FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

PROJECT EIR
CAMPUS PARK WEST PROJECT

PDS2005-3813-05-001(SPA); PDS2005-3800-05-003(GPA);
PDS2005-3600-05-005(REZ); PDS2005-3100-5424(TM);
Log No. PDS2005-3910-05-02-009(ER);
State Clearinghouse No. 2009061043

LEAD AGENCY:

COUNTY OF SAN DIEGO
PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310
SAN DIEGO, CA 92123
CONTACT: DENNIS CAMPBELL
858.505.6380

JUNE 18, 2014

This Environmental Impact Report was Certified by the

County of San Diego Board of Supervisors (Decision-Making Body) on June 18, 2014 (Date)

_____
Mark Wardlaw, Director

County of San Diego Planning & Development Services

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2020 L STREET, 5TH FLOOR
SACRAMENTO, CA 95811

JUNE 18, 2014

LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES THAT COMMENTED ON THE DRAFT EIR

LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES THAT COMMENTED ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (EIR)

A draft version of this Supplemental EIR was circulated for public review from August 8, 2013 to September 23, 2013, with comments on mineral resources issues being accepted through October 8, 2013. The following is a listing of the names and addresses of public agencies, organizations, and special interest groups that commented during this public review period.

LETTER DESIGNATION	NAME	ADDRESS
FEDERAL AND STATE AGENCIES		
A	United States Fish and Wildlife Service	Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, CA 92008
	California Department of Fish and Wildlife	South Coast Region 3883 Ruffin Road San Diego, CA 92123
STATE AGENCIES		
B	Caltrans District 11 Planning Division	4050 Taylor Street, M.S. 120 San Diego, CA 92110
C	Native American Heritage Commission	1550 Harbor Boulevard, Suite 10 West Sacramento, CA 95691
LOCAL AGENCIES		
D	North County Fire Protection District	315 East Ivy Street Fallbrook, CA 92028-2138
E	San Diego County Water Authority	4677 Overland Avenue San Diego, CA 92123-1233
F	San Luis Rey Municipal Water District (letter submitted by Aleshire & Wynder, LLP)	18881 Von Karman Ave, Suite 1700 Irvine, CA92612
G Late Letter	The Metropolitan Water District of Southern California	P.O. Box 54153 Los Angeles, CA 90054-0153
H Late Letter	Endangered Habitats League	Endangered Habitats League 8424 Santa Monica Blvd., Suite A 592 Los Angeles, CA 90069

LETTER DESIGNATION		NAME	ADDRESS
SPECIAL INTEREST/ORGANIZATIONS			
I	A & B	A-Fallbrook Community Planning Group	205 Calle Linda Fallbrook, CA 92028
	B – Late Letter	B-Design Review Board Committee	
J		Pala Tribal Historic Preservation Office	PMB 50, 35008 Pala Temecula Road Pala, CA 92059
K		Pechanga Cultural Resources, Temecula Band of Luiseno Mission Indians	P.O. Box 2183 Temecula, CA 92593
L		Rincon Band of Luiseno Indians	1 W. Tribal Road Valley Center, CA 92082
M		San Luis Rey Band of Luiseño Mission Indians	1889 Sunset Drive Vista, CA 92081

COMMENTS AND RESPONSES

U.S. Fish and Wildlife Service
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008
760-431-9440
FAX 760-431-9624

California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, California 92123
858-467-4201
FAX 858-467-4299

In Reply Refer To:
FWS/CDFW-13B0209-13TA0464

SEP 26 2013

Mr. Dennis Campbell
County of San Diego
Planning and Development Services
9150 Chesapeake Drive, Suite 200
San Diego, California 92123

Subject: Draft Environmental Impact Report and Habitat Loss Permit for the Campus Park West Project TM 5424 PDS 2005-3100-5424, PDS2005-3813-05-001, PDS2005-3800-05-003, PDS2005-3600-05-005, PDS2005-3910-05-02-009, San Diego County, California (SCH#2009061043)

Dear Mr. Campbell:

A1

The Department of Fish and Wildlife (Department) and the U.S. Fish and Wildlife Service (Service), collectively referred to as the Wildlife Agencies, have reviewed the Campus Park West Project Draft Environmental Impact Report (draft EIR) and Habitat Loss Permit (HLP). The comments provided in this letter are based on information provided in the draft EIR, HLP, and associated documents [including the Biological Technical Report (dated July 2013) prepared by REC Consultants, Inc.], our knowledge of sensitive and declining vegetation communities in the County of San Diego (County), and our participation in regional conservation planning efforts.

A2

The primary concern and mandate of the Service is the protection of fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Federal Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), including habitat conservation plans (HCP) developed under section 10(a)(2) of the Act.

The Department is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§15386 and 15381, respectively) and is responsible for ensuring appropriate conservation of the State's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA; Fish and Game Code §2050 *et seq.*) and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning (NCCP) program (DFG Code Section 2800, *et. seq.*). The County of San Diego (County) has signed a Planning Agreement with the Wildlife Agencies for the development of the draft North County Multiple Species Conservation Program Subregional Plan (NCMSCP), and this NCCP/HCP is currently in development for unincorporated lands in north San Diego County.

A3

The Campus Park West project site is 116.5 acres and is located at the intersection of Interstate 15 and State Route 76 (SR-76) within the unincorporated area of the County. The project may incorporate approximately 2.1 additional acres into the project that are currently designated as SR-76 right-of-way by the California Department of Transportation. Because SR-76 is now built to its final anticipated

A1 The County of San Diego appreciates the review and comments on the Project. Specific responses to the comments are provided below.

A2 These paragraphs provide information regarding the Service's and the Department's jurisdiction, enabling legislation and the Department's status as a trustee and responsible agency under CEQA, as well as an introduction to timing of the NCMSCP. County staff agrees with each of these statements.

A3 The County agrees that the statements provided in Comment 3 provide an accurate overview of the Project.

A3 cont. configuration, this area would be decertified and could be sold to the project Applicant. Should this occur, the project area would encompass a total of 118.6 acres. The project site consists of two parcels north of SR-76 and three parcels south of SR-76. The proposed project includes multi-family residential units, commercial space, and industrial space. The project would dedicate approximately 32 acres of permanent open space.

A4 Our review of the habitat evaluation maps of the County's draft NCMSCP indicates that habitats on and adjacent to the project site are "very high" and "high" habitat quality. The project site is located within the Pala Core (Planning Unit 4) and the Escondido-Temecula Linkage (Planning Unit 18) of the draft NCMSCP. The Escondido-Temecula Linkage provides for north-south movement for species such as the coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher).

A5 As part of the planning process for the NCMSCP, we met with County staff numerous times to discuss and reach consensus on proposed development/preserve design of the subject project (Campus Park West) as well as key adjoining properties (i.e., Campus Park and Meadowood), and to identify biological mitigation measures and County planning commitments that would enable these projects to proceed and not preclude completion of the preserve design or other essential goals of the NCMSCP. As a result of these meetings, the County, project applicants, and the Wildlife Agencies reached agreement on the "hardline" reserve boundary that would be incorporated into the NCMSCP. The primary concern of the Wildlife Agencies was the requirement for a north-south gnatcatcher movement corridor in this general area of the NCMSCP Plan Area. This linkage was generally referred to as the I-15 Linkage (or I-15 Stepping Stone Linkage). Initially, this linkage was planned to occur in immediate proximity to Interstate 15, and would have overlapped considerable portions of the three proposed hardlined properties.

A6 However, because retaining the linkage conflicted with key County urban planning goals for dense housing and a regional transportation node adjacent to I-15, an alternate linkage area was sought to accommodate north-south gnatcatcher movement. The alternate location was subsequently identified to the east along Rice Canyon, but was less ideal due to higher elevation, multiple ownerships, limited presence of coastal sage scrub, and amount of active agriculture across the landscape. In discussions for the NCMSCP, the Wildlife Agencies made it clear that the County would need to develop clear and specific requirements in the NCMSCP to ensure that the Rice Canyon linkage would be established and maintained.

A7 This means that any future proposed development in Rice Canyon must consider corridor width, the potential need for habitat restoration where agricultural uses currently exist, and other potential factors. These measures were to be incorporated into the NCMSCP, and specific goals and objectives were to be developed for this Planning Unit as part of the NCMSCP. This was not completed to our satisfaction but was part of the discussions in our last series of meetings with the County on the NCMSCP.

A8 It is important to understand that the hardline discussions between County representatives and the Wildlife Agencies for Campus Park West, Campus Park, and Meadowood were always done in the context of achieving a viable NCMSCP reserve system, and completing the NCMSCP. That is, at that time these projects were expected to receive their respective County approvals through the NCMSCP, not as separate HLPs. This is critical because the necessary measures to be assured by the County that would offset the loss of the I-15 Linkage are not in place, are not conditions of the current project (Campus Park West) approval, and there has been no other form of commitment by the County to ensure the Rice Canyon Linkage will ultimately be achieved. Absent such a commitment by the County, it is difficult for the Wildlife Agencies to make the HLP finding that the Campus Park West project would not preclude successful establishment of the anticipated NCMSCP.

A4 It is important to note the draft NCMSCP does not apply to the Project because it has not yet been adopted. Nonetheless, the County agrees with the statements provided in this comment. As shown in the Biological Technical Report ([BTR] REC August 2013), the majority of habitat types on and adjacent to the site are comprised of non-native vegetation and disturbed land. However, the Habitat Evaluation Model shows most of the site as being "very high" quality with some areas of "high" and "moderate" quality.

A5 The County agrees with this comment. Please also see response to Comment 4 above.

A6 The County generally agrees with this comment. County staff understands that the Rice Canyon linkage was less ideal than the I-15 linkage because, while the I-15 linkage was relatively intact land with only a few owners and minimal topography, Rice Canyon had steeper topography, multiple ownerships and areas of active agriculture. It should be noted, though, that Rice Canyon was also viewed as a better potential linkage for the coastal California gnatcatcher (*Polioptila californica californica*; gnatcatcher) when combined with the proposed hardline preserves near I-15. The regional habitat mapping shows that the majority of coastal sage scrub near I-15 will be preserved to allow for a strong connection to the coastal sage scrub habitat located in Rice Canyon. Please also see response to Comment 4 above.

A7 It is important to note the draft NCMSCP does not apply to the Project because it has not yet been adopted. Nonetheless, the County agrees with this comment and intends to make Rice Canyon a north-south corridor for wildlife movement for reasons identified in response to Comment 6. The current draft of the NCMSCP has the following goals for Rice Canyon:

- Strive to ensure that gnatcatchers are able to move in natural habitat north-south between the Heights of Pala Mesa Conservation Bank

A7 cont. through the slopes of Rice Canyon and to the hills and banks adjacent to the San Luis Rey River.

- Strive to conserve existing patches of coastal sage scrub over 1,000 feet wide along the slopes of Rice Canyon (to the extent that any one project can reasonably contribute to this conservation) to maintain live-in habitat for gnatcatcher and maintain north-south connectivity of its habitat. Require restoration of habitat where feasible to increase habitat corridor widths if minimum widths cannot be maintained in existing habitat.

In addition, County staff met with the Wildlife Agencies on December 19, 2013 to discuss Rice Canyon in detail and consider additional ways to prioritize preservation, and potential enhancement, of the vegetation communities in Rice Canyon. This discussion is still ongoing but all parties agree that these linkage issues can be resolved within the context of the NCMSCP planning documents.

A8 The applicants for Campus Park, Campus Park West and Meadowood all stated their intent to use the NCMSCP permitting process if the program was adopted before their projects were approved or to proceed with a separate Section 7 consultation or other appropriate permit process. For this reason, the Project's BTR was prepared with a dual analysis of processing, allowing the Project to be processed with either an approved NCMSCP or through the NCCP Process. This was explained in the Draft Subsequent EIR (EIR) in Section 2.6.1.2, Regulatory Framework.

Because the NCMSCP is not yet approved, the County is also moving forward with NCCP compliance for upland habitat impacts. Pursuant to the 4d rule of the federal Endangered Species Act (ESA), impacts to coastal sage scrub are limited to five percent of the total acreage occurring within the County's unincorporated area and require a Habitat Loss Permit pursuant to Habitat Loss Ordinance 8365. Project impacts have been assessed based on the NCCP flowchart. The Project will potentially impact 2.27 acres of coastal sage scrub, which will not exceed the County's five percent allowance when combined with other projects and will not preclude preserve and linkage design for this area of North County.

Mr. Dennis Campbell (FWS-SD-13B0209-13TA0464) 3

A9 Focused surveys for the gnatcatcher were conducted on the proposed project site in 2004 with negative results. No additional surveys have been conducted because the coastal sage scrub (CSS) on site is contained in a small, isolated patch, which has not recovered from the 2007 wildfire burn. The proposed project would impact 2.27 acres of CSS that would be mitigated at a 2:1 ratio. The Applicant proposes to mitigate impacts to CSS through the on-site preservation/restoration of 1.29 acres of CSS and off-site preservation of 3.25 acres of CSS.

We offer the following recommendations and comments to assist the County in minimizing and mitigating project impacts to biological resources, and to ensure that the project is consistent with the NCMSCP hardline agreement and HLP process, federal and state endangered species laws/regulations, and ongoing regional habitat conservation planning efforts:

A10
1. As discussed above, a major point of the "hardline" agreement reached among the County, the project applicant, and the Wildlife Agencies for the proposed project was that if the north/south gnatcatcher corridor along Interstate 15 was to be further compromised or eliminated, the County would ensure a north/south connection for gnatcatchers through Rice Canyon. The Wildlife Agencies did suggest to the County that the projects could directly contribute toward securing the Rice Canyon Linkage as part of their mitigation requirements, but absent that contribution, the County must provide necessary language and a commitment to achieve the necessary outcome. The draft EIR/HLP Conditions of Approval do not obligate either the County and/or a project Applicant commitment to contributing to the Rice Canyon corridor. If this project moves forward and is processed prior to finalization of the NCMSCP without contributing off site within the Rice Canyon corridor, it is unclear how the County's commitment to ensure the preservation of the Rice Canyon corridor would be met. We request to meet with the County to discuss the issue, and to identify potential options that would allow this project to receive our HLP concurrence.

A11
2. The draft EIR and supporting documents indicate that the proposed "hardline" was confirmed during County and project Applicant coordination with the Wildlife Agencies in September 2010. In Appendix E of the latest draft version of the NCMSCP (July 2010), under the hardline description, mitigation for Campus Park West impacts will include a significant contribution to the North County preserve in three ways:

   - Contribution of 25-30 acres of land, consisting of a combination of existing and restored vegetation, for impacts to southern riparian forest, tamarisk, and mulefat scrub. Mitigation for impacts to these vegetation types will be 3:1.
   - Contribution of 25-30 acres of land for impact of various upland vegetation types (e.g., coastal sage scrub, annual grasslands). Mitigation ratios will vary from 0.5 acre to 2.0 acres of open space per acre of impact, as specified in the Biological Mitigation Ordinance.
   - Contribution of 18 acres of restored upland aestivation area for arroyo toad. Mitigation ratios will be 3:1 for development of approximately 6-8 acres of non-native grassland located south of SR-76. It is estimated that approximately 6 acres will be located on site on a parcel that bounds the San Luis Rey River.
   - In addition, the draft NCMSCP states that all mitigation that is not provided on site will be provided in the Pre-Approved Mitigation Area (PAMA). The arroyo toad mitigation will be located within San Luis Rey River in the area between the Oceanside City limit

A8 cont. While the Project itself meets the current goals of the southern California coastal sage scrub NCCP process and the future goals of the NCMSCP, the County agrees that a commitment to maintain the proposed Rice Canyon Linkage is warranted. See also response to Comment 7 above.

A9 The County agrees with the characterization of on-site habitat, impacts, and the proposed mitigation ratio and locations (per EIR biological mitigation measure M-BI-4d). This mitigation ratio and acreage are based on the pre-fire habitat status and do not reflect the diminished quality of the habitat resulting from the 2007 wildfire. In addition to the 2004 protocol survey series for the gnatcatcher, a focused protocol survey for the gnatcatcher was initiated in spring 2013. Protocol surveys were not completed at that time due to the condition of the on-site habitat, as noted in the comment. This information was relayed to Service staff by REC on April 9, 2013 as part of the routine notification process regarding survey activities.

A10 The County agrees with this comment. Please refer also to the responses to Comments 4, 6, 7 and 8 above with regard to the existing and planned north-south gnatcatcher corridor east of I-15. It should be noted that Rice Canyon is currently still a viable linkage with minimal impacts from development. Meetings between the County and Wildlife Agencies on this issue are ongoing through the continued effort to finalize the NCMSCP.

A11 This comment provides a summary of the mitigation requirements determined during the hardline negotiation process for the Project. The following bullet points within this discussion respond to each of the specific items in this comment and demonstrate how each of these mitigation requirements are being met by the Proposed Project. It should be noted that between 2005 and 2010 extensive negotiations between the County, Service, Department and Applicant occurred to address Project-related biological impacts and (by extension) many of the concerns identified in this letter. Multiple iterations of the Project design were provided to the agencies during this negotiation process, and the Project was revised to address stated agency concerns. Please also note that in previous meetings with the Service in 2010, Service staff (M. Moreno) agreed the Project would address additional issues related to the hardline NCMSCP negotiations as part of the Section 7 permitting requirements, rather than as part of the EIR environmental process. The information

A11 cont. contained within the Draft EIR and supporting BTR presents the results of this extensive negotiation process.

Figure 5 within the BTR shows the pre-negotiated (hardline) take authorized areas. As shown on Figure 2.6-1 of the EIR and Figure 6 of the BTR, Project impacts are consistent with these negotiations and include all brush management activities. Direct and indirect impacts to sensitive species within on-site preservation areas would be mitigated through a number of Project design features identified in Table 1-3 of the EIR and Section 2.0 of the BTR, including, but not limited to: the Resource Management Plan (RMP), construction of a noise wall, light shielding, use of native landscaping, sufficient storm drainage, etc.

Please note that mitigation acreage identified in these negotiation points are dependent upon the final Project design proposed for approval.

a) As shown on EIR Table S-1, EIR Section 2.6.5 and BTR Table 5, the Project will provide on-site mitigation of 12.16 acres of wetland enhancement and 11.97 acres of wetland creation, in addition to off-site mitigation of 11.78 acres (creation and enhancement) for a total of 35.91 acres of restored and created habitat. In addition, the Project avoids and preserves in perpetuity 13.26 acres of high quality riparian woodland habitat on site. Therefore, the Project would contribute more than 25-30 acres of mitigation for riparian forest, tamarisk and mulefat scrub impacts.

b) As shown in EIR Table S-1, EIR Section 2.6.5 and BTR Table 5, the Project will provide on-site mitigation through the preservation and restoration of 9.28 acres of on-site upland habitat and the preservation of 17.45 acres of off-site habitat, for a total of 26.73 acres. Therefore, the Project would result in the contribution of 25-30 acres of mitigation for impacts to various upland vegetation types.

c) Regarding the arroyo toad, the Project includes three parcels located south of SR-76 that are currently zoned for commercial use. The most southerly parcel is disturbed and vacant, and no development is proposed on this parcel; it is proposed to be restored to native habitat. The most westerly parcel is disturbed

A11 cont.

and is currently experiencing heavy use by off-road vehicles. The most easterly parcel is an abandoned orange grove. None of these three parcels serves as breeding habitat or aestivation habitat for the arroyo toad based on personal communication with Cadre Environmental. The area is not considered breeding habitat or aestivation habitat due to the fact that the site has been repeatedly disturbed for fire fuel maintenance and for orchard operations. Although toads are thought to distribute up to one kilometer away from breeding habitat, the upland areas have been continuously disrupted such that aestivation of toads in these areas is unlikely. Dispersal from San Luis Rey River to the property would require the toad to either traverse the property south of SR-76 cross SR-76 (either over the pavement or through culvert) then traverse a rip rap slope with a steep 1:1-embankment. Past discussions with the Service, specific to the arroyo toad, led to a reduction in the amount of proposed development south of SR-76. Specifically, development was removed from one parcel as an avoidance measure. It was also agreed during those meetings between the Service and the County that arroyo toads do not inhabit or aestivate on the Campus Park West property. Based on this prior coordination, it was determined that the southern-most parcel would be likely to provide the best viable aestivation area in the future, following restoration, for the arroyo toad population occurring up and downstream in the San Luis Rey River. As a result, the avoidance of this parcel and the eventual restoration of this area were anticipated to avoid any potential impacts to arroyo toads in the future.

As described in EIR Section 2.6.1.1, Existing Setting, and BTR Section 1.4.6, Sensitive Wildlife Species, the northern and southern portions of the Project site contain no habitat suitable for arroyo toad. For additional information related to arroyo toad surveys, please refer to Appendix G of the EIR, BTR, Section 1.4.6, Sensitive Wildlife Species. Additionally, arroyo toad has been determined to not utilize the southern portion of the Project site, south of SR-76, because the banks of the San Luis Rey River and Horse Ranch Creek are too steep for toads to access the three parcels. Toads do not aestivate in orange groves and would only be attracted to such property due to irrigation, which would not

A11 cont.

continue under the Proposed Project. Additionally, the risk of road kill for toads trying to cross from the orange groves to the bare parcels is high and there is no suitable habitat there. Further, there is no suitable habitat for the toads in the southern portion of the Project site because the vast majority of toads aestivate in very loose, sandy soils under the riparian canopy or in mulefat. This was also confirmed with Service staff during a meeting in December 2012. The only potential area for arroyo toad on the Project site is within Horse Ranch Creek, which was determined to be void of toads during surveys. Also, toads breeding in the San Luis Rey River channels are generally colonizing these areas and not moving into the upland areas because they are not suitable. Based upon the information presented above and within the Appendix G of the EIR, the BTR, the contribution of approximately 18 acres of restored upland aestivation area for arroyo toad is no longer applicable for the Project.

d) The Project requirements for on- and off-site mitigation will be conditioned in the on- and off-site Project Final RMP. Given that this Project is being reviewed for approval prior to completion and finalization of the NCMSCP, the EIR and BTR state that all mitigation will be within an approved mitigation bank or land approved by the Director of Planning and Development Services (PDS). As noted above, for clarification purposes, Mitigation Measures M-BI-4a, M-BI-4b, M-BI-4d, M-BI-4e and M-BI-4f within Section 2.6 of the Final EIR have been revised to read: "Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by by the Director of the County PDS." Mitigation Measure 3 within the BTR has also been revised to read: "All habitat based mitigation requires that mitigation be within a Pre-Approved Mitigation Area (if the NCMSCP is adopted before Project approval), a pre-approved mitigation bank or other land approved by the Director of PDS." Therefore, the Project is conditioned to provide mitigation within a PAMA, if the NCMSCP is adopted before Project approval.

and the Pala Casino. Suitability will be determined by a biologist familiar with the needs of the arroyo toad and with expertise in restoring a wide variety of habitat types.

The draft NCMSCP further provides for the hardline that uses allowed within the North County preserve areas within Campus Park West are limited and specific, and consist of the following:

A11 cont.

- Revegetation of disturbed areas within the North County preserve as might be undertaken or permitted by state, federal, and local agencies in accordance with take permits
- Management and maintenance (including construction associated with repair) of public trails within the open space areas of the project that connect to trails in adjacent properties.
- Construction and maintenance of the water line, roads, and other public facilities.

A12

In addition, all brush management will be done within the development envelope (page 5 of Appendix E of draft NCMSCP). The final EIR and supporting documents should demonstrate how each of these hardline mitigation requirements are being met with the current project, including demonstrating that any proposed public access would be located in the least sensitive area of the site and not result in direct or indirect impacts to any listed/sensitive species within the on-site preserved areas.

A13

3. The proposed project would impact approximately 2.27 acres of coastal sage scrub (CSS), as well as other sensitive habitats. The draft EIR (Table 2.6-2) indicates that approximately 21.44 acres of on-site preservation (of which 1.29 acres would be CSS preservation), and 41.49 acres of off-site mitigation (of which 3.25 acres would be CSS preservation), would be required to offset impacts to the CSS and other sensitive habitats. The draft EIR/HLP does not identify a specific site for the off-site mitigation. We recommend that all impacts to sensitive habitats be mitigated within the PAMA identified by the draft NCMSCP. The final location of the off-site CSS mitigation would require approval from the Wildlife Agencies as part of the HLP review and approval process. Once approved, all mitigation lands for impacts to sensitive habitats should be placed within a biological open space easement with adequate secured funding to ensure long-term management and monitoring of the habitat and any sensitive/listed species at the mitigation sites in perpetuity.

A14

According to Table 2.6-1, there are 39.48 acres of disturbed areas mapped on site, of which 38.31 acres would be impacted (in addition to another 2.45 acres off-site impact). As described in the draft EIR on page 2.6-5, the areas mapped as disturbed contain non-native annual grasses and forbs. There also is a brief statement in the draft EIR that "[t]ypical species of these areas include oats, non-native brome grasses, filaree, short-pod mustard, burclover (*Medicago* sp.), and wild radish (*Raphanus sativus*), but not to an extent that would justify classifying it as non-native grassland" (page 2.6-5). The Wildlife Agencies disagree with this assessment. The amount of non-native grasses and forbs is seasonally dependent, particularly in the absence of maintenance measures typically undertaken by landowners to control these species. Additionally, the project site has been recognized as a very important location to NCMSCP planning, and discussions for the NCMSCP recognized that in areas important for wildlife movement that agriculture and other non-native conditions may be necessary for conservation/mitigation to achieve broad conservation objectives. Due to the presence of indicator non-native grass and forb species, and

A11 cont.

e) The Final RMP will limit the allowed uses within the preserve areas but will allow for the revegetation of disturbed areas.

f) The Final RMP will limit the allowed uses within the preserve areas but will allow for management and maintenance of public trails within the open space.

A12 All brush management is proposed within the development footprint. The final RMP will discuss any proposed public access to the on-site preserve and ensure any access occurs in the least sensitive area of the site in a manner that prevents direct and indirect impacts while providing long-term protection of sensitive species. Responses in Comment 11 are further applicable to this comment.

A13 The County agrees with the majority of this comment, aside from the request to identify a specific site for off-site mitigation in the Final EIR. While the Final EIR does not identify a specific mitigation site, Mitigation Measures M BI-4a, M-BI-4b, M-BI-4d, M-BI-4e and M-BI-4f (Section 2.6 of the Final EIR) have been revised to read: "Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by by the Director of the County PDS." Mitigation Measure 3 within the BTR has also been revised to read: "All habitat based mitigation requires that mitigation be within the draft Pre-Approved Mitigation Area, a pre-approved mitigation bank or other land approved by the Director of Planning & Development Services."

Requirements for on-site and off-site mitigation will be conditioned in the Final on- and off-site RMP for the Project. At that time, the Service and Department will serve as reviewing and approving agencies for the HLP and/or Section 7 process, including the location of the off-site mitigation. The mitigation lands will be placed within a biological open space easement with adequate secured funding, in perpetuity, as requested by the commenter.

A14 cont.

because this area is within the modeled I-15 Linkage, it is appropriate for these areas to be mitigated as non-native grassland.

A15

4. Based on the information contained in the draft EIR and supporting documents, it is unclear as to whether or not on-site biological open space areas to be used as mitigation for project impacts (21.44 acres) would be within Homeowner Association (HOA) controlled areas. All on-site mitigation areas should have biological open space easements recorded over the land with adequate secured funding to ensure long-term management and monitoring of the habitat and any sensitive/listed species in perpetuity by a qualified, Wildlife Agency-approved land management entity.

A16

5. Page 2.6-12 of the draft EIR states that "Although toads are thought to disperse up to 0.6 mile away from breeding habitat, the upland areas on the project site are continuously disrupted such that aestivation of toads in these areas is unlikely. Dispersal from the San Luis Rey River to the property would require the toad to either traverse the property south of SR-76, cross SR-76 either over the pavement or through culvert, and then traverse rip rap slope and/or steep 1:1 embankment. In addition, during a meeting with Service representatives regarding the adjacent Campus Park project (TM 5538) on December 4, 2012, Service staff indicated that the habitat in this area was not suitable for the arroyo toad."

   While we concur with the above statements for the portion of the proposed project north of SR-76, we do not concur with these statements for the three parcels south of SR-76. Although the project site does not support suitable arroyo toad [*Anaxyrus* (=*Bufo*) *californicus*] breeding habitat, the parcels south of SR-76 do support suitable arroyo toad foraging and aestivation habitat, including gentle slopes, southern riparian scrub, coastal sage scrub, non-native grasslands, and friable soils. In addition, although not ideal, arroyo toads are known to utilize agricultural areas for foraging, aestivation, and movement. Arroyo toads have also been documented both upstream and downstream of the proposed project site. Based on these observations of arroyo toads in proximity to the project area and the presence of suitable arroyo toad foraging and aestivation habitat within the project area, we recommend that impacts to suitable arroyo toad habitat on the three parcels south of SR-76 be mitigated as follows: a minimum 1:1 ratio for impacts to non-native grassland and agriculture, 2:1 ratio for coastal sage scrub, and 3:1 ratio for southern riparian forest. All mitigation should occur either on site within the open space south of SR-76, or, if adequate habitat is not available within this on-site open space, mitigation should be acquired off site within suitable arroyo toad habitat along the San Luis Rey River, within the proposed PAMA of the draft NCMSCP.

A17

6. The biological report (Appendix D) indicates that there is suitable habitat on site for the California yellow-billed cuckoo (*Coccyzus americanus occidentalis*), a state-listed species. We recommend that protocol surveys for this state-listed species be conducted in all areas of suitable habitat within and adjacent to the project site and the results of these surveys included in the final EIR and supporting documents. If it is determined that the area is occupied by yellow-billed cuckoo, all impacts to occupied habitat should be mitigated with in-kind habitat at the appropriate ratios. In addition, state CESA authorization/permits would be required for any impacts to this species.

A18

7. The Biological Technical Report included with the draft EIR states that one flycatcher was detected within Horse Ranch Creek adjacent to the proposed project during protocol surveys conducted for another development project in this area. While it is assumed that the flycatcher

A14 The County respectfully disagrees with the statement that it is appropriate for disturbed areas on site to be mitigated as non-native grassland. On page 2.6-5 of the EIR and page 10 of the BTR, the discussion of disturbed lands on site is divided into two sections: one describing the disturbed land in the northern portion of the Project site and one describing the disturbed land in the southern portion of the Project site.

As stated in the EIR and BTR and confirmed by County staff biologists, "Disturbed land in the northern section of the site consists of land cleared for fuel management around the entry drive and model airplane runway, and includes the runway and associated parking area, including a dirt remote control car track. This area has been repeatedly disked and cleared for fuel management, and contains low growth of primarily non-native annual grasses and forbs." Disturbed lands in the northern portion of the Project site are actively maintained and will continue to be maintained as disturbed, through fuel management activities, until implementation of the Project. Throughout much of the year, this area is bare ground. During the time of biological resource surveys, some annual non-native grasses were observed.

Within the southern section of the Project site, the EIR and BTR describe disturbed land as land that "consists of a triangle of bare land between the road and the orchard, and is mostly bare soil with scattered non-native grasses and forbs. Typical species in these areas include oats, non-native brome grasses, filaree, short-pod mustard, burclover (Medicago sp.), and wild radish (Raphanus sativus) but not to an extent to classify it as non-native grassland." The majority of disturbed land in the southern portion of the Project site. therefore, is predominantly bare of vegetation with only a minimal amount of non-native grasses occurring in the area, but not to the extent to classify as non-native grasslands.

County staff agrees that the Project site is located in an important location for regional conservation efforts. In this case, however, and as noted above, the areas in question qualify as disturbed lands and would not contribute to the NCMSCP reserve system.

Therefore, the disturbed areas on site have been mapped correctly and should not be classified as non-native grassland or require mitigation for impacts.

A15 The County agrees with the statements related to appropriate biological open space management. Within the EIR and BTR, it is clearly identified that the HOA will not manage the on-site open space. EIR Table 1-3 and Section 2.0 of the BTR state the following: "Open space areas will be preserved within an easement and will be subject to a Resource Management Plan." As stated in Appendix J, the conceptual RMP, "The County of San Diego Department of Parks and Recreation, or other acceptable entity, will be the preserve Resource Manager of the property through the Landscape Maintenance District regulations, Community Facilities District or other acceptable funding mechanism." The Final RMP will require the recordation of the open space easements, adequate secure funding for management and monitoring of the habitat and species. The Service and Department will serve as reviewing and approving agencies for the Final RMP.

A16 The County does not agree with the statement that parcels south of SR-76 support suitable arroyo toad foraging and aestivation habitat. The Project includes three parcels located south of SR-76 that are currently zoned for commercial use. The most southerly parcel is disturbed and vacant, and no development is proposed on this parcel; it is proposed to be restored to native habitat. The most westerly parcel is disturbed and is currently experiencing heavy use by off-road vehicles. The most easterly parcel is an abandoned orange grove. None of these three parcels serves as breeding habitat nor aestivation habitat for the arroyo toad, based on personal communication with Cadre Environmental. The area is not considered breeding or aestivation habitat due to the fact that the site has been repeatedly disturbed for fire fuel maintenance and for orchard operations. Although toads are thought to distribute up to one kilometer away from breeding habitat, the upland areas have been continuously disrupted such that aestivation of toads in these areas is unlikely. Dispersal from the San Luis Rey River to the property would require the toad to traverse the property south of SR-76 and cross a rip rap slope with a steep 1:1 embankment. Please also note that past discussions with the Service, specific to the arroyo toad, led to a reduction in the amount of proposed development south of SR-76. Specifically, development was removed from one parcel as an avoidance measure. Although arroyo toads may be present in the region of the Project, it was agreed between the Service and the County during those meetings that arroyo toads do not inhabit or aestivate on the Campus Park West property. In addition,

A16 cont. the southern-most parcel of the Project site was set aside as restorable open space in coordination with Service staff, to avoid any significant future direct or indirect effects to the arroyo toad, and thereby alleviating the need for further analysis. At that time, it was determined by the Service and the County that this area was the most suitable acreage for the arroyo toad to utilize in the future, should it colonize the area. The remainder of the area was determined to not be suitable due to the extensive amount of continual disturbance noted above and the fact that the portion of Horse Ranch Creek on the southern parcels are lined with riprap and contain 1:1 embankments making arroyo toad migration onto the site for aestivation unlikely.

Regarding the suggested mitigation ratios, other than the non-native grassland and agriculture, the suggested mitigation ratios are being implemented for all portions of the Project, including the parcels south of SR-76. Currently non-native grassland on site is being mitigated at 0.5:1, consistent with the current County of San Diego Biological Guidelines; and agriculture (in the form of groves) does not require mitigation because this habitat type is not considered sensitive.

A17 The County disagrees with the need to conduct protocol surveys for the California yellow-billed cuckoo on the Project site. Appendix D to the BTR indicates that there is a low potential for the California yellow-billed cuckoo to occur on site. Although suitable habitat is present, this species was not detected during any least Bell's vireo surveys, which were performed on site in 2004 and 2012. Therefore, protocol level surveys are not required.

was a southwestern willow flycatcher (*Empidonx traillii extimus*), the bird was not observed. Based on the observation (2011) of two southwestern willow flycatchers along Horse Ranch Creek that were determined to be a pair (see page 2.6-10 of the draft EIR), the presence of suitable southwestern willow flycatcher habitat adjacent to the project site, and the observation of an unconfirmed flycatcher, we recommend that protocol surveys for the southwestern willow flycatcher be conducted in all areas of suitable habitat within and adjacent to the project site and the results of these surveys included in the final EIR and supporting documents. If it is determined that the area is occupied by the southwestern willow flycatcher, measures to avoid, minimize, and offset project related impacts to the species should be identified.

A18 cont.

8. The draft EIR and supporting documents (page 17 of biology report) indicate that the last focused survey work for the federally listed endangered and state-listed threatened Stephens' kangaroo rat *(Dipodomys stephensi;* SKR) occurred in September 2004. The 2004 work concluded that suitable habitat exists on site. We recommend that an updated habitat assessment and, if warranted, protocol surveys for SKR be conducted in all areas of suitable habitat within and adjacent to the project site. The results of these surveys should be included in the final EIR and supporting documents. If it is determined that the area is occupied by SKR, measures to avoid, minimize, and offset project related impacts should be identified.

A19

9. Federally listed endangered species are known or have the potential to occur within the project site [i.e. least Bell's vireo (*Vireo bellii pusillus*; vireo), southwestern willow flycatcher, SKR, and arroyo toad]. In addition, the project site is located within designated critical habitat for the arroyo toad and gnatcatcher. Therefore, based on the potential direct and indirect impacts that may occur to these listed species and/or designated critical habitats as a result of the proposed project, it may be necessary for the applicant to obtain "take" authorization for these species/critical habitats through a section 7 consultation (if a Federal nexus exists, such as through involvement of the U.S. Army Corps of Engineers). For federally listed species, if a Federal nexus is not involved, it may be necessary for the applicant to obtain "take" authorization for the species alone through development of a Habitat Conservation Plan, pursuant to section 10 of the Act.

A20

10. Since the NCMSCP has not yet been completed, any take authorization for impacts to state-listed species including the least Bell's vireo, southwestern willow flycatcher (and potentially SKR and yellow-billed cuckoo) would have to be achieved through CESA. If the applicant intends to have take of any state-listed species addressed through a 2080.1 consistency determination (CD), it is important that the final EIR and supporting documentation contain a mitigation program that would fully mitigate for impacts to those state-listed species. Moreover, for the Department to evaluate and potentially issue a CD, it is important that the federal biological opinion (BO) for the project contain measures to clearly demonstrate that the state take would be fully mitigated under CESA. As part of the mitigation required under CESA, a biological conservation easement over the protected lands may be required along with adequate secured funding to ensure that the mitigation land would be managed, maintained, and monitored for listed species in perpetuity by qualified personnel.

A21

11. A final site-specific resource management plan (RMP) should be developed and implemented for the proposed on- and off-site mitigation areas as a condition of HLP approval to ensure the long-term conservation of the mitigation sites. The final RMP should provide measures and demonstrate that adequate funding would be provided to protect and manage the resources on the

A22

A18 Focused surveys for the southern willow flycatcher will be conducted and submitted for review to the agencies as part of the permitting process for the Project site, which is required to obtain an Individual Section 404 Permit from the U.S. Army Corps of Engineers (ACOE), a Streambed Alteration Agreement from the Department and a 401 Certification from the Regional Water Quality Control Board (RWQCB). In addition to these permits, consultation with the Service is required.

Based upon a 2012 presence-absence survey for the southwestern willow flycatcher performed by Natural Resource Consultants, no observed locations of the southwestern willow flycatcher would be directly impacted by the Project. Impacts to potential southwestern willow flycatcher habitat would be mitigated by the ratios provided in EIR Table 2.6-2 and BTR Table 5, in accordance with the mitigation for the least Bell's vireo. Indirect impacts are mitigated by the Project design features identified in EIR Table 1-3 and BTR Section 2.0, Project Effects, in addition to EIR Mitigation Measure M-BI-3a and BTR Mitigation Measure 2, including, but not limited to: implementation of an RMP, construction of a noise wall, light shielding, use of native landscaping, adequate storm drainage, etc. Therefore, any potential impacts to the southwestern willow flycatcher have been offset by the mitigation identified above.

A19 Focused surveys for the Stephens' Kangaroo Rat will be conducted and submitted for review to the agencies as part of the permitting process for the Project site, which is required to obtain an Individual Section 404 Permit from ACOE, a Streambed Alteration Agreement from the Department and a 401 Certification from the RWQCB. In addition to these permits, consultation with the Service is required. Although this species was determined absent from the Project site, direct impacts to any potential habitat are mitigated by the ratios provided in EIR Table S-1 and BTR Table 5. Indirect impacts are mitigated by the Project design features identified in EIR Table 1-3 and BTR Section 2.0, Project Effects, in addition to EIR Mitigation Measure M-BI-3a and BTR Mitigation Measure 2, including, but not limited to: implementation of an RMP, construction of a noise wall, light shielding, use of native landscaping, adequate storm drainage, etc.

A20 The County agrees with this comment.

A22 cont.

on-site and off-site mitigation lands in perpetuity. The RMP should include biological goals, management objectives, and specific tasks to achieve the objectives, provisions to monitor populations of sensitive and/or listed species, control for invasive plants, provide adequate fencing, limit public access, and address any other relevant land/species management issues. The RMP for the on- and off-site mitigation lands would require approval by the Wildlife Agencies as part of the County's HLP process.

A23

12. In the event take of least Bell's vireo, flycatcher, SKR, yellow-billed cuckoo or any other listed species would occur, one of the purposes of the RMP (Section 1.0 of the RMP) should be to demonstrate adequate mitigation, management, and funding has been provided to achieve state mitigation requirements for take to the listed species. We recommend that the species monitoring program in the final RMP be further developed, especially for the listed species. For example, sufficient monitoring and reporting of the existing and restored areas would be required to demonstrate that impacts to state listed species have been fully mitigated under CESA. In addition, Section 2.0 (Implementation) of the RMP should be specific on how the funding for managing and ongoing maintenance/monitoring of the on-site open space proposed as biological mitigation would be provided. For purposes of CESA compliance, the method of funding would need to be identified and established prior to impacts. The funding would also need to be provided in a separate, protected fund that cannot be used for purposes other than managing and monitoring the conserved open space. Additional comments on the draft RMP that should be addressed in the final version are as follows:

A24

a. The RMP should include a species monitoring component to allow for protocol surveys for all the listed species in the on- and off-site restored areas. Currently, only least Bell's vireo is provided for (A9). We also recommend that surveys for the gnatcatcher be included subsequent to restoration of the upland areas to the extent practicable.

A25

b. Section 6.0 (Biological Goals) of the RMP should have specific measurable goals and objectives for least Bell's vireo and southwestern willow flycatcher (see Goal 2). Goal 3 addresses cowbird trapping, and should be carried forward in the RMP as a potential future (funded) management action since Appendix C currently notes the presence of cowbird on site and cowbird is known to impact listed species.

A26

c. The final RMP should include a section describing any access that would be provided and how those areas would be managed and monitored. Table 5 (Public Use Tasks) on page 25 should include contingency or remedial measures for addressing issues that are identified in the field.

A27

d. The final RMP should clearly identify the entity that would be responsible for ensuring that all necessary management and monitoring tasks for the mitigation lands would be conducted by qualified personnel.

A28

e. The plant palette for the restored slope within the riparian buffer should be provided as part of the RMP, including the proposed locations and draft success criteria (including metrics for diversity).

A29

13. We recommend that any fuel clearing areas requiring replanting be planted with compatible, low-fuel natives (e.g., cacti and other succulents) to minimize the potential for invasive species to spread into the proposed on-site mitigation/open space areas and into adjacent natural lands. In

A21 The County agrees with this comment. The Project fully mitigates for significant impacts to state and federally listed species and a conservation easement will be placed over all areas set aside as open space. Consistent with the comment, the Project is required to provide adequate funding for all mitigation lands (on site and off site) to ensure that those lands be managed, maintained, and monitored for listed species in perpetuity by qualified personnel.

A22 The County agrees that the Service and the Department will serve as reviewing and approving agencies for the on- and off-site Final RMP through the HLP and/or Section 7 process. The Final RMP will provide measures and demonstrate that adequate funding would be provided to protect and manage the resources on the mitigation lands in perpetuity. The Final RMP will also include biological goals, management objectives, and specific tasks to achieve the objectives, provisions to monitor populations of sensitive and/or listed species, control for invasive plants, provide adequate fencing, limit public access, and address other relevant land/species management issues.

In accordance with the County of San Diego Biological Resource Guidelines, the RMP contained within the EIR and BTR is conceptual. A Final RMP will be required as a condition of the Project and completed prior to grading or finalizing the map. The Final RMP will require specific on-site and off-site mitigation for the Project. The Service and Department will serve as reviewing and approving agencies for the Final RMP.

A23 The County agrees that the Final RMP should provide a specific species monitoring program. Therefore, the Final RMP will include a species monitoring program that is fully developed, especially for listed species. The Final RMP will be provided to the Service and Department for review and approval through the HLP and/or Section 7 process.

A24 The County agrees that the Final RMP should include a species monitoring component that allows for protocol surveys for all listed species and to survey for the species with a potential to occur on site. The Final RMP will be provided to the Service and the Department for review and approval through the HLP and/or Section 7 process.

A25 The County agrees that the Final RMP will have specific measurable goals and objectives for least Bell's vireo and southwestern willow flycatcher. The Final RMP will be provided to the Service and Department for review and approval as part of the HLP and/or Section 7 process.

A26 The County agrees that the Final RMP should include a section describing any access points and how those areas would be managed and monitored. The Final RMP will be provided to the Service and the Department for review and approval as part of the HLP and/or the Section 7 process.

A27 The County agrees that the Final RMP should clearly identify the management and monitoring entity for the mitigation lands. The Final RMP will be provided to the Service and Department for review and approval as part of the HLP and/or Section 7 process.

A28 The County agrees that the Final RMP should include the riparian buffer plant palette, including locations and draft success criteria. The restored slopes will be part of a revegetation effort and will be addressed in the Final Revegetation Plan. That plan will include a final plant palette as well as success criteria. Once the slopes achieve the success criteria, the area will be included in the long term management goals and tasks of the Final RMP. The Final Revegetation Plan and Final RMP will be provided to the Service and Department for review and approval as part of the HLP and/or Section 7 process.

addition, we recommend that native plants (endemic to the local area) be used to the greatest extent feasible in landscaped areas adjacent to and/or near mitigation/open space areas and/or wetland/riparian areas to avoid degradation of native habitats. The California Invasive Plant Council provides a list of exotic plants species (Invasive Plant Inventory [Cal-IPC; http://www.cal-ipc.org/]) that should be avoided in landscaped areas. We recommend this measure be incorporated into the final EIR or that the final EIR identify other measures to address the potential degradation of native habitats from the use of invasive species in the landscaped areas.

A29 cont.

14. The draft EIR (Table 2.6-2) indicates that some areas adjacent to Horse Creek have grading that would be revegetated with native species. The draft EIR also indicates that these revegetated areas would be included in the RMP to offset the reduced biological buffers (*i.e.,* less than 100 feet) adjacent to occupied least Bell's vireo areas. The proposed planting palette for these areas should be included in the final EIR. Furthermore, if these areas are proposed to meet project mitigation requirements, all related restoration and revegetation plans should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location and acreage of the area proposed as mitigation; (b) plant species to be used, including container sizes, spacing and seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific/measurable success criteria; (h) a detailed monitoring program supported by secured funding; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. In addition, please clearly indicate (with supporting figures/maps) if these areas would be included within any areas where fuel clearing, trails, or other uses would occur and the method of protection proposed for these areas (e.g., conservation easement, limited building zone etc.). See also comment 4 above.

A30

A31

15. The Wildlife Agencies recommend that measures be taken to avoid project impacts to nesting birds. Proposed project activities (including, but not limited to, staging and disturbances to native and non-native vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1 to September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, we recommend that pre-construction surveys be conducted by a biologist with experience in conducting breeding bird surveys. These surveys would be used to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or other factors.

A32

16. As a condition of any CESA take authorization for the project, the land manager and entity that would hold conservation easements and funds for any mitigation would need to be approved by the Department. This review and approval process may occur when the CESA application (or 2080.1 consistency request) is provided to the Department. The Department is not currently interested in managing the conserved lands associated with this project. For purposes of CESA compliance, ownership of the conserved lands by a home owner's association (HOA) would likely not be appropriate. Page 5 of the draft RMP (Proposed Easement Holder) indicates that "if the land is transferred in fee title to any non-governmental entity, a Biological Open Space

A33

A29 EIR Table 1-3 and BTR Section 2.0, Project Effects, state that as a Project feature, all Project landscaping adjacent to open space will include native vegetation and drought tolerant plant materials. In addition, the Final Landscape Plans for the development will be required to preclude any species listed by Cal-IPC.

A30 The Final Wetland Mitigation plan will be revised to include the revegetation of the buffer slopes, including the identification of a buffer slope plant palette, irrigation and success criteria. The proposed planting palette will be included in the Final Wetland Mitigation Plan, which will be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. This Final Plan will be provided to the Service and Department for review and approval during the HLP and/or Section 7 process.

A31 Revegetated manufactured slopes will be included in the on-site biological open space easement and managed in perpetuity under a conservation easement. These biological open space areas are shown in EIR Figure 2.6-5 and would be managed by the RMP, included as Appendix J to the BTR. The Final RMP will address this request and will be provided to the Service and Department for review and approval as part of the HLP and/or Section 7 process.

A32 The County agrees with this comment and, therefore, the EIR and BTR require all brush clearing and grading to occur outside the bird breeding/nesting season, as stated in EIR Mitigation Measure M-BI-3a and BTR Mitigation Measure 2. As stated in the EIR and BTR, if avoidance of the breeding season is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be utilized.

A33 The County agrees with this comment. The land manager and entity that would hold conservation easements must be approved by the Service and Department. Within the EIR and BTR, it is clearly identified that the HOA will not manage the on-site open space. EIR Table 1-3 and Section 2.0 of the BTR state the following: "Open space areas will be preserved within an easement and will be subject to a Resource Management Plan." As stated in Appendix J, the conceptual RMP: "The County of San Diego

A33 cont.

Easement or Conservation Easement dedication must be recorded." For purposes of CESA compliance (where there is not adopted NCCP), a biological conservation easement (held by a bona fide conservation entity) would likely be required over the on- and off-site mitigation lands regardless of who ultimately would have fee title.

A34

17. The Conceptual Wetland Restoration Plan should include a monitoring/success metric for diversity. In addition, please note that the final wetland restoration plan would require review and approval by the Department as part of the 1600, and possibly CESA, permitting processes.

A35

18. The proposed project includes an access road (Pankey Road) that would be constructed immediately adjacent to occupied least Bell's vireo habitat (see Figure 2.6-1 of the draft EIR). The final EIR and supporting documents should provide more detail on the anticipated construction timing and activities/methods associated with this road, including what specific measures would be provided to avoid/minimize impacts to least Bell's vireo (and potentially flycatcher and yellow-billed cuckoo). If it is possible that construction for this access road may occur during the breeding season for this or any other state listed species, it should be determined upfront the type of impact (e.g., direct impact to a nest, indirect impacts from noise, etc.) that is likely to occur so that measures can be identified and evaluated in the final EIR and supporting documents for compliance with CESA. In addition, it is unclear whether or not any culvert or facility is proposed under Pankey Road to convey stormwater flows. Additional information on any required hydrological conveyance of water flows associated with the new road should be included in the final EIR and supporting documents. If any such facility/feature is required, we recommend that it be adequately sized and maintained to allow passage of smaller wildlife.

A36

A37

Thank you for the opportunity to comment on the subject draft EIR and HLP. If you have any questions, please contact Michelle Moreno of the Service at Michelle_Moreno@fws.gov or 760-431-9440, or Randy Rodriguez of the Department at Randy.Rodriguez@Wildlife.ca.gov or 858-637-7100.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor
U.S. Fish and Wildlife Service

Gail K. Sevrens
Environmental Program Manager
California Department of Fish and Wildlife

A33 cont. Department of Parks and Recreation, or other acceptable entity, will be the preserve Resource Manager of the property through the Landscape Maintenance District regulations, Community Facilities District or other acceptable funding mechanism." The Final RMP will be provided to the Service and Department for review and approval as part of the HLP and/or Section 7 process.

A34 The County disagrees that the Conceptual Wetland Restoration Plan should include a monitoring/success metric for diversity. This information will be included in the Final Wetland Restoration Plan. The Final Wetland Restoration Plan will be prepared as part of the permitting process and will address this information. Consistent with this comment, the Plan will be provided to the Service and Department for review and approval in conjunction with Section 7 and California Fish and Game Code 1600.

A35 This information is consistent with the EIR. EIR Mitigation Measure M-BI-3a requires avoidance of brushing, clearing and grading during the least Bell's vireo, as well as other bird species, breeding and nesting season. This would include any construction or grading associated with the access road (Pankey Road). Direct and indirect impacts to sensitive species within on-site preservation areas would be mitigated through a number of Project design features identified in EIR Table 1-3; including, but not limited to, the RMP, construction of a noise wall, light shielding, use of native landscaping, adequate storm drainage, etc. EIR Mitigation Measure M-BI-3a requires the Project applicant to confirm that construction would be outside of the breeding season. If avoidance of the breeding season is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be utilized.

A36 A bridge or large culvert is being proposed as part of the Project to convey the creek under Pankey Road. At this time, the bridge/culvert is not fully designed. However, regardless of facility type, it will be conditioned to provide an adequate height and width to allow for small animals/wildlife to cross. Please refer to the Horse Ranch Creek Flood study for the requested information on the hydrological conveyance of water flows associated with the new road.

A37 County staff appreciates the comments provided and expect that close coordination with Service and Department staff will continue throughout resolution of Project permitting and mitigation.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governo

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11-SD-76
PM 17.87
Draft SEIR
SCH #2009061043

Mr. Dennis Campbell
County of San Diego, DPLU
5510 Overland Avenue, Suite 310
San Diego, CA 92123

Dear Mr. Campbell:

B1 The California Department of Transportation (Caltrans) appreciates the opportunity to review the Draft Subsequent Environmental Impact Report (Draft SEIR) for the Campus Park West development (SCH #2009061043) located near Interstate 15 (I-15) and State Route 76 (SR-76). Caltrans has the following comments:

Traffic:

B2
- Mitigation (TR-2, 2a, 3, 3a) to improve or agree to provide security for the I-15/SR-76 interchange through a fairshare contribution should be identified in the EIR or County Conditions of Approval. The fair share contribution shall be equal to an amount proportional to this project's impact to the interchange. At the time the mitigation condition is triggered, it is recommended that the project proponents enter into an agreement directly with the San Diego Association of Governments (SANDAG) for reimbursement to SANDAG as part of the SR-76 East TransNet project and SR-76/I-15 Interchange improvements.

Hydrology:

B3
- Grading for this proposed project that would modify existing drainage and increase runoff to State facilities will not be allowed. Any approval of encroachment into Caltrans right-of-way (R/W) will need to confirm that there will be no increase in the peak flow between pre-project and post-project conditions, and that there will be no overtopping of SR-76 during a peak event. Caltrans standard drainage details and drainage structures should be provided in the drainage study for work inside Caltrans R/W. For Hydrology related questions, please contact Tim Brownson in Caltrans Hydraulics Engineering Branch at (619) 688-3391, or Curt Whiteaker at (619) 688-6736.

Other Comments:

B4
- Any proposed decertification of Caltrans R/W will need to be formally reviewed to be determined if it is excess and no longer necessary for transportation purposes with final approval of the California Transportation Commission (CTC).

B5
- Caltrans will not be held responsible for any noise impacts to this development.

"Caltrans improves mobility across California"

B1 These are introductory remarks and no response is required.

B2 The County agrees that a fair share contribution will be made to the costs for the existing interchange improvements. This is stated in the cited mitigation measures (TR-2, 2a, 3 and 3a). As documented in your June 7, 2013 communication, if the Project is approved, the amount of the fair share for full Project buildout will be 2.28 million dollars. The fair-share payments will be made in conjunction with the Project's phased development.

B3 The County understands that any increase runoff to state facilities will not be allowed. There would be no increase in flows to Caltrans facilities due to the project and overtopping of SR-76 during a 100-year storm event would not occur. All work within Caltrans' right-of-way would be submitted as part of an Encroachment Permit process and as such, standard Caltrans details and specifications for drainage and other structures would be utilized for the design.

B4 The County agrees that any proposed decertification would require formal review, leading to a determination that the excess right-of-way is no longer necessary for transportation purposes, with final approval by the CTC.

B6

- All landscape and irrigation improvements shall conform to Caltrans' policies for design construction and maintenance. The local agency is responsible for requiring any additional highway planting called for by its community standards as part of any development approval. All planting designs are approved by the Caltrans District Landscape Architect. The permittee can obtain from Caltrans District Landscape Architect Caltrans' standard details, plant list, planting and irrigation standard specifications, and special provisions where applicable. Large trees must be located outside the "clear recovery" area, as described in the Highway Design Manual. Any landscaping proposed within Caltrans R/W will need an executed Maintenance Agreement between Caltrans and the approving local agency. Additional information regarding landscaping can be found in Caltrans Encroachment Permit Manual, and Project Development Procedures Manual, which are available on Caltrans website.

Caltrans Encroachment Permit

B7

Any work performed within Caltrans R/W will require discretionary review and approval by Caltrans. Current policy allows Highway Improvement Projects costing $1 million or less to follow the Caltrans Encroachment Permit process. Highway Improvement Projects costing greater than $1 million but less than $3 million would be allowed to follow a streamlined project development process similar to the Caltrans Encroachment Permit process. In order to determine the appropriate permit processing of projects funded by others, it is recommended the concept and project approval for work to be done on the State Highway System be evaluated through the completion of a Permit Engineering Evaluation Report (PEER). A PEER should always be prepared, regardless of the cost of improvements, when new operating improvements are constructed by the permittee that becomes part of the State Highway System. These include but are not limited to, signalization, channelization, turn pockets, widening, realignment, public road connections, and bike paths and lanes. After approval of the PEER and necessary application and supporting documentation an encroachment permit can be issued.

Highway Improvement Projects greater than $3 million, or considered complex projects, would be required to adhere to the full Project Development Process (e.g. Project Initiation Documents, Project Study Reports and Cooperative Agreements). A Caltrans District responsible unit will be notified and a project manager will be assigned to coordinate the project approval.

In order to expedite the process for projects sponsored by a local agency or private developer, it is recommended a PEER be prepared and included in the Lead Agency's CEQA document. This will help expedite the Caltrans Encroachment Permit Review process. The PEER document forms and procedures can be found in the Caltrans Project Development Procedures Manual (PDPM). http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm
http://www.dot.ca.gov/hq/traffops/developserv/permits/pdf/forms/PEER_(TR-0112).pdf

B8

As part of the encroachment permit process, the applicant must provide an approved final environmental document including the California Environmental Quality Act (CEQA) determination addressing any environmental impacts within the Caltrans' R/W, and any corresponding technical studies. If these materials are not included with the encroachment permit application, the applicant will be required to acquire and provide these to Caltrans before the

B5 The County also agrees that Caltrans would not be responsible for noise impacts to the Project related to SR-76 or I-15. The Project Acoustical Report fully incorporates traffic numbers associated with these facilities, and provides appropriate sound barriers, as depicted in Figure 2.5-1 of the EIR. This barrier is addressed in the EIR and would be required as part of the Project mitigation.

B6 As shown on Figure 1-26a of the EIR, landscaping is not currently proposed within Caltrans right-of-way adjacent to SR-76 or I-15. As shown on Figures 1-26b and 1-26c, Project areas abutting these rights-of-way are identified simply for fuel modification or for a sidewalk/ pathway. No Project trees would be planted within the clear recovery areas. As a result, no encroachment permit would be required relative to landscaping installation and no maintenance agreement would be required. Hydroseeding as part of Project Best Management Practices may be required, and would be monitored for effectiveness as an erosion control measure, as required by the Construction General Permit.

B7 The County agrees that any work performed within Caltrans right-of-way would require discretionary review and approval by Caltrans. It is understood that a Permit Engineering Evaluation Report (PEER) is recommended to determine the appropriate permit process. A Draft PEER was provided to Caltrans on September 19, 2013 and coordination is ongoing.

B8 Should the Project be approved and an encroachment permit be necessary during Project construction, this Final EIR and supporting technical studies would be included as part of the permit application. Regulatory and resource agency permits are identified in Section 1.5.1 of the EIR and the County is coordinating with these agencies as appropriate.

B8 cont. permit application will be accepted. Identification of avoidance and/or mitigation measures will be a condition of the encroachment permit approval as well as procurement of any necessary regulatory and resource agency permits. Encroachment permit submittals that are incomplete can result in significant delays in permit approval.

B9 When a property owner proposes to dedicate property to a local agency for Caltrans use in conjunction with a permit project, Caltrans will not issue the encroachment permit until the dedication is made and the property has been conveyed to Caltrans.

B10 Improvement plans for construction within State Highway R/W must include the appropriate engineering information consistent with the state code and signed and stamped by a professional engineer registered in the State of California. Caltrans' Encroachment Permit Manual contains a listing of typical information required for project plans. All design and construction must be in conformance with the Americans with Disabilities Act (ADA) requirements.

B11 Additional information regarding encroachment permits may be obtained by contacting the Caltrans Permits Office at (619) 688-6158. Early coordination with Caltrans is strongly advised.

If you have any questions, please contact Trent Clark of the Caltrans Development Review Branch at (619) 688-3140.

Sincerely,

JACOB M. ARMSTRONG, Chief
Development Review Branch

B9 Comment noted.

B10 Any improvement plans for construction within Caltrans right-of-way would include engineering information consistent with state code and would be stamped by a professional engineer registered within California. Information would be submitted consistent with the Caltrans Encroachment Permit Manual and both design and construction would conform to ADA requirements.

B11 Comment noted.

STATE OF CALIFORNIA Edmund G. Brown, Jr.Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
ds_nahc@pacbell.net

August 16, 2013

Mr. Dennis Campbell, Planning Associate
San Diego County Department of Planning and Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Sent by FAX to: 858-694-2555
No. of Pages: 3

RE: Native American Consultation pursuant to California Government Code Sections 6540.2, 65092, 65351, 65352.3,, 65352.4, 65562.5 *et seq.* for the proposed "**General Plan Amendment No. GPA05-003; Specific Plan Amendment No. SPA05-001; Subsequent Environmental Impact Report, State Clearinghouse No. 2009061043Project;"** located in the northeast quadrant of the Intersection of Interstate 15 and State Route 76 ; North County; San Diego County, California.

Dear Mr. Campbell:

C1

Government Code Sections 65351, 65352.3, 65562.5, *et seq.* incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after January 1, 2005. California Native American tribes are identified on a list maintained by the Native American Heritage Commission (NAHC).

In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites. Note that the NAHC does NOT APPROVE General or Specific Plan; rather, it provides a list of tribal governments with which local jurisdictions must consult concerning any proposed impact to cultural resources as a result of the proposed action.

C1 Comment noted. This comment is not at variance with the environmental document. No changes were made to the environmental document as a result of this comment.

08/19/2013 09:38 FAX 916 657 5390 NAHC ☑002/003

C2 The NAHC did conduct a Sacred Lands file search of the of the 'area of Potential Effect or APE which did indicate indicate the presence of Native American cultural resources. As part of the tribal consultation process, the NAHC recommends that local governments and project developers contact the tribal governments and individuals to determine if any cultural places might be impacted by the proposed action. Also, the absence of specific site information in the sacred lands file does not preclude their existence. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

C3 Attached is a consultation list of tribal governments with traditional lands or cultural places located in the vicinity of the Project Area (APE). The tribal entities on the list are for your guidance for **government-to-government consultation** purposes.

A Native American tribe or individual may be the only source of the presence of traditional cultural places. For that reason, a list of Native American Contacts is enclosed as they may have knowledge of cultural resources and about potential impact, if any, of the proposed project.

If you have any questions, please contact me at (916) 373-3715.

Best regards,

Dave Singleton
Program Analyst

Attachment

C2 Comment noted. A cultural resources survey was completed for the Proposed Project and was negative for cultural resources. The study identified that the major portion of the significant Pankey Site CA-SDI-682 is located well east of the Project. Identified significant loci were capped and/or preserved in open space in 2012 as part of the previously approved Meadowood Project. The County acknowledges that other sources should be contacted in order to supplement previously known information and Project survey data. The County conducted SB-18 consultations that included contacting listed tribes provided by the NAHC on October 14, 2005 and August 24, 2010. Only two tribes (Pala and San Luis Rey) requested consultation. The County consulted with both of these tribes during the processing of this Project. No changes were made to the environmental document as a result of this comment.

C3 Comment noted. The Proposed Project includes a specific plan amendment and a general plan amendment that requires tribal consultation pursuant to SB-18. Each of the contacts listed on the NAHC correspondence with the County in 2005 and 2010 was contacted. Only two tribes (Pala and San Luis Rey) requested consultation. The County has met with these tribes during the processing of the Proposed Project. The San Luis Rey Band requested a pre-excavation agreement to be entered into prior to any ground-disturbing activities; and outlined concerns regarding the preservation of cultural, archaeological, and historical sites and resources located within the Project area. The Pala Band of Mission Indians recommended archaeological monitoring and expressed a desire to stay involved with Project planning. The County is continuing to consult with interested Tribal representatives regarding the Proposed Project.

Native American Tribal Government Consultation
San Diego County
August 16, 2013

Pala Band of Mission Indians
Historic Preservation Office/Shasta Gaughen
35008 Pala Temecula Road, PMB 50 Luiseno
Pala , CA 92059 Cupeno
PMB 50
(760) 891-3515
sgaughen@palatribe.com

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula , CA 92593
(951) 770-6100
hlaibach@pechanga-nsn.gov

Pauma & Yuima Reservation
Randall Majel, Chairperson
P.O. Box 369 Luiseno
Pauma Valley , CA 92061
paumareservation@aol.com
(760) 742-1289

La Jolla Band of Mission Indians
Lavonne Peck, Chairwoman
22000 Highway 76 Luiseno
Pauma Valley , CA 92061
rob.roy@lajolla-nsn.gov
(760) 742-3796

Soboba Band of Mission Indians
Rosemary Morillo, Chairperson; Attn: Carrie Garcia
P.O. Box 487 Luiseno
San Jacinto , CA 92581
carrieg@soboba-nsn.gov
(951) 654-2765

Rincon Band of Mission Indians
Bo Mazzetti, Chairperson
1 West Tribal Road Luiseno
Valley Center , CA 92082
bomazzetti@aol.com
(760) 749-1051

San Luis Rey Band of Mission Indians
Tribal Council
1889 Sunset Drive Luiseno
Vista , CA 92081
760-724-8505

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3. and 65362.4 et seq.

NORTH COUNTY FIRE PROTECTION DISTRICT

315 East Ivy Street • Fallbrook, California 92028-2138 • (760) 723-2005 • Fax (760) 723-2004 • www.ncfire.org

BOARD OF DIRECTORS

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Planning and Development Services
Project Servicing Counter
5510 Overland Ave. Suite 110
San Diego Ca. 92123

September 24, 2013

RE: General Plan Amendment; PDS2005-3800-05-003 (GPA). PDS2005-3813-05-001 (SP). PDS2005-3600-05-005 (REZ). PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER). SCH NO. 2009061043, CAMPUS PARK WEST PROJECT.

Comments for amendments to general plan are as follows:

D1 1. Fire Protection plan letter from Chief Morel, dated Dec 17, 2012 will still apply and any changes to project should be addressed in new submittal of FPP.

D2 2. Table 7-1. North County Fire Protection District should be listed as an agency that approvals are required.

Patty Koch, Fire Prevention Specialist
North County Fire Protection District
760 723-2040

D1 No changes to the Fire Protection Plan as circulated with the Draft EIR are anticipated. The County concurs that the December 17, 2012 Fire Protection Plan (FPP) letter from Chief Morel still applies.

D2 The County agrees that the NCFPD should be listed as a responsible agency. Table 7-1 of the Specific Plan Amendment Report has been revised.

San Diego County Water Authority
4677 Overland Avenue • San Diego, California 92123-1233
(858) 522-6600 FAX (858) 522-6568 www.sdcwa.org

September 23, 2013

Mr. Dennis Campbell
County of San Diego
Planning & Development Services
Project Processing Counter
5510 Overland Avenue, Suite 110
San Diego, California 92123

Subject: Comments on the Campus Park West Project Draft Subsequent EIR (PDS2005-3800-05-003 (GPA), PDS2005-3813-05-001 (SP), PDS2005-3600-05-005 (REZ), PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER), SCH NO. 2009061043, CAMPUS PARK WEST PROJECT)

Dear Mr. Campbell:

The San Diego County Water Authority (Water Authority) has reviewed a copy of the above-referenced documents made available on the County of San Diego's (County) website. The Subsequent Draft Environmental Impact Report (DEIR) identifies the need to annex the Campus Park West Project to the Water Authority in order to provide imported water supply to the proposed project. If the project were to annex to the Water Authority for water service, the Water Authority would be considered a responsible agency under the California Environmental Quality Act. The Water Authority has therefore examined the relevant portions of the documents and offers the following comment and clarification on the DEIR.

E1

Draft EIRc

The DEIR provides discussion on the Water Authority's 2010 Urban Water Management Plan (UWMP). It states that the accelerated forecasted growth component of the demand projections provided in the UWMP can be used by the Water Authority member agencies to meet the demands of new annexations not currently identified in the Water Authority's UWMP.

This discussion is found in two places in the DEIR: 1) Draft Chapter 3.0 - Environmental Effects Found not to be Significant, Section 3.1.9 Utilities and Service Systems, beginning on page 3.1.9-3, and 2) Appendix R -Water Supply Assessment. The comment below is relevant to both of these sections of the DEIR.

E2

MEMBER AGENCIES
Carlsbad Municipal Water District
City of Del Mar
City of Escondido
City of National City
City of Oceanside
City of Poway
City of San Diego
Fallbrook Public Utility District
Helix Water District
Lakeside Water District
Olivenhain Municipal Water District
Otay Water District
Padre Dam Municipal Water District
Camp Pendleton Marine Corps Base
Rainbow Municipal Water District
Ramona Municipal Water District
Rincon del Diablo Municipal Water District
San Dieguito Water District
Santa Fe Irrigation District
South Bay Irrigation District
Vallecitos Water District
Valley Center Municipal Water District
Vista Irrigation District
Yuima Municipal Water District

OTHER REPRESENTATIVE
County of San Diego

A public agency providing a safe and reliable water supply to the San Diego region

PRINTED ON RECYCLED PAPER

E1 Thank you for these comments. County staff agree that annexation to the Water Authority would be required for this Project and that the Water Authority is a responsible agency under CEQA.

E2 The County agrees with the location of discussion in the EIR regarding th s issue.

E3

Comment

In order to provide imported water service, the proposed project will need to annex to a Water Authority member agency, the Water Authority, and the Metropolitan Water District of Southern California. Annexation of the proposed Campus Park West project was not included in the Water Authority's 2010 UWMP. Accelerated forecasted growth is for projects within the Water Authority's service area and does not account for new annexations not identified in the UWMP. This should be corrected in the DEIR. The 2010 UWMP is found on the Water Authority's website at: http://www.sdcwa.org/urban-water-management-plan. The following contains background information on the additional demand increments in the Water Authority's UWMP and on the Water Authority's annexation policies.

To provide for a more comprehensive planning analysis and fully quantify potential demands served by the Water Authority, the Water Authority's UWMP includes two demand components in the demand forecast to address potential near-term annexations and accelerated forecasted growth. The potential near-term annexations and estimated demands associated with the annexations were provided to the Water Authority by its member agencies. The Water Authority is not familiar with all of the land-use activities at the local level and must rely on the member agencies for information. The Water Authority did not receive a request to include the Campus Park West Project in the near-term annexation demand increment, and therefore it is not included in the 2010 UWMP.

E4

The 2010 UWMP also includes a second demand increment, referred to as accelerated forecasted growth, which is associated with accelerated forecasted development as part of the Water Authority's Municipal & Industrial (M&I) sector demand projections. According to the UWMP (Section 2.4.1), "These forecasted housing units were identified by SANDAG in the course of its regional housing needs assessment, but are not yet included in local jurisdiction's existing general land use plans. The demand associated with accelerated forecasted growth is intended to account for a portion of SANDAG's residential land-use development currently projected to occur between 2035 and 2050, but has the potential to occur on an accelerated schedule. SANDAG estimates that general plan amendments, allowing this accelerated residential development, could occur within the planning horizon of the 2010 UWMP update." Accelerated forecasted growth is for projects within the Water Authority's service area and does not account for new annexations not identified in the UWMP.

The Water Authority has annexation policies that provide criteria for evaluating the annexation of territory to the Water Authority, which include a policy that provides for the protection of member agency supply reliability. The Water Authority Board also has approved implementation procedures that provide guidance in determining if approval of a proposed annexation would adversely affect member agency supply reliability. The guidance states that when water demands of an annexing property have not been included in the Water Authority's adopted UWMP, as is the case with the proposed project, then annexation of property generally will have an adverse impact on member agency supply

E3 Annexation to both of these service providers is specified in Section 1.5.1, Matrix of Project Approvals/Permits.

E4 The approved Water Supply Assessment (WSA) by the Rainbow Municipal Water District (RMWD) Board assumed that the Water Authority's accelerated forecasted growth (AFG) water supply developed in the 2010 UWMP would be available in the near term for projects such as Campus Park West. Moreover, the Project was previously included as a proposed annexation by the Water Authority and RMWD in the 2005 UWMP. At a meeting on September 11, 2013 with RMWD, the Water Authority and Project representatives, it was noted that the 2010 UWMP AFG supply did not include the proposed annexation of the Project into RMWD. This was also noted in the Water Authority's comment letter. The discrepancy between the 2005 and 2010 UWMP is understood. It was apparent that at that time, RMWD did not provide Campus Park West information to the Water Authority, and as a result, the Water Authority was unable to incorporate the Project as a proposed annexation.

The Water Authority is required by California Water Code to update the 2010 UWMP every five years. For the 2015 UWMP, RMWD has made certain that the Proposed Project will be included as a proposed annexation. This is further supported by the RMWD's Board approval of a pre-annexation agreement on May 22, 2012, indicating its commitment and support to supply water to the Project, especially since portions of Campus Park West are currently within the RMWD service area.

The 2015 UWMP will not only include the Project as a proposed annexation, but will likely be approved and adopted prior to the Project requiring water service. The current Project schedule estimates that entitlements, design, construction and first occupancies would occur within 2015, at the earliest. Therefore, it seems reasonable to expect the Water Authority 2015 UWMP will account for the Project.

reliability, unless the Water Authority finds that additional supplies are reasonably available to meet the long-term demands of the annexing property, without harming the supply reliability of its member agencies.

In July 2013, the Water Authority Board of Directors approved a 2013 Annual Water Supply Report for distribution to its member agencies, the county of San Diego, and cities within the county. This report identified a number of significant events that have occurred since the development of the Water Authority's long-range demand forecast for the 2010 UWMP. Mandatory water use restrictions, supply allocations, and lingering effects of the national economic recession all contributed to a sizable decrease in San Diego area water demands. Between fiscal years 2007 and 2012, total demand dropped by almost 27 percent. Taking into account that the Water Authority's service area demand over the past few years continues to be low compared with 2007 demand levels, the projected forecast for 2015 included in the 2010 UWMP, and it is reasonable to consider that the Water Authority could meet the long-term demands of the annexing property. The Water Authority will be revising its long-range demand forecast as part of the 2015 UWMP update. If the Campus Park West Project is approved and annexed to the Water Authority service area, demands associated with the project will be included in the revised format.

E4 cont.

Thank you for this opportunity to comment. Please add the Water Authority on your mailing list to receive the final EIR and any other information concerning this project. If you have any questions, please contact Ms. Lesley Dobalian at (858) 522-6747.

E5

Sincerely,

Dana Friehauf
Principal Water Resources Specialist

DF:ld

E4 cont. Should the 2015 UWMP be delayed or the Project be developed sooner, it seems reasonable that the Water Authority could rely on the fact that the Water Authority service area has seen a dramatic drop in water use since 2007 (almost 27 percent). For any short timeline gap between Project opening and approval of the 2015 UWMP, the Water Authority would reasonably be expected to meet the water demands of the Project. It is expected that this will allow inclusion of the Project into long-term demand assumptions used by the Water Authority for long-range forecasts, and that annexation into RMWD and the Water Authority service area will be approved.

All of this information has been added to EIR Appendix R, the Water Supply Assessment.

Specifically with regard to annexation, a memorandum that incorporates the Pre-annexation Agreement has been prepared for Water Authority and RMWD use during the annexation process. This has been added to EIR Appendix R, the Water Supply Assessment.

E5 Comment noted.

ALESHIRE & WYNDER LLP
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September 23, 2013

VIA E-MAIL AND OVERNIGHT DELIVERY (Dennis.Campbell@sdcounty.ca.gov)

County of San Diego
Planning & Development Services
Project Processing Counter
ATTN: Mr. Dennis Campbell
5510 Overland Avenue, Suite 110
San Diego, California 92123

Re: Notice of Availability of a Draft Environmental Impact Report, Draft Habitat Loss Permit, General Plan Amendment and Specific Plan for Campus Park West

Public Notice Project Numbers & Name: PDS2005-3800-05-003 (GPA), PDS2005-3813-05-001 (SP), PDS2005-3600-05-005 (REZ), PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER), SCH NO. 2009061043, CAMPUS PARK WEST PROJECT

Dear County of San Diego:

The undersigned serves as Legal Counsel to the San Luis Rey Municipal Water District ("San Luis Rey"), and in that capacity, thanks you for the opportunity to comment on the above-referenced matters, collectively referred to herein as the "Project." Pursuant to the Notice of Availability for the Project ("Notice"), including the Draft Subsequent Environmental Impact Report ("Draft SEIR"), San Luis Rey hereby submits the comments expressed herein and timely does so as set forth in the Notice.

Brief Background

F1

By way of brief background, San Luis Rey has a long, rich history of preserving rights and interests of its landowners primarily involving ground and surface water rights. San Luis Rey was formed on October 17, 1958 with its primary purposes and activities including: (1) Monitoring and acting upon issues which impact water, land and environment, and other activities which can potentially affect the quality or quantity of the water available to the water users in San Luis Rey; (2) Closely monitoring the regulation, design, environmental review, and permitting process for the Gregory Canyon Landfill ("GCL") project to assure that the local water supply is protected; and, (3) Monitoring the proceedings of the federal and State

F1 Aleshire & Wynder LLP's legal relationship with the San Luis Rey Municipal Water District (SLRMWD) is understood. The statement of the District's interest and powers is also understood. These are introductory remarks and do not require a response. Individual comments are addressed below.

F1 cont. government environmental agencies and environmental advocacy groups that could restrict water production, water use, or construction and operation of water management facilities.

Comments

San Luis Rey hereby provides the following comments specific to the pending Draft SEIR:

Comments on Section 3.1.4 (Hydrology/Water Quality):

Page 3.1.4-25:

This section contains statements regarding "disposal of extracted groundwater," by purporting that "[d]isposal of groundwater extracted during construction activities into local drainages and/or storm drain facilities could potentially generate significant water quality impacts…"

F2 While this section addresses water-quality issues related to construction-related groundwater extraction, no discussion whatsoever is made of the anticipated loss of local groundwater supplies arising from these construction activities. As set forth in *Madera Oversight Coalition, Inc. v. City of Madera (Tesoro Viejo, Inc.)* (2011) 199 Cal.App.4th 48, "full discussion" must be made, which means a reasoned analysis and full disclosure of the pertinent facts regarding potential environmental effects or consequences. As such, analysis is needed regarding the Project's anticipated effects on the groundwater supply arising from the construction-related activities identified in this section.

Electing not to provide this analysis would fail to provide an adequate basis for decision making under the California Environmental Quality Act ("CEQA"), Pub. Resources Code, § 21000 *et seq.* (*see, Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316).

Accordingly, San Luis Rey requests analysis regarding the Project's anticipated effects on the groundwater supply arising from the construction-related activities identified in this section, including without limitation, the quantity of water anticipated to be extracted and the feasibility of returning that quantity of water to the groundwater supply of the same quality as when extracted.

Comments on Section 3.1.9 (Utilities and Service Systems):

Page 3.1.9-3:

F3 In discussing the "local water supply considerations," a "pre-annexation agreement dated May 22, 2012" between RMWD and SDCWA is mentioned wherein an amendment to San Luis Rey's Sphere of Influence is anticipated. This pre-annexation agreement is not included or

F2 As described in Section 3.1.4.1, groundwater was identified at depths of 13 to 18 feet during on-site exploratory borings. The depth to ground water in the northern portion of the site is anticipated to be at a shallower depth but has not yet been confirmed. The amount of subsurface groundwater is unknown at this time. Although the cited section provides a conservative approach to potential water quality issues associated with incursions into shallow groundwater (in order to provide for potential mitigation of any adverse effects), identification of any anticipated amount of removed water would be speculative. Please note, however, that the recommendations for site remedial grading is to remove the on-site alluvium to within two feet of the static ground water table, so no major removals of groundwater are anticipated. Localized deeper excavations such as for utility installation may require some dewatering, but it is likely that the water could be moved to on-site detention basins where it would infiltrate back into the subsurface. No formal groundwater recharge is planned, although the site grading process would use a significant amount of water that may locally infiltrate and temporarily add to the ground water reserves.

F3 As noted, a memorandum that incorporates the Pre-annexation Agreement was prepared for San Diego County Water Authority and Rainbow Municipal Water District (RMWD) use during the annexation process. This has been added to EIR Appendix R, the Water Supply Assessment (WSA). The administrative requirements associated with disclosure of this annexation process do not require additional environmental review over the water supply analysis provided in the Subsequent EIR.

otherwise properly incorporated into the discussion, thus precluding full disclosure as required by *Madera Oversight Coalition, Inc. v. City of Madera (Tesoro Viejo, Inc.)* (2011) 199 Cal.App.4th 48. F3 cont.

As such, San Luis Rey requests that a true and complete copy of this agreement be incorporated into and fully analyzed in the DSEIR.

Comments on Appendix R: Water Supply Assessment ("WSA"):

Page 8:

A typographical error exists in the first sentence of the first paragraph by citing to Water Code section 7100 for the governing statutes of RMWD, when the appropriate citation is to Water Code section 71000 *et seq*. Also, the last paragraph contains a factual error when referring to the San Luis Rey River as the "sole source of water" to the San Luis Rey, when in fact groundwater is another source of supply to San Luis Rey landowners. Kindly correct these two items.

Page 12:

Under "water supply," second paragraph, the WSA states that "[t]he District's primary resource of potable water is imported…"; however, no further mention is made of what the secondary, or "non-primary," resources are for the water supply. Moreover, the next section entitled, "water sources - ground water," refers to RMWD's 2005 Urban Water Management Plan ("UWMP") determining that "the potential exists within the District to utilize groundwater as a supplemental water supply, and, that RMWD "is also looking into buying water rights from the City Carlsbad [sic] from the San Luis Rey River." F4

The WSA's comments, without any discussion or analysis of groundwater or surface water supply sources, needs to be developed more. As held in *Cherry Valley Pass Acres & Neighbors v. City of Beaumont* (2010) 190 Cal.App.4th 316 ("*Cherry Valley*"), an EIR for a land use project must address the impacts of likely future water sources (and related mitigation and alternatives), and the EIR's discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water availability. Also, where, despite a full discussion, it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies.

The *Cherry Valley* standard requires further discussion and analysis to allow for proper decision making, for reasons including without limitation: (i) a lack of analysis regarding the quantity of groundwater potentially to be extracted and under what authority; (ii) the effects of such groundwater extractions on the environment and other users (including storage rights); and, (iii) the basis for the purported surface rights of the City of Carlsbad and related information,

F4 These two items have been noted in the approved Water Supply Assessment (EIR Appendix R). The remainder of this response is based on discussions between Mr. Mark B. Elliott (Atkins Project Director) and Ms. Kirsten Plonka (RMWD District Engineering) on October 11, 2013.

The minor typographical and factual errors are noted and will be documented with RMWD. Please note that the Project does not propose any use of ground water to meet its potable water supply requirements, and would only obtain water service through RMWD. Relative to the Carlsbad water rights—this was only referenced to document a feasibility investigation that was conducted in 2005 by RMWD to explore alternative local water supplies. Based on recent discussion with RMWD, this water supply alternative is no longer being considered. Therefore, the reference within the WSA is only for historical documentation. RMWD continues to explore other local water supply alternatives, but is not currently evaluating ground water supplies within and under the control of the SLRMWD.

such as the quantity diverted, point of diversion, place of use, and time(s)/season of use. Ultimately, the WSA's references to these local supply sources are speculative without any further information, or incorporation of an agreement, if one exists, that establishes such right to either of these local supplies.

F4 cont.

Accordingly, discussion and analysis of these sources, and their potential environmental effects, is necessary.

SBX7-7

The 2009 legislative package, commonly known as "SBX7-7," requires a statewide twenty percent (20%) reduction in urban per capita water use by 2020. It requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified requirements, and requires agricultural water suppliers prepare plans and implement efficient water management practices.

F5

No mention of SBX7-7 is made in the DSEIR, which suggests that conservation is not pursued to the extent set forth by the Legislature through SBX7-7, which in turn implicates environmental impacts by not conserving as much as may be achievable.

Accordingly, this water conservation initiative should be addressed in the DSEIR.

Conclusion

Given San Luis Rey's focused commitment to protecting its landowners' interests, namely as to water rights and supplies, and the quality of those supplies, San Luis Rey submits its comments with the expectation that its comments will ultimately be implemented.

F6

Again, thank you for this opportunity to provide comments. Please do not hesitate to contact me if you would like to discuss this matter or if you have any questions regarding San Luis Rey's comments.

Very truly yours,

ALESHIRE & WYNDER, LLP

Wesley A. Miliband

F5 Although not directly referenced in the WSA, the Project would comply with the District's SB 7 x 7 requirements as documented in the 2010 RMWD UWMP Tables 7A and 7B. Because of historical high agricultural water use in the RMWD service area, the methodology used to calculate the baseline averages generated a high per capita demand to be reduced by 2015 and 2020. Because RMWD agricultural use continues to decline and RMWD water demands have been reduced over 20 percent the past few years, RMWD is on target to meet the SB 7 x 7 requirements by 2015 and 2020. Campus Park West would be conditioned to comply with all Best Management Practices for water conservation as outlined in the 2010 RMWD UWMP. In addition, the Project would construct a recycled water pipeline and, when available, serve all on-site irrigation demands with recycled water.

F6 Comment noted.

cc: Mr. Victor Pankey, President *(via e-mail)*
Mr. William Pankey, Vice-President *(via e-mail)*
Ms. Helga Fritz, Director *(via e-mail)*
Mr. Thomas Veysey, Director *(via e-mail)*
Mr. Claren Yarger, Director *(via U.S. Mail)*

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

October 1, 2013 **Via E-Mail and Federal Express**

Mr. Dennis Campbell
County of San Diego
Planning and Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Dear Mr. Campbell,

Notice of Availability for the Campus Park West Draft Subsequent Environmental Impact Report

G1 The Metropolitan Water District of Southern California (Metropolitan) reviewed the Draft Environmental Impact Report (Draft EIR) for the Campus Park West (Project). The County of San Diego (County) is acting as the Lead Agency under the California Environmental Quality Act for the Project. The Project proposes to approve four discretionary actions: a tentative map for a subdivision, a specific plan amendment, a general plan amendment, and rezoning to develop a mixed-use community on approximately 118 acres. A small percentage of the project lies within the Rainbow Municipal Water District (RMWD).

G2 RWMD is a public agency that distributes water to utility companies and municipal water departments, and is a member of San Diego County Water Authority (SDCWA), Metropolitan's member agency. RWMD and SDCWA have contacted Metropolitan regarding this Project. Metropolitan appreciates these efforts and looks forward to continued coordination on this Project. Metropolitan acknowledges RWMD's efforts to enhance water supply reliability and flexibility by helping develop programs to increase storage, water distribution, and other resource-management plans.

G3 This letter contains Metropolitan's comments to the Draft EIR as a potentially affected public agency. The Project is partially within Metropolitan's service area, east of Interstate 15 and is situated both north and south of State Route 76 in San Diego County (see attached map). The project area south of State Route 76 and a small parcel north of State Route 76 is within SDCWA boundaries. The remaining project area north of State Route 76 is not currently within Metropolitan's service area and will need to be annexed prior to water being served. Should the parcel develop and receive imported water it will need to be annexed to Metropolitan and SDCWA. Metropolitan is a responsible agency with respect to annexation and needs to be listed in the agency approval list related to EIR actions.

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: P.O. Box 54153, Los Angeles, California, 90054-0153 • Telephone: (213) 217-6000

G1 This is a correct summary of the County's role in this project under the California Environmental Quality Act (CEQA), the proposed discretionary actions and the relationship of the Project to Rainbow Municipal Water District's (RMWD's) current service area. No response is necessary.

G2 This is a correct characterization of RMWD, and your acknowledgement of RMWD's efforts to enhance water supply reliability and flexibility is noted. No response is necessary.

G3 The County agrees with these comments. The need to annex additional Project area into the Metropolitan service system is identified in EIR Section 1.5.1 on the Matrix of Project Approvals and Permits. The identified need for this annexation in the Draft Supplemental EIR indicated that Metropolitan is a responsible agency under CEQA.

G4 The Draft EIR needs to clearly state the need for a proposed annexation to Metropolitan, SDCWA, and San Diego County LAFCO, including water standby charges and other required conditions for annexation in the project description. The Draft EIR also needs to expressly state that discretionary annexation to Metropolitan is required. This statement should appear in each section of the Draft EIR (e.g., water supplies or utilities) where annexation to SDCWA and the County is discussed. Furthermore, an analysis of the proposed annexation must be included in the appropriate impact section of the Draft EIR so that Metropolitan and other public agencies can rely on the Draft EIR for their own discretionary actions.

G5 The Draft EIR describes a pre-annexation agreement dated May 22, 2012 that describes specific provisions for service between RMWD and SDCWA, referenced in Appendix S. However, the pre-annexation agreement was not attached in Appendix S. Metropolitan requests the agreement be made available for review. We encourage RWMD to continue to work with Metropolitan, SDCWA, and San Diego County LAFCO on annexation procedures by contacting Ethel Young at (213) 217-7677.

G6 Metropolitan thanks the County for granting us an additional two weeks for comment preparation. We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental documentation and the Final EIR on this project. If you have any questions, please contact Mr. Dave Clark at (213) 217-6070 or dclark@mwdh2o.com

Very truly yours,

Deirdre West
Manager, Environmental Planning Team

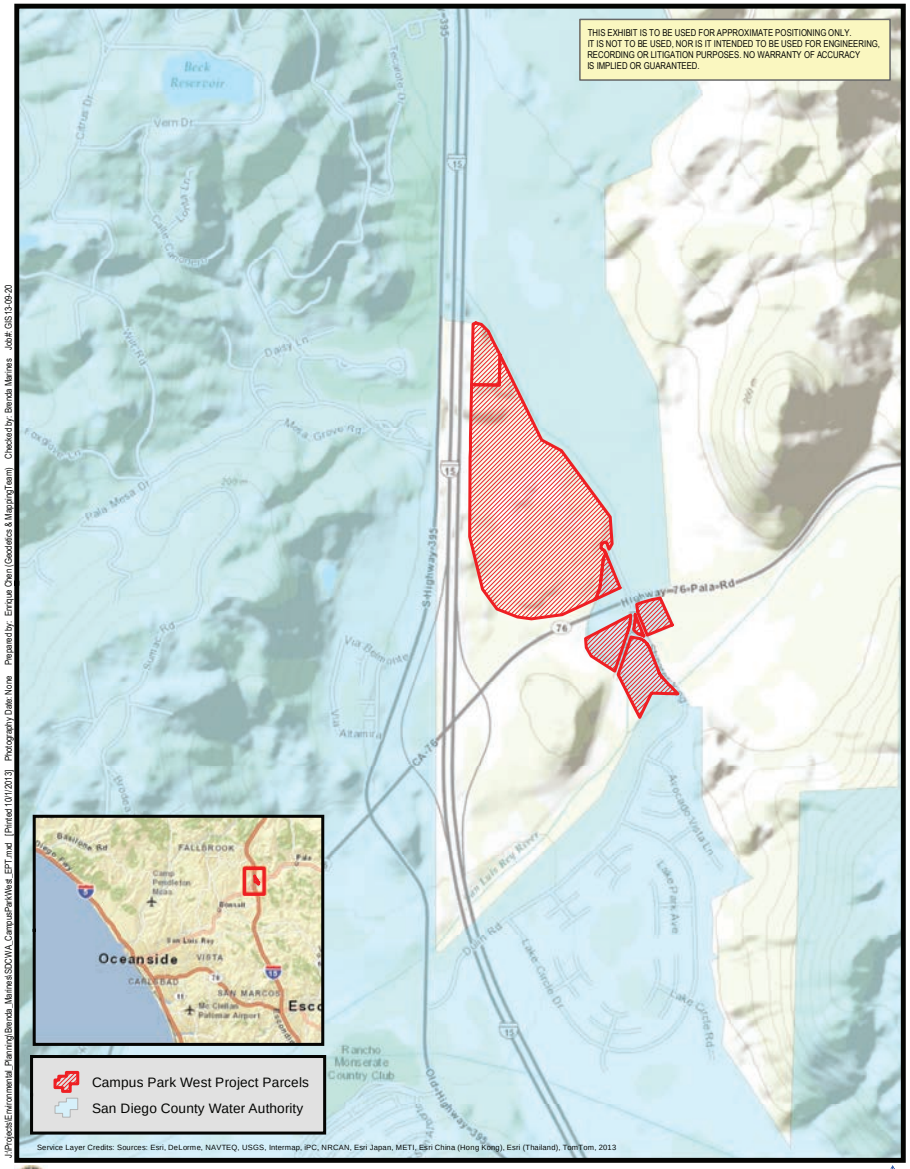
BSM/bsm
EPT 2013091701

Enclosure: Map

G4 Please refer to the response to Comment G3 regarding identification of proposed Metropolitan annexation. This is also described in Section 1.2.2.3, Utilities of the EIR. These result in the requested clear statements regarding annexation. The County disagrees that additional discussion needs to be included in other sections of the EIR. Section 3.1.9, Utilities and Service Systems, looks at the environmental effects of service connections. Excluding the footprint analyses addressed (as appropriate) in resource discussions throughout Chapters 2 and 3 of the EIR, the annexation is primarily a paper exercise. This is considered an administrative effort that is adequately disclosed in Chapter 1.

G5 A memorandum that incorporates the Pre-annexation Agreement has been prepared for San Diego County Water Authority and RMWD use during the annexation process. This has been added to EIR Appendix R, the Water Supply Assessment and is part of the public record. The Applicant and County staff are continuing to work with the local water agencies as well as LAFCO. The contact person and number for this issue at Metropolitan are appreciated.

G6 Comment noted. Metropolitan is on the mailing list to receive the Final Subsequent EIR and other important information (e.g., the Project hearing date).



J:\Projects\Environmental Planning\Benda Maines\SDCWA Campus\ParkWest_EPT.mxd [Printed 10/1/2013] Photography Date: None Prepared by: Enrique Chen (Geodetics & Mapping Team) Checked by: Benda Maines Job# GIS13-09-20

October 7, 2013

Dennis Campbell
Planning and Development Services
5510 Overland Ave, Suite 110
San Diego, CA 92123

RE: Draft HLP and DEIR for Campus Park West (PDS2005-3800-05-003 (GPA), PDS2005-3813-05-001 (SP), PDS2005-3600-05-005 (REZ), PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER), SCH NO. 2009061043)

Dear Mr Campell:

H1 The Endangered Habitats League (EHL) appreciates the opportunity to comment on this draft HLP and DEIR. I apologize for the late submittal of comments but nevertheless ask that this information be placed into the administrative record and considered by staff, applicant, and decision-makers. Our comments will focus on coastal sage scrub impacts and North County MSCP consistency.

H2 Campus Park is part of a group of "hard line" projects in the vicinity. EHL supports such hard lines when sound preserve segments are created. The current proposal is to impact 2.27 acres of additional coastal sage scrub formerly anticipated to be part of a Caltrans right of way. The regional significance of the coastal sage scrub is as "steppingstone" linkage along I-15.

EHL has two concerns:

H3 **1) Is the remaining stepping stone habitat sufficient for connectivity purposes?**

According to the HLP,

"The onsite preservation/restoration of 1.29 acres of coastal sage scrub in combination with the existing habitat within the right of way of Interstate 15 is adequate for the archipelago to function in this area."

According to the DEIR,

"When compared to the Project site, both Rice Canyon and off-site I-15 "stepping stone" linkages provide higher quality habitat and unobstructed development; creating feasible wildlife corridors, adequate foraging, and vegetation cover sufficient for protection from predators."

These statements are long on conclusions and short on supporting facts. Where is the habitat that, along with the preserved 1.29 acres, provides for archipelago function? How many acres is it, and why is it sufficient, particularly as "live in" habitat? No map is provided.

H1 Comments noted.

H2 This statement summarizes the commenter's understanding of the Project and impacts to coastal sage scrub. The County of San Diego appreciates the review and comments on the Project. Specific responses to the comments are provided below.

H3 The remaining stepping stone habitat is considered sufficient for connectivity purposes. Figure 2.6-3 in the EIR and Figure 4 of the Biological Technical Report (BTR) identify the wildlife movement corridors within the vicinity of the Project site. The 1.29 acres of preserved coastal sage scrub on site is located in the northernmost portion of the site, shown in Figure 2.6-5 of the EIR and Figure 11 of the BTR. This preserved acreage would enhance the existing local wildlife corridor that occurs to the east of the Project site, as shown in Figures 2.6-3 and 4, referenced above. The off-site coastal sage scrub stepping stone habitat occurs primarily to the west of I-15 and is shown as a yellow regional wildlife corridor. As described in Section 2.6.1.1 under the heading Habitat Connectivity and Wildlife Corridors, as well as in Section 1.4.8 of the BTR, the stepping stone habitat along I-15 is ideal for foraging purposes. This habitat is not ideal for "live in" habitat. Rice Canyon is located less than one mile northeast of the Project site. Rice Canyon contains vegetation cover ideal for the movement of wildlife species to hide from predators, foraging for food, and breeding and nurturing of young.

H3 cont. In regard to the the Rice Canyon and off-site steppingstones, where are these? No map is provided, nor acreages, although the rationales cited are helpful. Are Rice Canyon and the off-site steppingstones permanently protected, or is that speculative?

2) Is the mitigation adequate?

According to the HLP,

H4 *"In addition, 3.25 acres of off- site mitigation at a 2:1 ratio will be provided in the Northern Valley Ecoregion for the impacted coastal sage scrub."*

Because we do not yet have an adopted North County MSCP that ensures a viable archipelago as part of a comprehensive plan, this particular mitigation should be "in kind" in terms of function. That is, it should conserve other stepping stone habitat along I-15 as opposed to coastal sage scrub *anywhere* in the Northern Valley Ecoregion. Absent that, and especially in view of the failure to provide evidence that sufficient land for stepping stone function has been *avoided* on-site, the impact is not mitigated to an insignificant level.

H5 Thank you for considering our views.

Yours truly.
Dan

Dan Silver, Executive Director
Endangered Habitats League
8424 Santa Monica Blvd., Suite A 592
Los Angeles, CA 90069-4267

213-804-2750
dsilverla@me.com
www.ehleague.org

H3 cont. Both Rice Canyon and the off-site I-15 stepping stones are identified as being protected in the future. County regional habitat mapping shows that the majority of coastal sage scrub near I-15 would be preserved to allow for a strong connection to the coastal sage scrub habitat located in Rice Canyon. The County has also committed to preserving Rice Canyon and the current draft of the NCMSCP has the following goals for Rice Canyon:

- Strive to ensure that coastal California gnatcatchers are able to move in natural habitat north-south between the Heights of Pala Mesa Conservation Bank through the slopes of Rice Canyon and to the hills and banks adjacent to the San Luis Rey River.

- Strive to conserve existing patches of coastal sage scrub over 1,000 feet wide along the slopes of Rice Canyon (to the extent that any one project can reasonably contribute to this conservation) to maintain live-in habitat for coastal California gnatcatcher and maintain north-south connectivity of its habitat. Require restoration of habitat where feasible to increase habitat corridor widths if minimum widths cannot be maintained in existing habitat.

In addition, County staff met with the Wildlife Agencies on December 19, 2013 to discuss Rice Canyon in detail and consider additional ways to prioritize preservation, and potential enhancement, of the vegetation communities in Rice Canyon. This discussion is ongoing but the parties agree that these linkage issues can be resolved within the context of the NCMSCP planning documents.

H4 The Project's habitat loss has been minimized and mitigated to the maximum extent practicable. As stated in Section 2.6.5 the EIR, significant direct impacts to 2.27 acres of Diegan coastal sage scrub on and off site shall be mitigated at a 2:1 ratio, for a total of 4.54 acres. A total of 1.29 acres shall be preserved/ restored on site and 3.25 acres shall be preserved off site. Off-site mitigation acreage shall be located within: a Pre-approved Mitigation Area (PAMA) if the NCMSCP has been adopted when the Project is approved, at an approved mitigation bank, or on purchased land to be managed by a RMP (Resource

H4 cont. Management Plan), as approved by the Director of the County Planning and Development Services (PDS). The Habitat Loss Permit (HLP) provision of a 2:1 mitigation ratio within the Northern Valley Ecoregion, in addition to the on-site preservation of 1.29 acres of coastal sage scrub, is considered adequate, as both Rice Canyon and the off-site I-15 stepping stones are identified as being protected in the future. Refer to response to Comment 3 for additional information. The mitigation proposed for the Project impacts is considered adequate and would reduce Project impacts to a less than significant level.

Since the NCMSCP is not yet approved, the County is also moving forward with Natural Community Conservation Planning (NCCP) compliance for upland habitat impacts. Pursuant to the 4d rule of the Federal Endangered Species Act, impacts to coastal sage scrub are limited to five percent of the total acreage occurring within the County, and require an HLP pursuant to Habitat Loss Ordinance 8365. Project impacts have been assessed based on the NCCP flowchart. The Project would potentially impact 2.27 acres of coastal sage scrub, which would not exceed the County's five percent allowance when combined with other projects and would not preclude preserve and linkage design for this area of North County. The NCCP Flowchart indicates the coastal sage scrub habitat is "Intermediate Potential Value for Long-term Conservation." At the required 2:1 mitigation ratio for this impact, the Project complies with the total required mitigation of 4.5 acres of occupied coastal sage scrub (1.25 acres on site and 3.25 off site).

H5 Comment Noted.

FALLBROOK COMMUNITY PLANNING GROUP
And
DESIGN REVIEW BOARD
Regular Meeting
Monday 16 September 2013, 7:00 P.M., Live Oak School, 1978 Reche Road, Fallbrook
MINUTES

Mr. Russell called the meeting to order at 7:00 p.m.

Twelve (12) members were present: Anne Burdick, Roy Moosa, Tom Harrington, Jean Dooley, Ron Miller, Paul Schaden, Jim Russell, Jack Wood, Lee J. De Meo, Eileen Delaney, Jackie Heyneman and Donna Gebhart. Ike Perez, Michele Bain and Jerry Farrell were not present.

1. Open Forum. Opportunity for members of the public to speak to the Planning Group on any subject matter within the Group's jurisdiction but not on today's agenda. Three minute limitation. Non-discussion, & Non-voting item.

Ms. Burdick informed the Group that work had begun on the Mission and Ammunition intersection improvements and that the new four way traffic control was in place and working well at Alturas and Fallbrook Street.

2. Approval of the minutes for the meetings of 19 August 2013. Voting Item.

Ms. Dooley motioned to approve the minutes and it passed unanimously.

IA1

3. GPA05-003, SPA -001, REZ 05-005, TM5424. Campus Park West located in the north east corner of I-15 and SR-76. NOTICE IS HEREBY GIVEN that the County of San Diego is circulating for public review a draft Environmental Impact Report in accordance with the California Environmental Quality Act along with a General Plan Amendment and Specific Plan for the following project. The draft Environmental Impact Report, General Plan Amendment and Specific Plan can be reviewed on the World Wide Web at http://www.sdcounty.ca.gov/pds/ceqa_public_review.htmland at Planning & Development Services (PDS), Project Processing Counter, 5510 Overland Avenue, Suite 110, San Diego, California 92123 and at the public libraries listed below. Comments on these draft documents must be sent to the PDS address listed above and should reference the project numbers and name. PDS2005-3800-05-003 (GPA). PDS2005-3813-05-001 (SP). PDS2005-3600-05-005 (REZ). PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER). SCH NO. 2009061043, CAMPUS PARK WEST PROJECT. The Campus Park West project is a proposed amendment to the Hewlett-Packard Campus Park Specific Plan; and is the result of changes in land ownership and regional planning goals, generally consistent with the 2011 County General Plan. The Project proposes two design scenarios. One (Scenario 1) is sited within the original Project boundaries and covers approximately 116.5 acres. The other (Scenario 2) would incorporate approximately 2.1 additional acres into the Project that are currently held as State Route 76 (SR-76) right-of-way by the California Department of Transportation (Caltrans). Because SR-76 is now built to its final anticipated configuration and the excess right-of-way is not anticipated to be required for state route operations, this area would be decertified and could be sold to the Project Applicant. Should this occur, the Project would encompass a total of 118.6 acres. Under both Scenarios 1 and 2, the Project includes review and proposed approval of four discretionary actions. These include:
- A Tentative Map (TM 5424) to subdivide the property into 23 lots;
- A Specific Plan Amendment (SPA 05-001) to amend the 1983-approved Specific Plan to the currently proposed mix of uses;
- A Rezone (REZ 05-005) from S90 to S88; and,

IA1 The introductory comments are noted and do not require a response.

- A General Plan Amendment (GPA 05-003) to revise or reconfigure land use designations as well as amend the Mobility Element (ME)
Specifically, the GPA would: (1) change the Regional Category on two parcels south of SR-76 from Rural to Village; (2) change the land use designation of three parcels south of SR-76 from Specific Plan to General Commercial and Rural Lands 40; (3) expand Limited Impact Industrial uses north of SR-76 south to Pala Mesa Drive; (4) reconfigure land use designations north of SR-76 to reflect the Project SPA; and (5) amend the ME to reclassify Pankey Road from a Collector to a Boulevard with Class II bike facilities from Pala Mesa Drive to Shearer Crossing, apply Class II bike facilities to the portion of Pala Mesa Drive within Project boundaries, and designate Pala Mesa Drive between the western Project boundary and Old Highway 395 as a Class III bike route.
The draft Environmental Impact Report (DEIR) identifies significant and unavoidable environmental impacts to Aesthetics, Air Quality, and Transportation and Traffic. The DEIR also identifies significant and mitigated environmental impacts to Biological Resources, Cultural Resources, Noise, and Paleontological Resources.
In accordance with Section 86.104 of County of San Diego Ordinance No. 8365 (N.S.) and Section 4.2.g of the Coastal Sage Scrub Natural Communities Conservation Plan Process Guidelines (November 1993), a Habitat Loss Permit is required because the project would impact Diegan coastal sage scrub.
Section 2762 of the Public Resources Code requires the County as lead agency under CEQA to prepare in conjunction with preparation of an EIR, and prior to approving the project, a statement specifying the County's reasons for permitting a proposed use in an area that contains mineral resource deposits of regional or statewide significance. The County of San Diego is considering the approval of the proposed Campus Park West project which would allow residential use on the project site which currently contains lands classified by the Mineral Resource Zone- (MRZ system. In addition to public circulation, this statement must be provided to the State Geologist and the State Mining and Geology Board for review and comment.
Comments on this DEIR, General Plan Amendment, Specific Plan and Draft HLP must be received no later than September 23, 2013 at 4:00 p.m. (a 45 day public review period). These draft documents can also be reviewed at the Fallbrook Library, located at 124 S. Mission Rd., Fallbrook, CA 92028. For additional information, please contact Dennis Campbell at (858) 505-6380 or bye-mail atDennis.Campbell@sdcounty.ca.gov.
Comments on the project related to mineral resource issues should also be directed to Dennis Campbell at Dennis.Campbell@sdcounty.ca.gov or at the above address. Comments related to mineral resource issues must be received no later than October 8, 2013 at 4:00 p.m. (a 60 day public review period). County planners Kristin Blackson, Kristin.Blackson@sdcounty.ca.gov and Dennis Campbell,Dennis.Campbell@sdcounty.ca.gov**.**

IA1 cont.

Land Use & Circulation Committees. Community input. Voting item. (8/8)

Ms. Camille Passon of Project Design Consultants introduced the project. She informed the Group that the Number of multi family units had been reduced from 320 to 248 units. The open space had been increased and industrial area reduced to 12.6 acres. Within the open space and the development a network of pathways and trails would link to other similar features in the adjoining developments and the college site. Ms. Passion stated that an effort was made to have the project match the Fallbrook Guidlines with a few exceptions.
Also the project now has a commitment from Rainbow Water to provide sewer and water for the development. The project currently has a EIR out for review with the comment period ending September 23.

IA2

Mr. Dennis Campbell of the Department of Planning and Development Services then commented on the County view of the project. He stated that while the project required both General Plan and Specific Plan approval these actions were going to require the developer to come back to the Planning Group and the County with more detailed designs. The pressing issue was getting the Groups comments and concerns with the proposed EIR.

Mr. Jack Wood reported on the Land Use Committee review of this project.
The Committee felt that the current plan basically is decreasing the d/u from 355 to 283.

IA2 This is an accurate summary of the introductory comments provided regarding Project changes, and return to the FCPG with more detailed designs as the Project moves forward if approved. The number of overall potential residential units, when considering both the multi-use area as well as the multi-family residential area, is also correct.

Points of :

- **Possible combination of Residential and Reduced Footprint Alternatives.**
  Rational is that the private outdoor space per unit is totally inadequate. .
  Extensive industrial area creates long expanse backing on the I-15 freeway
  Reduce from 12.6 – 6.6 acres leaving more for a buffer zone. IA3
- **Height of commercial buildings are of concern. North County Fire District does not have adequate equipment for buildings of the projected 45' height that includes articulation features.** IA4
- **Proposed two bus stops only on Pankey Rd with no connection to the Park and Ride on the west side of I-15.** IA5
- **Grading 20' – 30' cut and fill slopes near freeway. It was observed that it does shield view of backside of Industrial and Commercial buildings from I-15.** IA6
- **Concern – Is the commercial area neighborhood-serving or regional?- documentation states that it will not conflict with Fallbrook proper commerce. Big Box stores?** IA7
- **Commercial segments sold separately? Will each then come back to FCPG for compliance?** IA8
- **Discussion of the pros and cons of Smart Growth.** IA9

The Committee motioned to respond to the project with the following statement:
We oppose this project's application of Smart Growth because

1. **The livable space provided in this project effects the quality of life because of limited space per unit.** IA10
2. **Too much industrial area. Reduce from 12.6 to 6.6 acres.**
3. **Proposed commercial would compete rather than compliment Fallbrook proper. To enhance the area and compliment Fallbrook all commercial opportunities must be neighborhood.** IA11

Ms. Burdick reported on the Circulation Committee review of this project. **THE LACK OF IMPROVEMENTS TO PALA MESA BRIDGE: Members had serious concerns about the inadequacy of the bridge and its "T" connection to Pankey Road. Even with a signal installed at the intersection of Highway 395, the traffic will still queue onto the bridge and back up as far as Pankey Road, creating a bottle-neck in and out of the Campus Park West project.** IA12

THE CREATION OF PANKEY PLACE AS A SUBSTITUTE EAST-WEST CONNECTOR BETWEEN HORSE RANCH CREEK ROAD AND PALA MESA DRIVE. While the Committee recognizes the over-riding issue of sensitive habitat, the members had always hoped that a direct connection between Pala Mesa Drive and Horse Ranch Creek would one day be possible. The lack of a direct connection will have a significant impact on general congestion and fire response times to all the projects east of Interstate 15. IA13

The cul-de-sac at the north end of Pankey Road does not meet county standards and creates only one ingress and egress for the industrial park. What secondary access is available for the industrial area in the event of a closure at Pankey Road and Pala Mesa Drive? IA14

What is the purpose of the right-in, right-out intersection on Pankey Road approximately 320 feet north of Pankey Place? This would infer that truck traffic, in fact all traffic accessing whatever area is being serviced by this intersection, would have to enter Campus Park West via Pala Mesa Bridge. That issue had been raised in 2008 and deleted from consideration in 2010. How is this circulation concept different from prior proposals? IA15

The bike route data is confusing because the street design maps indicating Class II and Class III bike routes do not match the Circulation Plan map or the written descriptions. Figure II-11 shows Pankey Road North of SR-76 as a Class III bike route, but Figure II-9 shows it as a Class II bike route. The GPA description says it would…."amend the ME to reclassify Pankey Road….with Class II bike facilities from Pala Mesa Drive to Shearer Crossing" and does not mention Pankey Drive north of Pala Mesa Drive. IA16

IA3 The Reduced Residential and Reduced Footprint alternatives do not need to be combined in order to provide adequate outdoor space per unit. The amount of open space proposed under the Proposed Project meets County requirements and FCPG Design Guidelines and is included as conditions of approval for the Project. The future site plan layout would identify the actual number of residential units to be provided as well as precisely lay out how the required open space requirements would be met.

The amount of proposed limited impact industrial acreage is appropriate to the mix of uses anticipated under the adopted General Plan and other approved uses in adjacent properties. It could accommodate both a new sheriff's station and other light industrial/office employment-generating uses. The development of industrial uses in this area would not "create a long expanse backing on the I-15 freeway" due to setbacks and landscaping. Buildings would be setback at least 75 feet from the freeway to account for brush management. This would include a 25-foot Zone 2 fuel modification zone, which would include thinning and maintenance of natural vegetation, as well as a 50-foot Zone 1 fuel modification zone, which would include a 5-foot fully landscaped and irrigated setback area. This rear setback would be fully landscaped per the Project Design Guidelines, which are consistent with the FCPG Design Guidelines. Please refer to EIR Figure 2.1-8 for a depiction of these buildings and their visibility from southbound I-15.

IA4 Proposed building heights would not exceed 35 feet, except for uninhabited architectural projections, which may reach 40 to 45 feet and are subject to NCFPD review. The adjacent Campus Park project was also approved with a 40-foot height limit in its Town Center area to permit architectural projections exceeding 35 feet. Therefore, Campus Park West is consistent with the planned character for this new village area. The potential for an isolated structure or two to exceed 35 feet would only be realized if the North County Fire Protection District (NCFPD) obtained equipment allowing them to access higher structures This wording is in the Project Specific Plan and on the Tentative Map, which identify the Project with a "D" designator. This designation requires future plans to be reviewed against the Specific Plan. This would trigger any necessary coordination with NCFPD prior to construction.

IA5 The park and ride on the west side of I-15 will have bus loading and unloading as well. As noted in comment, the Project would reserve space for one to two bus stops along Pankey Road to accommodate future bus service based on standards provided by the North County Transit District (NCTD). Once NCTD extends service to the area, people will be able to take a bus from the park and ride to the Project site. Alternatively, people living within the Project site would be able to take a bus to the park and ride and beyond. Therefore, there would be a connection to the park and ride once bus service is extended to the area.

IA6 Slopes adjacent to I-15 would shield some views from I-15 to proposed buildings. These slopes would be hydroseeded, and on-site landscaping would provide additional visual shielding and visual interest. Please refer to EIR Figures 2.1-7 and 2.1-8 for illustrations of the slopes abutting I-15 and visibility of these buildings from points west.

IA7 The on-site commercial uses proposed as part of this Project are identified as general commercial, which would incorporate some neighborhood commercial uses. The nature of the commercial areas is described under the heading "General Commercial" in Section 1.2.2.1 of the EIR, as are the exterior appearance and relation of these uses to the proposed development. Their regional nature is also noted in the discussion of land use consistency in Section 3.1.5.2 of the EIR. The purpose of the commercial uses is to support the projects located in the northeast quadrant of I-15 and SR-76, as well as the surrounding residential community and passersby on I-15. This is expected to minimize trips for Fallbrook and adjacent residents (e.g., to Temecula, Oceanside or Escondido) and to provide convenience and minimize additional off-freeway trips for travelers along I-15. The proposed project is located approximately 10 miles away from downtown Fallbrook.

IA8 Although the timing and number of buyers of commercial segments are not known at this time, development on each of the parcels will require subsequent permits and discretionary review. As the Project moves through final mapping and design, it would undergo site plan review, and would come back before the FCPG for review and comment.

IA9 A discussion of smart growth pros and cons did ensue. It was not specific to this Project and no response is required.

IA10 Please refer to response to Comment IA3. The livable space per unit meets required guidelines and standards. The limited impact industrial uses are in scale with the overall proposed development and appropriately set back from I-15. Please also refer to EIR Figure 2.1-7 for a depiction of a portion of these uses for viewers located west of I-15.

IA11 Please see response to Comment IA7.

IA12 The Pala Mesa Bridge would remain intact, with improvements proposed at the western and eastern termini of Pala Mesa Drive at Old Highway 395 and Pankey Road, respectively. Level of Service (LOS) C or better operations are calculated at these locations during the a.m. and p.m. peak hours with the addition of Project traffic (Existing + Project). Queuing is anticipated to occur in the westbound direction along the Pala Mesa Bridge at the Old Highway 395/Pala Mesa Drive intersection due to the single westbound storage lane across the bridge. These queues would clear during signal cycles, as modeling demonstrates by the acceptable overall LOS cited above. The Traffic Analysis confirmed this anticipated outcome through completion of SIMTRAFFIC 2D analyses of intersection operations throughout the site (including this location). The SIMTRAFFIC2d analysis consists of a moving simulation of traffic in plan view (from above) with all projected lane geometry, signal timing, and Project traffic loading in place. No excessive queuing on Pankey Road resulted.

IA13 Pankey Place would be just one of the east-west connections provided between Horse Ranch Creek Road and Pala Mesa Drive. Other connections include Pala Mesa Drive/Pankey Road to SR-76 and Pala Mesa Drive to Old Highway 395 to Steward Canyon Road. A direct east-west connection between Pala Mesa Drive and Horse Ranch Creek Road would require cutting through a riparian area (Horse Ranch Creek) that supports birds that are identified as endangered by the United States Fish and Wildlife Service (Service). The resource agencies, including the Service, the California Department of Fish and Wildlife (Department), and U.S. Army Corps of Engineers (ACOE), all of which would be instrumental in Project permitting, are on record as requiring avoidance of the creek, its sensitive habitat, and associated species, to the maximum extent practicable. The changes to the circulation network were previously approved through the approval of Palomar College

IA13 cont by the College District and other adjacent projects by the Board of Supervisors and are included in the County's adopted Mobility Element. Please note that the Project has been designed to operate without high levels of congestion and within appropriate emergency response times. Please refer to Subchapters 2.3 (Transportation/Traffic) and 3.1.8 (Public Services) for detail on these issues.

IA14 The Pankey Road cul-de-sac is designed to accommodate anticipated traffic to the office/industrial park located north of Pala Mesa Drive and would meet requirements of the Consolidated Fire Code. The commercial development is not proposed to include manufacturing facilities, which would require design specifications to accommodate tractor-trailers. As such the proposed cross section is sufficient to serve anticipated traffic. Adequacy of the cul-de-sac is detailed in Section 2.3, Primary and Secondary Access Roads, in the Project Fire Protection Plan (Appendix K to the EIR). Please refer in particular to: Appendix K Section 2.3.1, Access Road Widths ; Section 2.3.3, Turning Radius; and Section 2.3.4, Dead Ends. Therefore, no secondary access is required for this short extension of Pankey Road north of Pala Mesa Drive.

IA15 The "right in, right out" intersection on Pankey Road is proposed to provide direct access to businesses to be located on the southern portion of the commercial parcel. This is advantageous in that it provides an alternative to the main full-access signalized driveway, thereby reducing overall delay at this location. It is not accurate to infer that this driveway would be only available for southbound traffic via Old Highway 395, or would somehow exacerbate traffic distribution from this roadway. In fact, northbound vehicles on Pankey Road would utilize this driveway via a U-turn at the main driveway if their commercial destination was located along the Project's southern perimeter. It would also provide convenient access for drivers traveling southbound from within the Project (office/industrial or residential).

IA16 The County disagrees that the bike route information is confusing or inaccurate. Figure II-11 shows Pankey Road north of SR-76 with Class II bike facilities. There is an eight-foot striped bike lane. This is consistent with Figure II-9, which also shows Pankey Road north of SR-76 as a Class II bike route. A Class III bike route would not have a separate bike

IA17 **(Also, Figure 1-14 in the DESEIR shows proposed off-site roadway improvements on a 2010 On-site Circulation map.)**

IA18 **The volume of traffic resulting from this development will create bottlenecks at both access points: the southern access at Highway 76 and the western access at Old Highway 395. All the traffic to and from this development will need to use one of these two intersections for ingress and egress.**

IA19 **There was concern about freeway traffic noise affecting the residential areas. The walls suggested in the EIR appear inadequate and unsightly.**

IA20 **Shared parking seems inadequate based on the data presented. Parking requirements for the multi housing units should at minimum equal the requirements for single family homes because in most developments such as this there is always a shortage of parking. Parking provisions today do not reflect the reality of high density developments.**

IA21 **There was concern about the "significant traffic impacts" listed in the EIR. Most of the solutions for these were resolved by stating that Traffic Impact Fees would be paid. The committee felt that this answer did not adequately clarify what exactly would be done to resolve these "significant" issues. What are the specific solutions?**

IA22 **A Diamond Interchange for I-15 at Stewart Canyon would greatly improve most of the traffic problems created by the developments east of I-15.**

IA23 **The long-requested transportation node for the developments east of I-15 should be located in the Campus Park West project. The existence of a Park and Ride across the freeway is of little value to the residents, merchants, and customers east of the I-15.**

IA24 **The roads in the commercial/shopping areas should be built to Public Road standards in order to provide adequate access and to eliminate excessive congestion.**

IA25 **There is a great deal missing from these documents. Where is the on-site circulation plan? How do the described intersections feed into the road network of the various component areas? Where are the buildings located? What is the phasing of the project?**

IA26 **Committee members wondered why is the project coming to us now when so much of the information appears incomplete?**

Next Mr. Jim Owning (a Fallbrook businessman and past Group member) spoke as an interested citizen and property owner in an adjacent subdivision and felt that his concerns matched many of his neighbors and business clients. While he had no major concerns with the General or Specific Plan he did have the following comments on the overall project.

IA27 **1) He felt the industrial element of the project should be maintained not reduced.**

IA28 **2) Mr. Owning was very concerned with pedestrian traffic crossing SR-76, both with the hazard to pedestrians and the added pollution with heavy traffic starting and stopping to allow pedestrian traffic to cross. He noted that there is already an undercrossing under SR-76 that could utilized as a pedestrian crossing and should be incorporated into the design.**

IA29 **3) Finally Mr. Owning was concerned with the projects effects on air quality. He encouraged the County to consider requiring the developer to follow Granite Construction example and place monitoring equipment prior to construction to develop a base line and then continue to monitor as the project develops to assure air quality is maintained.**

IA16 cont. facility. Instead, bicyclists would share the travel lane with automobiles. The GPA description does not mention Pankey Road north of Pala Mesa Drive because that section of road is not a Mobility Element roadway.

IA17 The comment is correct. The year of the base map, however, is not important to the focus of the figure. The purpose of the figure is to schematically represent the geographic extent of the off-site improvements at the Old Highway 395/Pala Mesa Road, SR-76/Pankey Road, and Pankey Road/Shearer Crossing intersections. Those are accurately represented.

IA18 The Project proposes improvements to both of the connecting intersections—from Old Highway 395 onto Pala Mesa Drive, and from SR-76 onto Pankey Road. These improvements, which include additional pavement, restriping, and signalization, as appropriate, would alleviate the bottlenecks which could occur without these improvements. No adverse impacts are anticipated. Please refer to EIR Figures 2.3-4, -6, -9, and -10 for comparison of existing and future peak volumes and turn geometrics at these locations (snapshots 13 and 32).

IA19 The proposed sound walls are limited (being located only on the east side of Pankey Road north of SR-76 abutting the multi-family residential uses) and are primarily visible only from within the Project. The sound walls are adequate to attenuate noise while at a height consistent with privacy fencing throughout the County (five and a half feet tall) and would be shielded by Project landscaping. Fire walls required by the NCFPD would be more visible, but similar—six feet in height, and generally set back from the viewer due to riparian open space and fuel modification areas. The proposed fire wall located along SR-76 located south of SR-76 and west of Pankey Road also would be set back from SR-76. If the Caltrans excess right-of-way in that area is decertified and commercial uses extend up to SR-76, that roadway would serve as a fire block and no wall would be constructed.

IA20 The Project complies with zoning ordinance parking requirements for multi-family development. The shared parking regulations allow for the ability of non-residential uses that have different hours of operation to share parking spaces; thereby reducing the need for expansive parking lots. Uses that are only occupied during the day may offer their spaces to uses that are primarily occupied in the evenings and vice versa.

IA21 The cumulative project impacts identified with development of the Project would be mitigated by payment of Transportation Impact Fees (TIF), which is the County of San Diego's approved method of mitigating cumulative impacts. For the Project, TIF monies would be utilized by the County to implement improvements within the Fallbrook planning area. The specific improvements anticipated are described in the Mobility Element Network Appendix (Fallbrook Mobility Element Network).

IA22 The County has discussed the possibility of a diamond interchange at Stewart Canyon Road with Caltrans, the agency with jurisdiction over the interchange. Caltrans has indicated a diamond interchange is not feasible because the traffic volumes do not warrant that configuration of an interchange.

IA23 The traffic node is being built across I-15 at the existing park and ride. See also the response to Comment IA5.

IA24 Internal roads in commercial/shopping areas do not need to be designed and built to public road standards. They will accommodate destination driven travelers internal to the site and will be moving at slower speeds and lower volumes, consistent with road surfaces designed to route drivers between structures and through parking areas.

IA25 The on-site circulation plan is depicted on each of the EIR figures that use the site plan as a base for specific Project elements. Cross sections of the primary project roads are shown on Figures 1-17 through 1-20. Alleys and byways within the development bubbles are not illustrated at this time. These facilities would not provide through traffic capabilities, would carry only destination-driven travelers internal to the site, and would be designed as part of the final site plans incorporating structure locations. Please note, however, that roads traversing the Project, as well as the vehicular transportation patterns throughout the limited impact industrial, multi-family residential, and commercial parking areas, would be designed to meet standard County safety design criteria. Project phasing is described in EIR Section 1.2.2.6, Project Phasing, and shown on Figure 1-27, the Conceptual Phasing Plan.

IA26 The level of Project information is adequate to identify the Project footprint, with associated specificity regarding quantifiable impacts to natural resources and identification of necessary mitigation. CEQA Guidelines Section 15004(b) notes that choosing the precise time for CEQA compliance involves balancing competing factors. As stated, EIRs: "should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment." The County finds that enough information is available at this point to ascertain impacts with an appropriate level of specificity, while not requiring design detail that is not necessary at this time. It also allows for consideration of community requests relative to design, prior to final site plan development.

IA27 Comment noted.

IA28 No undercrossing is proposed at this location. A cross walk at the signalized intersection is considered the appropriate solution for pedestrian use. There is no existing culvert in the vicinity of the Pankey Road/SR-76 intersection large enough to accommodate a pedestrian crossing. Further, there are multiple underground utilities near the intersection, wh ch, in addition to th safety concerns of an underground passageway, would make the creation of an underground passageway very problematic. A pedestrian undercrossing of SR-76 also would be below the floodplain elevation and would periodically flood, creating a potential safety issue. As a result of these considerations, pedestrian and equestrian crossings of SR-76 would occur at marked intersections, and in accordance with signalized crossing patterns.

IA29 As noted in the comment, the monitoring equipment proposed in this comment is focused on construction-period effects. For a quarry, which requires long-term movement of dirt and rocks, as well as potential rock crushing activities, the ongoing "construction period" can provide heightened long-term effects on air quality within the basin. Project-related effects on air quality, however, are primarily related to operations rather than construction activities. Please see EIR Tables 2.2-4 through 2.2-10, which indicate that construction activities alone would not result in anticipated air quality exceedances. The conformance with air basin standards shown through Project modeling would be obtained through routine emissions control measures that would be monitored as part

Mr. Campbell informed the Group that the project would be conditioned to provide fire equipment if they exceeded the 35 foot building height. Also while a traffic node was not a part of this project Caltrans was constructing one across the freeway by the existing park and ride. Mr. Campbell felt bus service from the college and the developments on the east side of the I-15 to the traffic node on the west side of the freeway was inevitable. He also commented the Fire response times appeared to be adequate for this development and the other developments with the proposed location of Pankey Way. In discussions with State Fish and Wildlife staff they had stated that if there was an effort to move Pankey Way north they would fight that proposal.

IA30

Ms. Jean Dooley suggested that the reduced footprint EIR alternative (223 units) be applied to the project to address the majority of the publics concerns.

IA31

Ms. Delaney felt the industrial aspect of the project was very important and should be increased even if it meant less commercial.

IA32

After lengthy further discussion Mr. Wood motioned to provide the County with all of the concerns brought up during the discussion. The motion passed unanimously.

4. Request by Mark Olson, 619-296-0605 x236, mo@nstpr.com, to provide a presentation to present information on an invasive pest that can be very deadly for citrus trees, called the Asian citrus psyllid, which has been detected in Fallbrook. Mark represents the Citrus Pest & Disease Prevention Program – a non-profit program dedicated to stopping the spread of invasive pests in the San Diego region. With 7 out of 10 residents owning backyard citrus trees in the area, his presentation will be very valuable to the Fallbrook community and board members. We will present information on the spread of this pest, what is being done about it in Fallbrook, and how residents can best protect their citrus trees. For more information http://www.californiacitrusthreat.org. (8/19)

Mr. Mark Olson introduced the presentation. He informed the Group that the Asian Citrus Psyllid had been found in Fallbrook, the LA basin, Riverside and San Bernardino. While the Psyllid itself was not harmful to citrus trees a disease it can transmit can be very deadly to citrus trees (primarily orange, lemon and lime). He illustrated the worldwide damage the disease has caused. He encouraged all citrus growers to inspect their trees and remove any old or dead trees.

IA33

5. Appoint Patty Koch, Fire Prevention Specialist, North County Fire Protection District, 330 S. Main Ave., (760) 723-2040, pkoch@ncfire.orgas as an non-elected member of the Circulation Committee. Community input. Voting item.

Mr. Russell presented the request and the appointment was approved unanimously.

6. Presentation by BENJAMIN J. STABLES III, 951-972-7963, jays@landwestco.com, and Nate Pivaroff, 949-233-2549, NPivaroff@leeirvine.com on a conceptual site plan and architectural samples for a proposed retail center located on 2.7 acres at the southwest corner of Mission Road and Rocky Crest Road. The applicant believes that the proposed project adheres to the existing zoning and County guidelines and have discussed it with the County Planning Dept. staff. Since they are in the due diligence stage, the Planning Dept. has recommended that they obtain some initial feedback from the Community, the Planning Group and the Design Review Board prior to moving any further. Community input. Non-voting item. (9/13)

A representative of the Lands West Development Company presented a tentative site plan a commercial center at the southwest corner of Mission Road and Rocky Crest. The plan proposed a 16,000 Square foot building in the center of the parcel and two smaller 2,500 square foot buildings along Mission. They representative presented some Mission style architecture they had used on a similar project. The Group was informed the developer intended to present plans to the County within 60 days.

IA29 cont. of the Project construction effort if the Project is approved. As such, additional monitoring equipment would not be expected to provide additional benefit.

IA30 Please refer to responses to Comments IA4, IA23, and IA13, respectively.

IA31 As discussed in the responses to Comments IA3 through IA29, the issues raised during FCPG discussion would not be resolved by the Reduced Footprint Alternative, which was developed to minimize biological resources impacts north of Pala Mesa Drive. None of the issues raised by the group pertained to biological resources.

IA32 The preference for additional limited impact industrial, even if it means less commercial is noted. No change to the Proposed Project is being made at this time. The current proposed mix of uses is an integral part of the development scenario proposed for the northeast quadrant at I-15 and SR-76, as assumed in the adopted County General Plan.

IA33 The remainder of the minutes addresses other issues and projects that do not require responses as part of the Campus Park West Final EIR.

AI33 cont.

Mr. Wood noted the single entry on Mission and two access points on Rocky Crest. He felt that the traffic on Mission was very fast and would make that entry dangerous. Also the proposed traffic signal at Peppertree would further complicate the problem.
Ms. Delaney stated that the Landscaping may not meet the Fallbrook Community plan requirements. She also felt the larger building should be flipped to the easterly side of the lot.
Mr. Moosa asked what type of retailer did they hope to attract. The developer stated they felt a small soft goods or grocer would be ideal.
The Group identified other tenants that the community could use, like a hobby shop, hardware store or office supply store.
Ms. Dooley suggested a green building with lots of trees and shade.
Mr. Moosa suggested the developer consider tying the architecture into the community flavor and perhaps link to the Historical Society just down the street from their project.

The Meeting was adjourned at 8:45 pm
Tom Harrington, Secretary

SPECIAL MEETING OF THE FALLBROOK COMMUNITY PLANNING GROUP
DESIGN REVIEW BOARD COMMITTEE
Tuesday, 2 October, 2013 9:00 AM
Fallbrook Sheriffs Station
Alvarado St, Fallbrook

DRAFT MINUTES

Committee members present: Jean Dooley, Roy Moosa, Ron Miller, Jackie Heyneman, Eileen Delaney, Bob Sabus. Excused: Jack Wood & Jedda Lorek

Also present: Chris Brown, Dennis Campbell, Camille Passon, & Project Architect:_____

1. Open Forum. Opportunity for members of the public to speak to the Planning Group on any subject matter within the Group's jurisdiction but not on today's agenda. Three minute limitation. Non-discussion, & Non-voting item.
None
2. GPA05-003, SPA -001, REZ 05-005, TM5424. Campus Park West located in the north east corner of I-15 and SR-76. NOTICE IS HEREBY GIVEN that the County of San Diego is circulating for public review a draft Environmental Impact Report in accordance with the California Environmental Quality Act along with a General Plan Amendment and Specific Plan for the following project. The draft Environmental Impact Report, General Plan Amendment and Specific Plan can be reviewed on the World Wide Web at http://www.sdcounty.ca.gov/pds/ceqa_public_review.htmland at Planning & Development Services (PDS), Project Processing Counter, 5510 Overland Avenue, Suite 110, San Diego, California 92123 and at the public libraries listed below. Comments on these draft documents must be sent to the PDS address listed above and should reference the project numbers and name. PDS2005-3800-05-003 (GPA). PDS2005-3813-05-001 (SP). PDS2005-3600-05-005 (REZ). PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER). SCH NO. 2009061043, CAMPUS PARK WEST PROJECT. The Campus Park West project is a proposed amendment to the Hewlett-Packard Campus Park Specific Plan; and is the result of changes in land ownership and regional planning goals, generally consistent with the 2011 County General Plan. The Project proposes two design scenarios. One (Scenario 1) is sited within the original Project boundaries and covers approximately 116.5 acres. The other (Scenario 2) would incorporate approximately 2.1 additional acres into the Project that are currently held as State Route 76 (SR-76) right-of-way by the California Department of Transportation (Caltrans). Because SR-76 is now built to its final anticipated configuration and the excess right-of-way is not anticipated to be required for state route operations, this area would be decertified and could be sold to the Project Applicant. Should this occur, the Project would encompass a total of 118.6 acres. Under both Scenarios 1 and 2, the Project includes review and proposed approval of four discretionary actions. These include:

IB1

IB1 These introductory comments are noted.

IB1 cont.

- A Tentative Map (TM 5424) to subdivide the property into 23 lots;
- A Specific Plan Amendment (SPA 05-001) to amend the 1983-approved Specific Plan to the currently proposed mix of uses;
- A Rezone (REZ 05-005) from S90 to S88; and,
- A General Plan Amendment (GPA 05-003) to revise or reconfigure land use designations as well as amend the Mobility Element (ME)

Specifically, the GPA would: (1) change the Regional Category on two parcels south of SR-76 from Rural to Village; (2) change the land use designation of three parcels south of SR-76 from Specific Plan to General Commercial and Rural Lands 40; (3) expand Limited Impact Industrial uses north of SR-76 south to Pala Mesa Drive; (4) reconfigure land use designations north of SR-76 to reflect the Project SPA; and (5) amend the ME to reclassify Pankey Road from a Collector to a Boulevard with Class II bike facilities from Pala Mesa Drive to Shearer Crossing, apply Class II bike facilities to the portion of Pala Mesa Drive within Project boundaries, and designate Pala Mesa Drive between the western Project boundary and Old Highway 395 as a Class III bike route.

The draft Environmental Impact Report (DEIR) identifies significant and unavoidable environmental impacts to Aesthetics, Air Quality, and Transportation and Traffic. The DEIR also identifies significant and mitigated environmental impacts to Biological Resources, Cultural Resources, Noise, and Paleontological Resources.

In accordance with Section 86.104 of County of San Diego Ordinance No. 8365 (N.S.) and Section 4.2.g of the Coastal Sage Scrub Natural Communities Conservation Plan Process Guidelines (November 1993), a Habitat Loss Permit is required because the project would impact Diegan coastal sage scrub.

Section 2762 of the Public Resources Code requires the County as lead agency under CEQA to prepare in conjunction with preparation of an EIR, and prior to approving the project, a statement specifying the County's reasons for permitting a proposed use in an area that contains mineral resource deposits of regional or statewide significance. The County of San Diego is considering the approval of the proposed Campus Park West project which would allow residential use on the project site which currently contains lands classified by the Mineral Resource Zone- (MRZ system. In addition to public circulation, this statement must be provided to the State Geologist and the State Mining and Geology Board for review and comment.

Comments on this DEIR, General Plan Amendment, Specific Plan and Draft HLP must be received no later than September 23, 2013 at 4:00 p.m. (a 45 day public review period). These draft documents can also be reviewed at the Fallbrook Library, located at 124 S. Mission Rd., Fallbrook, CA 92028. For additional information, please contact Dennis Campbell at (858) 505-6380 or bye-mail atDennis.Campbell@sdcounty.ca.gov.

Comments on the project related to mineral resource issues should also be directed to Dennis Campbell at Dennis.Campbell@sdcounty.ca.gov or at the above address. Comments related to mineral resource issues must be received no later than October 8, 2013 at 4:00 p.m. (a 60 day public review period). County planners Kristin Blackson, Kristin.Blackson@sdcounty.ca.gov and Dennis Campbell, Dennis.Campbell@sdcounty.ca.gov.

IB1 cont.

After a lengthy discussion a motion was made by Jackie Heyneman & the Committee voted unanimously to submit the following comments:

Design Review encompasses almost every aspect of a project: land use, circulation, parks, landscaping, architecture, aesthetics and signage. Since many comments have already been made by the Land Use & Circulation Committees, they will not be duplicated in our comments here.

A chapter/sub-chapter /page number of the DEIR may be listed as reference to our comments. However these same comments are pertinent to other Chapters/sub-chapters that may not be listed, but discuss the same subject.

IB2

Pages 1-22-23, 2.1-23, Figure 1-6, Figure 5, 1.2.2.4, 2.1.2.1 Appendix
"Acceptable architectural styles would include "rustic rural ranch" characteristics, "urban Victorian," Mediterranean, ….."
1-22 1.2.2.4. Landscape/hardscape
"Proposed Mediterranean"
While design styles are not specifically listed in the Community Character section of the Fallbrook Community Plan, styles & materials are addressed in Commercial, Industrial & Multi-Family sections. They exclude Mediterranean. DEIR should be revised to reflect this in the architecture & landscaping.

IB3

FALLBROOK COMMUNITY PLAN
Commercial. Page 17
Policy LU 2.2.4 Encourage "Village Style" architecture, described as Craftsman, Victorian, Ranch, Colonial, Cottage Mission and Spanish architectural styles and utilization of building materials such as wood (simulated, non-combustible) rock, brick, stone or similar materials which are in harmony with the natural environment. These requirements aim to maintain and promote the intimate personal scale of the Village, its character, and warmth.
Industrial page 18
Policy LU 2.3.4 Require the use of "Village Style" architecture, described as Craftsman, Victorian, Ranch, Colonial, Cottage Mission and Spanish architectural styles and utilization of building materials such as wood (simulated, non-combustible) rock, brick, stone or similar materials which are in harmony with the natural environment. These requirements aim to maintain and promote the intimate personal scale of the Village, its character, and warmth.

IB4

http://www.sdcounty.ca.gov/pds/advance/POD_11-005_Draft_Fallbrook_Design_Review_Checklist.pdf
The project does not propose the following tree species :
• All Eucalyptus
• Palms that exceed 20 feet at maturity such as:
o Archontophoenix (All) o Brahea (
o Standard Cocos (Coconut Palm) o Julaea (Chilean Wine Palm)
o Livistona (All)
o Phoenix (All)
o Pritchardia (All)
o Rhapalostylis (All)
o Roystonea (All)
o Sabal (All)
o Syagrus romanzoffianum aka Arecastrum romanzffinum (Queen Palm) o Washingtonia (All)
o Caryota (All)

IB2 Campus Park West is the third of three projects moving through the County environmental review process in the northeast quadrant of the I-15/SR-76 interchange. The County views all three of these projects as elements of an overall development plan for this area, and has requested that they both provide complementary land uses and common design elements. The other two projects (Campus Park, approved in 2011, and Meadowood, approved in 2012) included the Mediterranean design style in their Specific Plans. As such, Campus Park West was directed to include the same or compatible styles in the Campus Park West Specific Plan. Specific to landscaping, the portion of San Diego County in which the Project would be located has a Mediterranean climate. As such, the types of plants that thrive in warm (sometimes hot) summers and relatively mild winter zones also do well here. The plant list must contain the plants that do well in this environment.

IB3 The County agrees that use of the noted materials provide visual links to the natural environment, and result in structures that contribute to an emotionally "warm" setting. As noted in Appendix A of the Project Visual Impact Analysis (Appendix B to the EIR), the Fallbrook Design Guidelines specify that native stone, masonry with cement plaster finish, wood framing with cement plaster finish, detailed wrought iron, wood, and brick walls are encouraged. Chain link or open wire, corrugated metal, bright colored plastic or plastic coated materials, and reed materials are discouraged. The material encouraged in this guideline would be used in the Project to create an aesthetically pleasing environment on site. In addition, the Project may include precast concrete walls or panels. If used, the materials discouraged in the noted guideline would be minimized.

IB5
Pages 1.27-28
1.2.2.4
"Where there is a conflict between the Fallbrook Design Guidelines & San Diego County ZO sign regulations, the Project Specific Plan would control. Where the Specific Plan is silent, the County ZO (sections 6200 & 6250 would prevail."
Many Design Guidelines for signage in Fallbrook conflict with County Ordinance. The most restrictive is what controls, so this should also apply to this project as well.

IB6
Chapter 6 II- 103
WALL SIGN AREA
General Commercial Signs
Signs should be no more than 50% of the architectural building element on which it is placed.
Industrial
Signs should be less than 50% of the architectural building element on which it is placed.

IB7
Page 1-58, Table 1-3.
Building heights should not exceed 35 feet for consistency throughout the region and comply with the Fallbrook Design Guidelines; With the exception of unoccupied architectural features which may not exceed 45 ft.

IB8
2.1.2.4
Green Roofs
While green roofs/rooftops are said to improve building energy efficiency, they should not be used to replace or calculate open space configurations in residential areas. They can be very costly to maintain (example -Fallbrook Library) and may also cause safety or liability issues.

Clarify- Children's play areas will not be satisfied by roof tops

IB9
Figure 1-9, Appendix B
"The trees and landscaped street edges and open spaces would reduce and soften the strong geometric forms and lines, the bright or neutral colors, and hard textures that the Proposed Project would introduce in to the viewshed when seen from areas within the viewshed that are at higher elevation, such as within Engel Family Preserve, Monserate Mountain Trail, and I-15 at the southern edge of the viewshed. The difference from the Fallbrook Design Guidelines, therefore, would not create a visual impact."
More trees & shrubs should be used along the I-15 to reduce the visual impacts of the Project.

IB10
The meeting was adjourned at approximately 10:45 A.M.

Eileen J. Delaney
Chair

IB4 Please refer to the response to Comment IB4 regarding consistency with the two "sister" projects in this quadrant. In response to this request, however, palms have been deleted from the plant palette for Campus Park West.

IB5 The "most restrictive" standard is not the appropriate standard in this case. The Fallbrook Design Guidelines were developed for the type of commercial uses prevalent in the currently developed portions of Fallbrook, including the "downtown" area. These uses are different from the Project-proposed uses that would provide area residents with commercial options not currently available. They are different both in type of commercial business, and in type of user. Some of the businesses would require larger stores than currently exist in the more storefront and strip mall type of commercial use. These larger stores would also be pulling I-15 travelers from the freeway, and as such, need to be visible from that facility in such a way that viewers can safely see and respond to the signs at appropriate exits. As a result, the signage plan requires more flexibility and different standards than are found in strict compliance with the current guidelines. Revisions to the plan will not be implemented.

IB6 Please refer to the response to Comment IB5.

IB7 Building heights would not exceed 35 feet at this time, except for uninhabited architectural projections, which may reach 40 to 45 feet and are subject to NCFPD review. This wording is also in the Project Specific Plan and on the Tentative Map, which identify the Project with a "D" designator. This designation requires future plans to be reviewed against the Specific Plan. This would trigger any necessary coordination with NCFPD prior to construction. The adjacent Campus Park project was also approved with a 40-foot height limit in its Town Center area to permit architectural projections exceeding 35 feet. Therefore, Campus Park West is consistent with the planned character for this new village area. The potential for an isolated structure or two to exceed 35 feet would only be realized if the North County Fire Protection District (NCFPD) obtained equipment allowing them to access higher structures. This variation would not be visually substantially different relative to a five- to six-foot viewer.

IB8 The County's zoning ordinance permits up to 20 percent of common open space to be placed on rooftops. If green roofs are provided, they would be implemented according to current building standards, including safety requirements. The private owner would be responsible for their maintenance. While residents may take their children with them to these rooftops, they would not be designed to contain specific children's play areas. A requirement has been added to the Specific Plan Amendment to clarify that no portion of the required children's play area may be located on a rooftop.

IB9 The setbacks and landscaping requirements along I-15 are wholly consistent with the requirements of the Fallbrook Design Guidelines. In addition, the Applicant cannot add vegetation that would conflict with the Fire Protection Plan in terms of tree canopy adjacency, or that would create unsafe conditions for drivers on I-15 trying to read Project signs.

IB10 Comment noted.

PALA TRIBAL HISTORIC PRESERVATION OFFICE

PMB 50, 35008 Pala Temecula Road
Pala, CA 92059
760-891-3510 Office | 760-742-3189 Fax

PALA THPO

September 23, 2013

Dennis Campbell
County of San Diego
Planning & Development Services
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Re: PDS2005-3800-05-003 (GPA), PDS2005-3813-05-001 (SP), PDS2005-3600-05-005 (REZ), PDS2005-3100-5424 (TM), HLP XX-XXX, LOG NO. 3910 05-02-009 (ER), SCH No. 2009061043, CAMPUS PARK WEST PROJECT

Dear Mr. Campbell:

J1 Thank you for the notification of the availability of the draft Environmental Impact Report for the above-referenced project. This letter constitutes our initial response on behalf of Robert Smith, Chairman of the Pala Band of Mission Indians.

J2 I have looked over the cultural resources review for the project and I am generally in concurrence with your findings and proposals for mitigation. However, I would like to stress that the Pala Band continues to request government-to-government consultation as the project moves forward. We would like to be involved in the development of any pre-excavation agreements, data recovery plans, and/or mitigation plans for unexpected discoveries and inadvertent disturbance of human remains. I appreciate that the DEIR addresses the significance of the Tom-Kav site (CA-SDI-682) but would like to see a greater emphasis on the potential for related sites and subsurface cultural resources to potentially be discovered on the Campus Park West property. In the interests of avoiding a similar outcome as what happened with Horse Ranch Creek Road, it is imperative that the DEIR discuss exactly how any such discovery will be handled, and that it be made explicit that no decisions will be made regarding such discoveries without immediate and direct involvement of the Pala Band.

J3

J4 Please feel free to contact me with any questions or concerns: sgaughen@palatribe.com or 760-891-3515. I look forward to continuing consultation on this project.

Sincerely,

Shasta C. Gaughen, PhD
Tribal Historic Preservation Officer
Pala Band of Mission Indians

J1 Comment noted. This comment is not at variance with the environmental document. No changes were made to the environmental document as a result of this comment.

J2 Comment noted. In the event that unknown cultural resources are located during construction activities, the Grading Monitoring Program that is a condition of approval must be followed. If a Research Design and Data Recovery Plan are required, a Luiseño Native American monitor would be involved in the program. Furthermore, the condition has been revised to require coordination with the Luiseño tribes should a Data Recovery Program be required. A copy of the plan would be provided for review and comment. If human remains are identified consultation pursuant to Public Resources Code Section 5097.98 is required with the Most Likely Descendant (MLD) as designated by the NAHC. The environmental document has been revised as a result of this comment.

J3 Comment noted. It is considered very unlikely that additional cultural resources would be located on Campus Park West given the amount of existing disturbance and ground visibility. Unidentified resources are expressly addressed in Mitigation Measure M-CR-1, 2, and 3, under clauses g, j and l. The Luiseño Native American monitor would coordinate with the Principal Investigator regarding appropriate next actions. Please note that in clause d, an adequate number of monitors is expressly required,

J3 cont. including Luiseño Native American monitors during all earthmoving activities. Should human remains be identified, the process identified in clause h of the above-noted mitigation measures would be followed. The Native American Heritage Commission would identify the Most Likely Descendant/point of contact and the requirements of Public Resources Code Section 5097.98 would be followed. Pre-Excavation Agreements are not required because a Grading Monitoring Program has been made a condition of approval and SB-18 consultation has afforded the tribes the opportunity to request revisions to the condition. No changes were made to the environmental document as a result of this comment.

J4 Comment noted. Your contact information is noted. Staff will continue to coordinate with the Historic Preservation Office on these important issues as necessary and appropriate. No changes were made to the environmental document as a result of this comment.

PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

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Evie Gerber
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Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Anna Hoover

September 23, 2013

VIA E-MAIL and USPS

Mr. Dennis Campbell
Project Planner
County of San Diego
Planning & Development Services
5510 Overland Avenue, Ste 110
San Diego, CA 92123

Re: Pechanga Tribe Comments on the Draft Environmental Impact Report for the Campus Park West Project (PDS2005-3800-05-003 (GPA), PDS2005-3813-05-001 (SP), PDS2005-3600-05-005 (REZ), PDS2005-3100-5424 (TM), Log No. 3910 05-02-009 (EIR), SCH No. 2009061043

Dear Mr. Campbell:

K1 This comment letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe"), a federally recognized Indian tribe and sovereign government. The Tribe formally requests, pursuant to Public Resources Code §21092.2, to be notified and involved in the entire CEQA environmental review process for the duration of the above referenced project (the "Project"). Please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archaeological reports, and all documents pertaining to this Project. The Tribe further requests to be directly notified of all public hearings and scheduled approvals concerning this Project. Please also incorporate these comments into the record of approval for this Project.

K2 The Tribe submits these comments concerning the Project's potential impacts to cultural resources in conjunction with the environmental review of the Project. The Tribe knows that the Campus Park West Project area is a part of a Traditional Cultural Property that is associated with the Luiseño village of Tómqav. This is acknowledged in the Draft Environmental Impact Report (DEIR) as well as the cultural studies and the Tribe concurs with this assessment.

K3 The Tribe is also concerned that cultural resources will be impacted during development of this Project. Although there were no physical manifestations of the Tribe's ancestors observed on the surface of this Project, because of the surrounding resources and the importance of the area, the potential is high for impacting subsurface resources. The Pechanga Band is not opposed to this Project; however, we are opposed to any direct, indirect and cumulative impacts

K1 Comment noted. The Tribe is on the distribution list for public notices and document circulation. The Tribe also will be notified of public hearings and scheduled approvals for the Project. These comments have been incorporated into the Final Subsequent EIR, and as such, are part of the administrative record and will be before the Board of Supervisors during consideration of the Project for approval or denial. No changes were made to the environmental document as a result of this comment.

K2 The Project does not assume that the site extends onto Campus Park West. As noted in Section 2.4.1.6 of the EIR:

> The village of Tom-Kav, recorded to the east of the Campus Park West property as site CA-SDI-682, would potentially qualify as a Traditional Cultural Landscape/Property.
>
> In relation to the Campus Park West property, however, the currently known location of the Tom-Kav village/CA-SDI-682 is well to the east. During the archaeological studies for the Campus Park West property, no archival or archaeological evidence was discovered to indicate that

K3 cont.

this Project may have to tribal cultural resources. The Tribe's primary concerns stem from the Project's proposed impacts on Native American cultural resources. The Tribe is concerned about both the protection of unique and irreplaceable cultural resources, such as Luiseño village sites, sacred sites and archaeological items which would be displaced by ground disturbing work on the Project, and on the proper and lawful treatment of cultural items, Native American human remains and sacred items likely to be discovered in the course of the work.

K4

At this time, the Tribe refers the County to the substantial and extensive letters submitted for the Meadowood, North Education Center and Campus Park projects regarding the significance and importance of this area to the Luiseño people. The Tribe additionally requests that the Developer, the Project archaeologist and the County involve the required Luiseño monitor/representative(s) in all aspects of the development including but not limited to mass grading, trenching, borings, archaeological excavations, consultations regarding evaluation of artifact sensitivity, development of the Grading Monitoring and Data Recovery Plan, recommendations and concurrence of artifact type and use as well as temporary fencing placement and buffer development.

K5

Further, the CEQA Guidelines state that lead agencies should make provisions for inadvertent discoveries of cultural resources (CEQA Guidelines §15064.5). The Tribe believes that adequate cultural resources assessments and management must always include a component which addresses inadvertent discoveries. Every major State and Federal law dealing with cultural resources includes provisions addressing inadvertent discoveries (See e.g.: CEQA (Cal. Pub. Resources Code §21083.2(i); 14 CCR §1506.5(f)); Section 106 (36 CFR §800.13); NAGPRA (43 CFR §10.4). Moreover, most state and federal agencies have guidelines or provisions for addressing inadvertent discoveries (See e.g.: FHWA, Section 4(f) Regulations - 771.135(g); CALTRANS, Standard Environmental Reference - 5- 10.2 and 5-10.3). Because of the extensive presence of the Tribe's ancestors within the Project area vicinity, it is not unreasonable to expect to find vestiges of that presence. Such cultural resources and artifacts are significant to the Tribe as they are reminders of their ancestors. Moreover, the Tribe is expected to protect and assure that all cultural sites of its ancestors are appropriately treated in a respectful manner. Therefore, as noted previously, it is crucial to adequately address the potential for inadvertent discoveries.

K6

Finally, the Pechanga Tribe believes that if human remains are discovered, State law would apply and the mitigation measures for the permit must account for this. According to the California Public Resources Code, § 5097.98, if Native American human remains are discovered, the Native American Heritage Commission must name a "most likely descendant," who shall be consulted as to the appropriate disposition of the remains. It is the position of the Pechanga Tribe, and all Luiseño tribes, that human remains must never be moved or other impacted, but rather, they should remain in their original resting place, undisturbed.

K2 cont. Tom-Kav village (site CA-SDI-682), extends onto the Project property. Similarly, no evidence of independent and in situ milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps was noted.

No changes were made to the environmental document as a result of this comment.

K3 Comment noted. A cultural study was completed and was negative for cultural resources. It is considered very unlikely that additional cultural resources would be located on Campus Park West given the amount of existing disturbance and ground visibility. The County appreciates the Tribe's statement of lack of opposition and understands the Tribe's concerns regarding potential impacts to cultural resources. The Project would be conditioned to require a Grading Monitoring Program that includes a Luiseño Native American monitor. The Luiseño Native American monitor would be invited to attend the pre-grading meeting(s) (clause b), would be present for all earth-moving activities and during cutting of previously undisturbed formations (clauses d and e), would be involved in the location and assessment of any previously unidentified cultural resources (clause g), and would be included in data recovery, if required. In addition, please note that based on comments received during public review of the Draft Subsequent EIR for this Project, the involvement of the Luiseño Native American monitor in any potential fencing required in clause 2 of this mitigation measure has been expressly added to the measure. Should human remains (clause h) be identified, the property owner would be required to follow the requirements of the Grading Monitoring Program, County Guidelines for Determining Significance, County Grading Ordinance, Health & Safety Code Section 7050.5 (b and c), and Public Resources Code Section 5097.98. No changes were made to the environmental document as a result of this comment.

K4 Comment noted. The correspondence referred to has been reviewed. As specified in Section 2.4.5 of the EIR, a Native American monitor is

The Tribe reserves the right to fully participate in the environmental review process, as well as to provide further comment on the Project's impacts to cultural resources and potential mitigation for such impacts.

K7

The Pechanga Tribe looks forward to working together with the County of San Diego in protecting the invaluable Pechanga cultural resources found in the Project area. Please contact me at 951-770-8104 or at ahoover@pechanga-nsn.gov should you have questions or comments. Thank you.

Sincerely,

Anna Hoover
Cultural Analyst

Cc Pechanga Office of the General Counsel

K4 cont. expressly required to be involved with the grading monitoring program (including the pre-grading meeting), and during earth-moving activities (including borings) and cutting into previously undisturbed deposits. Coordination with the Luiseño Native American monitor is included in the Grading Monitoring Program and would include consultation regarding artifact sensitivity, and artifact type. The Pechanga Tribe was contacted on October 14, 2005 regarding their desire to be involved in SB-18 consultations. No response was received. The Tribe is involved in the development of the Data Recovery Plan through comments submitted in the above-noted correspondence and modifications to the prior County standard operating procedure regarding curation of artifacts. Please note that the Mitigation Measure M-CR-1, 2, and 3 (clause j) has been modified to include options for curation; consisting of curation at either a San Diego curation facility or a Luiseño Tribal curation facility that meets federal standards per 36 CFR Part 79, or repatriation to a Luiseño Native American tribe. In addition, based on this request, the involvement of the Native American monitor in any potential fencing required in clause 2 of this mitigation measure has been expressly added to the measure. Also see response to Comment 3 above. Changes were made to the environmental document as a result of this comment.

K5 Comment noted. Unidentified resources are expressly addressed in Mitigation Measure M-CR-1, 2, and 3, under clauses g, j and l. The Luiseño Native American monitor would consult with the Principal Investigator regarding appropriate next actions upon the discovery of resources. Please also refer to the response to Comment 3 of this letter. Please note that professional standards and County intent require that all Native American cultural sites be treated in a respectful manner. Please refer to the response to Comment 3 regarding inadvertent discoveries. No changes were made to the environmental document as a result of this comment.

K6 Comment noted. The potential for discovery of human remains is expressly addressed in Mitigation Measure M-CR-1, 2, and 3, under clause h. The Tribe's preference for treatment of human remains is

K6 cont. noted. The County strictly adheres to California State law as cited in the comment (PRC Section 5097.98). No changes were made to the environmental document as a result of this comment.

K7 Comment noted. The Tribe's interest in the Project is appreciated and the Tribe's right to participate in the environmental review process is understood and welcomed. The Pechanga Tribe was contacted on October 14, 2005 regarding their desire to be involved in SB-18 consultations. No response was received. Although, the Pechanga Tribe is not part of the SB-18 consultations, the County is open to any comments or concerns that they may have and is available to consult under Sacred Lands. No changes were made to the environmental document as a result of this comment.

RINCON BAND OF LUISEÑO INDIANS
Culture Committee
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(760) 297-2621 or·(760) 297-2622 & Fax:(760) 749-8901

September 23, 2013

County of San Diego
Department of Planning and Land Use
5510 Overland Avenue, Suite 110
San Diego, CA 92123

Re: Campus Park West (Pappas Property) Project, GPA 05-003, SPA 05-001, REZ 05-005, TM 5424, ER 05-02-009

Dear Ms Donna Beddow

Rincon is submitting these comments in response to the draft Environmental Impact Report

RINCON TRIBE CULTURAL AFFILIATION TO PROJECT AREA

L1 D. L. true, C. W. Meighan, and Harvey Crew[1] stated that the California archaeologist is blessed "with the fact that the nineteenth-century Indians of the state were direct descendants of many of the Indians recovered archaeologically, living lives not unlike those of their ancestors." Similarly, the Tribe knows that their ancestors lived in the land and that the Luiseño peoples still live in their traditional lands. While we agree that anthropological and linguistic theories as well as historic accounts are important in determining traditional Luiseño territory, the Rincon Tribe asserts that the most critical sources of information used to define our traditional territories are our songs, creation accounts and oral traditions. The Rincon Tribe has specific cultural and legal interest in the Campus Park West Project. The project property is located within Luiseño ancestral territory and the Tribe is culturally affiliated with the geographic area. The Tribe also has specific knowledge of cultural resources and sacred places within/near the proposed Project alignments. Therefore further asserts that this culturally sensitive area is affiliated with the Rincon Band of Luiseño Indians because of the specific cultural ties to this area. Rincon considers any resources located on this Project property to be Luiseño therefore Rincon cultural resources, and do to its proximity to Rincon the Tribe asserts it's right to be named the Most Likely Descendent (Cal. Pub. Res. C. §5097.98) in case human remains are uncovered.

PROJECT IMPACTS TO CULTURAL RESOURCES AND PROPOSED TREATMENT FOR CULTURAL RESOURCES

[1] D. L. True, C. W. Meighan, Harvey Crew. Archaeological Investigations at Molpa, San Diego County. California, *University of California Press* 1974 Vol. 11, 1-176

Bo Mazzetti, Tribal Chairman · Stephanie Spencer, Vice Chairwoman · Steve Stallings, Council Member · Laurie E. Gonzalez, Council Member · Frank Mazzetti III, Council Member

L1 Comment noted. Rincon's assertion of right to be named Most Likely Descendant in the case of location of human remains on site is acknowledged. Should human remains be identified, the determination would be made by the Native American Heritage Commission. In addition, the County will strictly follow steps identified in Public Resources Code Section 5097.98. No changes were made to the environmental document as a result of this comment.

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L2 In General the Rincon Tribe has no disagreement with the findings in this draft Environmental Report, accept under the heading "Ethnographic Evidence for the San Diego Region" (p.8) the author states that "one of the most comprehensive ethnographic overviews compiled in Southern California was completed for the Palm Springs Cahuilla by noted ethnographer Lowell Bean. We would like to point out that this project is situated in Luiseño territory and is in an area that is central to the Luiseño creation story. The Rincon Tribe asserts that while anthropological and linguistic theories as well as historic accounts are important in determining traditional Native American life ways, the most critical sources of information used to define Luiseño life ways are our creation accounts and oral traditions. Therefore the proximity of this project to the Pankey site and as pointed out above the area is central in our creation story we regard this area as very sensitive.

L3 Based on the discussion above the Rincon Tribe is asking the County and developer to work with the Rincon Tribe to avoid where possible our Cultural Heritage. We thank you for the opportunity to submit this information to the County. If you should have any questions or comments, please do not hesitate to contact the Rincon Cultural Resource Center at (760) 297-2635.

Sincerely,

Rose Duro

Rincon Cultural Committee Chair

Bo Mazzetti, Tribal Chairman · Stephanie Spencer, Vice Chairwoman · Steve Stallings, Council Member · Laurie E. Gonzalez, Council Member · Frank Mazzetti III, Council Member

L2 Comment noted. As stated in the comment, the ethnographic background section does include the work of Lowell Bean. The prehistory and history of the area continues to expand as additional studies are completed and information is shared by the Native American tribes. Rincon was contacted on October 14, 2005 and August 24, 2010, regarding whether they wanted to participate in the SB-18 consultations. No response was received. During consultations, the County encourages Native American tribes to share any information they may have to make a study more complete. The County encourages Rincon to forward any information they may have relative to the traditional Native American "life ways" based on creation accounts and oral tradition. No changes were made to the environmental documents as a result of this comment.

L3 Comment noted. The Tribe's interest in and coordination regarding this Project is appreciated and noted. Rincon has been added to the distribution list and will be notified of the public hearings. No changes were made to the environmental documents as a result of this comment.

SAN LUIS REY BAND OF MISSION INDIANS
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September 23, 2013

Dennis Campbell
Planner
Planning & Development Services
County of San Diego
5510 Overland Ave., Ste. 110
San Diego, CA 92123

VIA ELECTRONIC MAIL
Dennis.Capbell@sdcounty.ca.gov

RE: COMMENT LETTER ON DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE CAMPUS PARK WEST PROJECT AND GENERAL PLAN & SPECIFIC PLAN AMENDMENTS (SCH NO. 2009061043)

Dear Mr. Campbell:

Thank you for the opportunity to submit the following comments regarding the Draft Subsequent Environmental Report ("DSEIR") for the Campus Park West Project ("Project").

M1

As you are aware, we, the San Luis Rey Band of Mission Indians ("SLR" or "Tribe") are a Northern San Diego County tribe whose traditional territory encompasses the cities of Oceanside, Carlsbad, Vista, San Marcos and Escondido, as well as the unincorporated communities of the County of San Diego such as Fallbrook and Bonsall. SLR is resolute in the protection and preservation of our cultural resources within our traditional territory.

M2

It is the Tribe's understanding that the Project is located on 116.5 or 118.6 acres, to the north and south of the intersection at State Route 76 ("SR 76") and Pankey Road in the unincorporated community of Fallbrook, CA. The Project proposes to subdivide the property into 23 lots and to rezone the current use of the property to allow mixed uses of the property (Specific Plan) and to revise the land use designations to meet the Project goals (General Plan Amendment). In addition, it is the Tribe's understanding that the Project contained within these new zoning and land designations, 283 multi-family residential homes, general commercial with a mixed-use core, limited impact industrial/business professional uses, on- and off-site infrastructures and open space that would allow for a connecting trail system with the envisioned San Luis Rey River Park will be constructed. These uses would then be subdivided and/or separated into six (6) planning areas ("PA's").

M1 Comment noted. The comment is not at variance with the environmental document. No changes were made to the environmental document as a result of this comment.

M2 Comment noted. The comment is not at variance with the environmental document. No changes were made to the environmental document as a result of this comment.

M3

The Tribe has reviewed the DSEIR and will support its passage if additional and revised mitigation measures are adopted to protect and preserve our Luiseño Native American cultural resources. It is important for the County of San Diego ("County") to realize that the Tribe does not oppose the Project in general, but that we *are* passionately opposed to any plans that may damage or destroy any potentially significant cultural or sacred sites and ancestral remains that may be located within the Project's footprint. As the County is aware, this Project is proposed to be constructed within the Traditional Cultural Property and/or Landscape known as Tom-Kav. Tom-Kav is sacred to the Luiseño people and is home to the Second Part of our Creation Story. Any development within this sacred place must be done with caution and acknowledgment of its intense sensitivity.

I. THE PRESENCE OF A LUISEÑO NATIVE AMERICAN MONITOR DURING ALL EARTH DISTURBING ACTIVITIES IS JUSTIFIED, AND AS SUCH, LUISEÑO NATIVE AMERICAN MONITORS SHOULD BE REQUIRED AND CONTRACTED WITH DURING THIS PROJECT.

The Tribe has reviewed the DSEIR for this Project and the Mitigation Measures for Cultural Resources contain therein. As stated within Cultural Resources Mitigation Measures CR-1 through 3, it is clear that the County acknowledges the necessity and benefits of requiring a Luiseño Native American monitor to be present during all earth disturbing activities; however, the language used within the CR1-3 is still too limiting in the protections our cultural resources require and deserve and therefore need to be revised accordingly.

M4

II. THE CREATION OF ANY GRADING MONITORING PROGRAM AND/OR A DATA RECOVERY PLAN MUST BE DONE IN COLLABORATION WITH THE LUISEÑO NATIVE AMERICAN COMMUNITY AND MUST TAKE INTO ACCOUNT THE LUISEÑO SPIRITUAL PRACTICES AND PREFERRED PRESERVATION AND PROTECTIVE MEASURES.

Currently, the language of the Cultural Resource Mitigation Measures states, "Prior to approval of grading or improvement plans, the Applicant shall implement a grading monitoring and data recovery program to mitigate potential impacts to undiscovered, buried archaeological resources to the satisfaction of the Director of PDS and to a level below significant." Developing a grading monitoring program and/or a data recovery program that results in the satisfaction of the Director of Planning and Development Services without collaboration and/or input from the Luiseño Native American community is not acceptable to the Tribe. Many of our sacred places are being destroyed and descectrated in the name of new development. This Project is within the sacred landscape of Tom-Kav and within extremely close proximity to a burial ground to many of our ancestors. Special considerations and precautions must be made to preserve and protect what can and cannot be seen at present.

M3 Comment noted. The Tribe's interest in development in this area is understood. A study was completed which was negative for cultural resources. The Project would be conditioned to require a grading monitoring program that requires preservation in place (avoidance) be considered as the first alternative should resources be identified. If such preservation would be infeasible, data recovery would be an appropriate mitigation measure, as identified in CEQA. The County is aware that the Project is in proximity to Tom-Kav, the location of the Second Part of the Creation Story for the Luiseño. As noted in Section 2.4.1.6 of the EIR:

> In relation to the Campus Park West property…the currently known location of the Tom-Kav village/CA-SDI-682 is well to the east. During the archaeological studies for the Campus Park West property, no archival or archaeological evidence was discovered to indicate that the Tom-Kav village (site CA-SDI-682), extends onto the Project property. Similarly, no evidence of independent and in situ milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps was noted.

Because of the sensitivity of the area, as previously discussed, the Project would be conditioned to require a grading monitoring program including a Luiseño Native American monitor. No changes were made to the environmental document as a result of this comment.

M4 Comment noted. The presence of the Luiseño Native American monitor is noted for all critical elements of the cultural resources mitigation program. These Project elements are identified in the Mitigation Measures M-CR-1, 2, and 3. As indicated, the Luiseño Native American monitor would (1) be invited to attend the pre-grading meeting(s) (clause b) when the monitor could review the grading plan; (2) be invited to be present for all earth-moving activities and during cutting of previously undisturbed formations (clauses d and e); (3) be involved in the location and assessment of any previously unidentified cultural resources (clause g); and (4) be included in data recovery, if required. In addition, please note that based on comments received during public review of the Draft Subsequent EIR for this Project, the involvement of the Luiseño Native American monitor in any potential required fencing, has been added to the Mitigation Measure. The Luiseño Native American monitor

M4 cont.

Therefore, prior to developing a monitoring plan to grade the Project area or subjecting Luiseño cultural resources to a data recovery, the Project archaeologist and County archaeologist must take into consideration the beliefs and wishes of the Luiseño Native American community. A grading plan is simply the understanding of all interested parties on how the soils will be manipulated and/or extracted for construction and/or development purposes. These procedures can have extremely detrimental impact if done incorrectly or insensitively to a cultural belief and practice. It is imperative that SLR and the other Luiseño tribes be provided an opportunity to review the proposed grading plan, be allowed to provide our input and to see that input be seriously considered and implemented when feasible.

In regards to a data recovery plan, it is equally crucial that the Applicant and the County first evaluate avoidance and preservation measures prior to the implementation of a data recovery plan. The Luiseño Native American community should not only be consulted with in regards to the creation of a data recovery plan, but also be invited to collaborate on its appropriateness and necessity in deconstructing a sacred cultural resource.

a. CR-1(C) And (D) Should Be Revised To Require Luiseño Native American Monitors At All Earth Disturbing Activities, Both On-Site And Off-Site.

M5

Presently, the language contained with CR-1 (c) and (d) restrict the presence of Luiseño Native American monitors to the earth disturbing activities as they pertain to the activities taking place on-site. It is clear from the DSEIR that there will be many, many impacts to Tom-Kav and that these will not all take place within the Project boundaries, but will occur "off-site" as well. These "improvements" will impact areas of importance to the Tribe and therefore, Luiseño Native American monitors must be present in order to be protect these areas from inappropriate and unwarranted disturbances. Therefore, this language must be amended to reflect that Luiseño Native American monitors will be present during all earth disturbing activities on-site and off-site.

b. CR-1(E) Should Be Revised To State That Luiseño Native American Monitors Should Be Present During All Cutting Of Deposits And Other Earth Disturbing Activities, And Not Be Limited To Cuts Of Undisturbed Soils Only.

M6

The language contained with CR-1(e) states that "[M]onitoring of cutting of previously disturbed deposits will be determined by the Principal Investigator." The Tribe respectfully requests that language be added to this mitigation measure that clearly indicates that the Principal Investigator must consult with the Luiseño Native American monitor in reaching this determination. Therefore, the phrase should be restated to read, "[M]onitoring of cutting of previously disturbed

M4 cont. would advise and coordinate with the Project Archaeologist should any Traditional Cultural Properties (TCPs) be identified. The TCPs would be treated in accordance with the Grading Monitoring Program condition. Furthermore, it is also expected that the Luiseño Native American monitor would communicate the beliefs and wishes of the Luiseño Native American community to the Project Archaeologist.

Please refer to the response to Comment 3 of this letter regarding the physical relationship of the Project site to the village of Tom-Kav. The potential for the location of human remains is expressly addressed in Mitigation Measure M-CR-1, 2, and 3, under clause h. Based on comments received, the Grading Monitoring Program has been revised to require avoidance as the first measure pursued when a resource is located. If such avoidance is infeasible, then data recovery is the appropriate measure to be pursued under CEQA. The Luiseño Native American community has been consulted under SB-18 consultations and as such, has been afforded an opportunity to participate in the development of mitigation measures. Clause j has been modified in this Final Subsequent EIR to include options for curation; including use of a San Diego facility or Luiseño Tribal curation facility that meets federal standards per 36 CFR Part 79, or alternatively the collections may be repatriated to a Luiseño Native American tribe. Changes have been made to the environmental document as a result of this comment.

M5 Comment noted. The need for Luiseño Native American monitors to be present during on- and off-site investigations is expressly required by Mitigation Measures M-CR-1, 2, and 3 (each of these mitigation measures addresses unknown but potentially significant impacts to off-site resources). Specifically, 1d states in part: "Native American monitors shall be present to ensure that all earthmoving activities are observed and shall be on site during all grading activities for areas to be monitored (on and off site)." The text "all areas to be monitored" means both on and off site. The Mitigation Measures have been changed accordingly.

M6 Comment noted. The condition has been expanded to include consultation with the Luiseño Native American monitor for the determination of monitoring of the cutting of previously disturbed deposits. The environmental document has been changed as a result of this comment.

deposits will be determined by the Principal Investigator after consulting with the Luiseño Native American monitor."

c. CR-1(F)'S Language Should Include That Any Determination Of A Cultural Resource Deposits Significance Should Be Determined By The Project Archaeologist In Collaboration And Consultation With The Luiseño Native American Monitor.

Archaeologists and Native American monitors are trained to perform different analysis of cultural resources. For instance, in the case of determining the significance of isotopes we believe adamantly that any determination as to whether the deposits are "non-significant" should be left to the archaeologist and the Native American monitor and that both should agree on the deposit's insignificance. Both entities should agree due to the fact that each professional weighs the deposits differently based on their training and beliefs. An archaeologist looks at the deposits value for research purposes and its scientific worth. Whereas, a Native American monitor looks at the deposits importance as it relates to its religious significance and cultural relevance. Each opinion is equally important and both should be taken in equal consideration. Therefore, it is the Tribe's request that Native American monitors be accorded the same amount of respect for their training and professional opinions in regards to the identification and protection of cultural resources as the contracted archaeologist and this request should be incorporated into the Final SEIR accordingly.

M7 Comment noted. It appears that the comment mistakenly references 1f instead of 1g. Native American monitors are accorded the same level of respect as other professionals. The language in clause g does not restrict determination of significance to the Principal Investigator. The Mitigation Measure provides for consultation with the Luiseño Tribes regarding the significance of identified cultural sites and the Data Recovery Program. Decisions as to lack of significance would be made in concert with the Native American monitor as part of the ongoing and close coordination required during monitoring. No changes were made to the environmental document as a result of this comment.

d. CR-1(F) Should Permit The Collection And Repatriation Of All Isolates And Non-Significant Deposits By The Luiseño Native American Monitor.

If it is the determination of the Project archaeologist after consultation with the Luiseño Native American monitor that the deposits are isolates and non-significant, then the Tribe respectfully requests that County permit the Luiseño Native American monitor to collect the resources and repatriate them in accordance with Luiseño beliefs and traditions. To abandon the resources for imminent destruction and desecration cannot be permitted and their collection and repatriation should be allowed.

M8 Comment noted. The County agrees with this request. As noted in the final wording of clauses f and j, curation would be acceptable at a San Diego Curation facility, a Luiseño Tribal Cultural facility, or through repatriation. If artifacts are identified as isolates and non-significant and are not collected in the field by the Project Archaeologist, but desired by the Native American monitor, the monitor has the ability to collect them and transfer them to either a tribal center or repatriation program. Changes were made to the environmental document to clarify that collection by the Native American monitor is appropriate for isolates and non-significant deposits should the archaeological materials not be collected by the Project Archaeologist.

e. CR-1(G)'S Language Should Be Revised To Provide The Luiseño Native American Monitor Equal Authority To Temporarily Halt Ground Disturbance Operations As The Project Archaeologist.

The Tribe respectfully requests that if cultural resources are encountered that the Native American monitor be given the authority to temporarily halt ground disturbing activities if a cultural resource and/or archaeological artifact deposit or cultural feature is discovered. It is imperative that Native American monitors possess the authority to temporarily halt ground disturbing activities when a cultural resource or archaeological resource are discovered in order for the resource to be properly identified and not destroyed by heavy machinery. Therefore, the Tribe respectfully requests that the

M9 Comment noted. The County agrees with this request. Clause g has been revised to expressly allow for the Native American monitor to divert grading or temporarily halt grading in the event of discovery of a cultural resource, pending determination of significance. Changes were made to the environmental document as a result of this comment.

M9 cont.

language authorizing the temporary halting of ground disturbing activities be included as well.

f. CR-1(G)'S Language Needs To Be Clarified As To When The Principal Investigator Shall Contact The County Archaeologist.

M10

CR-1(g) lacks clarity as to when the County Archaeologist needs to be contacted by the Principal Investigator. It is imperative that this directive be clearly communicated by the County. Therefore, the Tribe respectfully requests that this statement be amended with a clear directive as to when the Principal Investigator must be in contact with the County Archaeologist.

g. CR-1(G)'S Language Regarding The Creation Of A Research Design And Data Recovery Program Needs To Be Revised To Include A Requirement Of Collaboration With The Luiseño Native American Community.

M11

If a significant cultural resource and/or unique archaeological resource are unearthed during ground disturbing activities for this Project, the Tribe respectfully requests that they be notified and consulted with in regards to the respectful and dignified treatment of those resources. The Tribe's preference will always be for avoidance and that the resource be protected and preserved in perpetuity. If however, relocation and/or a data recovery plan is authorized by the County as the Lead Agency, the Tribe respectfully requests that as a condition of any authorization, the Tribe be consulted regarding the drafting and finalization of any such recovery. These resources are evidence of our ancestors' lost history and, as such, we must have a voice and be a part of how those resources are treated and preserved for future generations.

M12

Moreover, when cultural resources are discovered during the Project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. Additionally, if the archaeologist does not collect the cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may in their discretion, collect said resources and provide them to the Tribe for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions. Therefore, it is the Tribe's recommendation that these items be given to the Tribe so that they may be repatriated at the site on a later date.

h. CR-1(H)'S Language Needs To Be Revised To Include The Luiseño Spiritual Preference And Procedures Regarding Identification Of Our Ancestors Remains.

M13

If Native American remains and/or associated burial goods are unearthed during the Project, and prior to a Most Likely Descendant being determined by the Native American Heritage Commission, it is the Tribe's request that the ancestral remains be kept *in situ* (in place), or in a secure location in close proximity to their discovery and

M10 Comment noted. The County disagrees that the timeframe lacks clarity. As stated in clause g, "The Principal Investigator shall contact the County Archaeologist at the time of discovery." In other words, the notification should be immediately following discovery. No additional change to wording of clause g is required. No changes were made to the environmental document as a result of this comment.

M11 Comment noted. Please refer to the responses to Comments 4 and 7 of this letter. The County understands the concerns identified in this comment, and finds that they have been appropriately addressed. No changes were made to the environmental document as a result of this comment.

M12 Comment noted. The Luiseño Native American monitor would be involved in grading monitoring, data recovery, if required, and the initial identification and cataloguing in the field. It is required that the archaeological materials identified during the grading monitoring program be collected by the Project Archaeologist unless they are isolates or non-significant deposits. Please refer to the response to Comment 8 of this letter regarding the collection of artifacts by the Luiseño Native American monitor. No changes were made to the environmental document as a result of this comment.

M13 Comment noted. If human remains are identified in the field, the County acts strictly in compliance with California Health and Safety Code Section 5070.50 and Public Resources Code 5097.98, as cited in the comment. All work is stopped in the area where the human remains were identified and the remains are retained in situ and secured until the County Coroner is on site. The request that the human remains remain in-situ for analysis can be made by the Most Likely Descendent (MLD),

M13 cont.

that a forensic anthropologist perform their analysis of the remains on-site in the presence of a Luiseño Native American monitor. Any transportation of the ancestral remains would be considered by the Tribe as disrespectful and undignified treatment. Therefore, the Tribe requests that in addition to the strict adherence to the protocol stated in the California Health and Safety Code Section 7050.5 and California Public Resource Code Section 5097.98, the Final SEIR reflect that if Native American remains are suspected to have been discovered, then those suspected Native American remains shall be kept in situ, or in a secure location in close proximity to where they were found, and that the analysis of the remains occur only on-site in the presence of a Luiseño Native American monitor by a forensic anthropologist and/or osteologist.

M13 cont. at the time that the County Coroner is contacted; however, if the remains are removed by the Coroner, the County would not have control over the remains. A forensic anthropologist on the County Coroner's staff would determine the origin of the human remains. If the remains are left in situ, or returned, the County would consult with the MLD, as identified by the Native American Heritage Commission, pursuant to State law. No changes were made to the environmental document as a result of this comment.

M14

i. CR-1(I)'S Language Must Be Amended To Acknowledge That Not All Artifacts May Be Subjected To Analysis.

When cultural resources are discovered, it is vital that those resources be identified not only for their pre-historic use, but also their spiritual importance. Artifacts discovered within close proximity to a burial area could be considered by the Most Likely Descendant to be a burial good. The artifact may also be an item used for religious ceremonies. In either instance, neither artifact will be permitted to be tested by the Luiseño Native American community. Hence, the language currently being used in CR-1(i) needs to be amended and revised accordingly.

M14 Comment noted. The County agrees that testing of human remains and grave goods is not allowed under the law. Consultation as required under State law would take place with the MLD. As part of the consultation, the artifacts located in proximity to the burial would be available for review by the MLD. Please also refer to the response to Comment 13, above. Changes were made to the environmental document as a result of this comment.

M15

j. CR-1(J) Should Be Stricken And Replaced With Language That Would Allow For Repatriation Of Our Luiseño Cultural Resources And Not Require Curation Of Those Cultural Resources.

It is the religious belief, custom, and practice of the Tribe to repatriate all cultural resources that are unearthed during ground disturbing activities. Therefore, any plans to curate any such items would blatantly disregard the respect due to these cultural resources. Instead, any such items should be returned to the Tribe and/or the Most Likely Descendant, if applicable, as determined by the Native American Heritage Commission. This Project is located within the traditional and aboriginal territory of our Tribe and the other Luiseño tribes. The Tribe considers all cultural items found in this area to belong to their ancestors, and the ancestors of the other Luiseño tribes. This request should be included in the Final SEIR.

M15 Comment noted. Please refer to the response to Comment 8 of this letter. This applies to all prehistoric (but not all historic) artifacts. No changes were made to the environmental document as a result of this comment.

M16

k. CR-1(K-M) SLR Respectfully Requests That Any And All Reports Produced Regarding The Earth/Ground Disturbing Activities Related To This Project Be Provided To SLR In A Timely Manner.

CR-1 (k)-(m) requires monthly reports, and End-Of-Project reports to be compiled and submitted to the County for record keeping purposes. The SLR Band respectfully requests that copies of all said reports required and received by the County be provided to the Tribe within a reasonable time period.

M16 Comment noted. The County agrees that each of the cited reports would be provided to the Tribe within a reasonable time period. Changes were made to the environmental document as a result of this comment.

l. CR-2's Language Should Be Amended To Require The Presence Of A Luiseño Native American Monitor During The Erection Of Any Temporary Fencing Around SDI-682 Given The Area's Concentrated Sensitivity.

M17 The area described by the DSEIR that could potentially require temporary fencing, is an area that is in very close proximity to extremely sensitive cultural resources. As such, any erection of temporary fencing must be done in the presence of a Luiseño Native American monitor and the Project archaeologist. Each is trained to evaluate and discern evidence of pre-habitation and each has their own objectives of protection and preservation. Therefore, a Luiseño Native American monitor must be present during any erection and break down of any and all temporary fencing.

III. ADDITIONAL CULTURAL RESOURCE TESTING IS NECESSARY AND JUSTIFIED AND MUST REQUIRE THE PRESENCE OF A LUISEÑO NATIVE AMERICAN MONITOR.

M18 In 2004 and 2012 no Luiseño Native American monitor(s) were present during the archaeological testing and evaluation of this Project site. The glaring absence of a Luiseño Native American monitor at this particular site is extremely disturbing to the SLR Band. In fact, the cultural resource report created for this Project fails to reflect any discernible true expertise and knowledge of this area. There is no mention of the many cremation burials discovered in close proximity to this Project. Nor is there any mention of the unique archaeological resources discovered within close proximity of this Project. Nor is there any mention of the additional resources being found in this sacred area- the Traditional Cultural Property and Landscape known as Tom-Kav. Unrestricted access to this land has been denied to the Luiseños for generations. It is only now through the Applicant's desire to develop the land that the Luiseños can finally return to Tom-Kav and research and investigate our oral history and spiritual understandings. Therefore, prior to any further discussion, the County should demand of the Applicant that additional testing be conducted over the lands they propose to develop and that any future evaluations must be done in the presence of a Luiseño Native American monitor.

M19 In addition, the construction of Street R or Pankey Place will be commencing within the near future. Special consideration is being given to the development of this road and the necessary infrastructure that will need to be placed beneath it. Therefore, prior to any grading and development approvals, the Tribe respectfully requests that the County first weigh the results of Street R/Pankey Place's road construction and preparation of necessary infrastructure as they relate to the discovery of Luiseño Native American cultural resources.

M17 Comment noted. The County agrees with this comment. The Project would be conditioned to include a Luiseño Native American monitor during the placement and removal of temporary fencing. Please also refer to Mitigation Measure CR-2. Changes were made to the environmental document as a result of this comment.

M18 Comment noted. The comment is correct that no Native American monitors were present during the 2004 survey or 2012 field check. The presence of Native American monitors was not required until the County's Guidelines for Significance were approved in 2006. Because the work in 2012 was a field check and not a survey, a Native American monitor was not required. The Project would be conditioned to require a grading monitoring program which requires the inclusion of a Luiseño Native American monitor to be involved during monitoring, testing and evaluation activities.

The County disagrees with the characterization of the cultural resources technical report. A discussion of Tom-Kav and the associated burials (as well as the resulting coordination with the San Luis Rey Tribe) is presented in Section 1.2.2 of the report. Similarly, the Addendum presented at the beginning of the report describes the attributes of a TCP as well as why Campus Park West is not currently identified as being part of such a property.

The archaeological study did not identify potentially significant deposits. No surficial evidence exists that indicates the presence of subsurface archaeological remains that would require testing. As such, additional testing is not warranted. Monitoring of all grading activities would occur as required and as described in the above responses. No changes were made to the environmental document as a result of this comment.

IV. SLR STRONGLY RECOMMENDS AND REQUESTS THAT ADDITIONAL MEASURES OF MITIGATION BE ADOPTED BY THE CITY IN ORDER TO LESSEN ANY ADDITIONAL NEGATIVE IMPACT TO OUR KNOWN NATIVE AMERICAN CULTURAL RESOURCES.

Furthermore, the Tribe strongly recommends and requests that additional measures of mitigation be adopted by the City in order to lessen any additional negative impact to our known Native American cultural resources.

M20

A. Cultural Resources should be avoided and protected from pedestrians, residents and/or trail users.

Currently, PA-6 is proposed as a trail that will serve as a beginning/ending part of the San Luis Rey River Park. If cultural resources are discovered within this proposed area, and/or any other proposed areas where residents, customers and/or members of the general public will congregate, it is the Tribe's express request that the Applicant and the County work in collaboration with the Tribe to determine if the resources may be avoided and preserved in perpetuity, or whether the resources could be relocated and incorporated in an area of open space or development whereby the resource may still be preserved and protected in perpetuity.

B. Only "Clean Fill" Should Be Utilized During This Project

M21

Lastly, the Tribe is opposed to any undocumented fill being used during the proposed development. In the event the "fill" will be imported into the Project area, the Tribe requests that any proposed use of fill be clean of cultural resources and documented as such. It has been a practice of many in the construction profession to utilize fill materials that contained cultural resources from other "unknown" areas thereby contaminating the potential cultural landscape of the area being filled. This type of fill material is unacceptable. Moreover, if the fill material is to be utilized from areas within the Project boundaries, then we ask that that fill be analyzed and confirmed by an archeologist and/or Luiseño Native American monitor that such fill material does not contain cultural resources. A requirement that fill material be absent of any and all cultural resources should therefore be included as an additional mitigation measure of the Final SEIR.

V. CONCLUSION

M22

The San Luis Rey Band of Mission Indians appreciates this opportunity to provide the County of San Diego with our comments and recommendations on the Campus Park West Project. The Tribe hopes the County will adopt the mitigation measures for

M19 Comment noted. Construction of Street R/Pankey Place is not required as part of Campus Park West implementation. As such, Campus Park West mitigation does not apply to this potential road improvement (Street R/Pankey Place). Monitoring of grading associated with roadway construction was required under the 2011-approved Campus Park project, located east of Campus Park West. No changes were made to the environmental document as a result of this comment.

M20 Comment noted. The Campus Park West Project is located wholly within the jurisdiction of the County of San Diego. Therefore, it is assumed that the comment should refer to the County and not a city.

Relative to PA 6 and the existing trail that bisects the parcel, if the trail is improved and any resources are located, they would be addressed consistent with all other restrictions and requirements of the mitigation measures addressed above in responses to this letter. Please note, that the County is pursuing re-routing of this existing trail to abut portions of existing roadways, which would minimize ground disturbance activities in this PA. No changes were made to the environmental document as a result of this comment.

M21 Comment noted. The Project cut and fill would be balanced on site; no import is anticipated. On-site soil would be monitored and reviewed for cultural material as part of the monitoring program required in clauses d and e of Mitigation Measures M-CR-1, 2, and 3. No change to the mitigation measures specified in the Final Subsequent EIR is necessary.

M22 Comment noted. The Tribe's interest in the Project and comments are appreciated. Modifications to the Project Mitigation, Monitoring and Reporting Program have been made as indicated in the responses above. If this Project is approved, the County will move forward with implementing Project improvements in accordance with CEQA and in

M22 cont.

Cultural Resources as herein requested and that they will appear in the Final SEIR. As always, we look forward to working with the County to guarantee that the requirements of CEQA are rigorously applied to this Project and all projects. We thank you for your continuing assistance in protecting our invaluable Luiseño cultural resources.

Sincerely,

Merri Lopez-Keifer
Tribal Legal Counsel

M22 cont. compliance with all relevant state law. As part of the ongoing Project evaluation, the County is continuing Government-to-Government Consultation with the Tribes. The County appreciates the opportunity to work with the Tribe in protection of valuable cultural resources.

STATEMENT OF LOCATION AND CUSTODIAN OF DOCUMENTS

STATEMENT OF LOCATION AND CUSTODIAN OF DOCUMENTS OR OTHER MATERIALS THAT CONSTITUTE A RECORD OF PROCEEDINGS

June 18, 2014

Project Name: **Campus Park West**

Reference Case Numbers: **PDS2005-3813-05-001(SPA); PDS2005-3800-05-003(GPA), PDS2005-3600-05-005 (REZ); PDS2005-3100-5424(TM); Log No. PDS2005-3910-05-02-009(ER); State Clearinghouse No. 2009061043**

The CEQA [Section 21081.6(a)(2)] requires that the lead agency (in this case the County of San Diego) specify the location and custodian of the documents or other material that constitute the record of proceedings upon which it decision is based. It is the purpose of this statement to satisfy this requirement.

Location of Documents and Other Materials That Constitute the Record of Proceedings:

County of San Diego, Planning and Development Services
Project Processing Center
5510 Overland Avenue, Suite 310
San Diego, California 92123

If this project was subject to a hearing by the County of San Diego Board of Supervisors the following is also a location of documents and other materials that constitute the record of proceedings:

County of San Diego, Clerk of the Board of Supervisors
1600 Pacific Highway, Room 402
San Diego, California 92101

Custodian:

County of San Diego, Planning and Development Services
Project Processing Center
5510 Overland Avenue, Suite 310
San Diego, California 92123

If this project was subject to a hearing by the County of San Diego Board of Supervisors the following is also a custodian of the record of proceedings:

County of San Diego, Clerk of the Board of Supervisors
1600 Pacific Highway, Room 402
San Diego, California 92101

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FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

CAMPUS PARK WEST PROJECT
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K Fire Protection Plan
L Volume 1: CEQA Preliminary Hydrology/On-site Drainage Study
L Volume 2: Preliminary Hydromodification Management Study
L Volume 3: Hydromodification Screening
M Preliminary Major Stormwater Management Plan
N Horse Ranch Creek Floodplain Study
O San Luis Rey Floodplain Study
P Mineral Resource Technical Report
Q Project Facility Availability Forms
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LIST OF ACRONYMS AND ABBREVIATIONS

AB	**Assembly Bill**
ACM	**asbestos containing material**
ACOE	**United States Army Corps of Engineers**
ADT	**average daily trips**
AEP	**Association of Environmental Professionals**
af	**acre feet**
afy	**acre feet per year**
AGR	**agricultural supply**
amsl	**above mean sea level**
APN	**Assessor Parcel Number**
AQIA	**Air Quality Impact Assessment**
ASM	**ASM Affiliates, Inc.**
AST	**aboveground storage tanks**
ASTM	**ASTM International, formerly known as the American Society for Testing of Materials**
ATS	**advanced treatment systems**
Basin Plan	**San Diego RWQCB Water Quality Control Plan for the San Diego Basin**
BAT	**best available technology economically achievable**
BAU	**business as usual**
BCT	**best conventional pollutant control technology**
BIOL	**biological habitats of special significance**
BMI	**benthic macroinvertebrate(s)**
BMO	**Biological Mitigation Ordinance**
BMPs	**best management practices**
BOD	**biochemical oxygen demand**
BRCA	**Biological Resource Core Area**
BTU	**British thermal units**
BUSD	**Bonsall Union School District**
CAA	**Clean Air Act**
CAAQS	**California Ambient Air Quality Standards**
CAFE	**Corporate Average Fuel Economy**
CalEPA	**California Environmental Protection Agency**
CalEEMod	**California Emission Estimator Model**
CAL FIRE	**California Department of Forestry and Fire Protection**
Cal-OSHA	**California Division of Occupational Safety and Health**
Caltrans	**California Department of Transportation**
CAPCOA	**California Air Pollution Control Officers Association**
CARB	**California Air Resources Board**
CASQA	**California Stormwater Quality Association**
CBC	**California Building Code**
CCAA	**California Clean Air Act of 1988**
CCAR	**California Climate Action Registry**
CCR	**California Code of Regulations**
CDFG	**California Department of Fish and Game**
CDFW	**California Department of Fish and Wildlife**
CDMG	**California Division of Mines and Geology**
CEC	**California Energy Commission**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

CEQA	**California Environmental Quality Act**
CEUS	**Commercial End Use Survey**
CFCs	**chloroflurocarbons**
CFR	**Code of Federal Regulations**
cfs	**cubic feet per second**
CGS	**California Geological Survey**
CH_4	**methane**
CHHSL	**California Human Health Screening Level**
CLOMR	**conditional letter of map revision**
CMP	**Congestion Management Program**
CNDDB	**California Natural Diversity Database**
CNEL	**Community Noise Equivalent Level**
CNPS	**California Native Plant Society**
CO	**carbon monoxide**
CO_2	**carbon dioxide**
CO_2e	**carbon dioxide equivalent**
COD	**chemical oxygen demand**
Construction Permit	**National Pollutant Discharge Elimination System General Construction Activity Storm Water Permit**
County	**County of San Diego**
CPA	**Community Planning Area**
CSMP	**Construction Site Monitoring Program**
CUDA	**Current Urban Development Area**
CWA	**Clean Water Act**
cy	**cubic yards**
dB	**decibel(s)**
dBA	**A-weighted decibel(s)**
DEH	**San Diego County Department of Environmental Health**
DMP	**Drought Management Plan**
DOT	**Department of Transportation**
DPLU	**County of San Diego Department of Planning and Land Use**
DPM	**diesel particulate matter**
DPW	**County of San Diego Department of Public Works**
DTSC	**Department of Toxic Substances Control**
DU	**dwelling unit(s)**
du/ac	**dwelling unit(s) per gross acre**
DWR	**California Department of Water Resources**
EB	**eastbound**
EDUs	**equivalent dwelling units**
EO	**executive order**
EIR	**Environmental Impact Report**
EIS	**Environmental Impact Statement**
EPIC	**Energy Policy Initiative Center**
ESA	**Endangered Species Act**
ESL	**Environmental Screening Level**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

^{o}F	**degrees Fahrenheit**
FEMA	**Federal Emergency Management Agency**
FHWA	**Federal Highway Administration**
FIRM	**Flood Insurance Rate Map**
FPP	**Fire Protection Plan**
fps	**feet/foot per second**
FUHSD	**Fallbrook Union High School District**
g	**acceleration due to gravity**
GCC	**Global Climate Change**
General Plan	**County of San Diego General Plan**
Geosoils	**Geosoils, Inc.**
Geotechnics	**Geotechnics, Incorporated**
GHG	**greenhouse gas**
GIS	**Geographic Information Systems**
GISB	**Grate Inlet Skimmer Box**
GPA	**General Plan Amendment**
gpd	**gallons per day**
gpm	**gallons per minute**
Groundwater Permit	**National Pollutant Discharge Elimination System General Groundwater Extraction Permit**
GWP	**global warming potential**
H_2S	**hydrogen sulfide**
HA	**Hydrologic Area**
HCFCs	**Hydrochlorofluorocarbons**
HEC-RAS	**Hydrologic Engineering Center – River Analysis System**
HFCs	**hydrofluorocarbons**
HI	**hazard index**
HLP	**Habitat Loss Permit**
HMD	**Hazardous Materials Division**
HMP	**Hydromodification Management Plan**
HNL	**Hourly Noise Level**
HOA	**homeowners' association**
hp	**horsepower**
HSA	**Hydrologic Subarea**
HU	**Hydrologic Unit**
HVAC	**Heating, Ventilating and Air Conditioning**
Hydrology Study	**Preliminary CEQA Hydrology/On-site Drainage Study**
I-15	**Interstate 15**
IBC	**International Building Code**
ICC	**International Code Council**
IID	**Imperial Irrigation District**
in/sec	**inches per second**
IND	**industrial service supply**
IPCC	**Intergovernmental Panel on Climate Change**
IPM	**integrated pest management**
ITE	**Institute of Transportation Engineers**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

JURMP	**County Jurisdictional URMP**
Kg	**kilogram**
kV	**kilovolt**
kWh	**kilowatt hours**
LAFCO	**San Diego Local Agency Formation Commission**
LBP	**lead based paint**
LCFS	**Low Carbon Fuel Standard**
L_{EQ}	**equivalent sound level**
LEED	**Leadership in Energy and Environmental Design**
LID	**Low Impact Development**
LLG	**Linscott, Law and Greenspan Engineers**
LMD	**Landscape Maintenance District**
LOMR	**letter of map revision**
LOS	**level of service**
LPC	**County of San Diego Light Pollution Code**
LUST	**leaking underground storage tank**
MAR	**marine habitat**
MBTA	**Migratory Bird Treaty Act**
MCL	**maximum contaminant level**
MSDS	**material safety data sheet**
MEC	**MEC Analytical Systems, Inc.**
MEP	**maximum extent practicable**
MG	**million gallons**
mg/kg	**milligram per kilogram**
mg/l	**milligrams per liter**
mg/m^3	**milligrams per cubic meter**
mgd	**million gallons per day**
MIGR	**migration of aquatic organisms**
MLD	**Most Likely Descendant**
MLS	**mass loading station**
MMBTU	**million British thermal unit**
MMT	**million metric tons**
Montreal Protocol	**Montreal Protocol on Substances that Deplete the Ozone Layer**
mpg	**miles per gallon**
mph	**miles per hour**
MPO	**Metropolitan Planning Organization**
MRZ	**Mineral Resource Zone**
MSCP	**Multiple Species Conservation Program**
MSP	**Master Specific Plan (I-15/SR-76 Interchange Master Specific Plan)**
MSPA	**Master Specific Planning Area**
MSR	**Municipal Services Review**
MUN	**municipal and domestic supply**
Municipal Permit	**National Pollutant Discharge Elimination System Municipal Storm Water Permit**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

MWD	**Metropolitan Water District of Southern California**
MWh	**megawatt-hour**
NAAQS	**National Ambient Air Quality Standards**
NAHC	**Native American Heritage Commission**
NB	**northbound**
NCCP	**Natural Community Conservation Program**
NCFPD	**North County Fire Protection District**
NCTD	**North County Transit District**
NFPA	**National Fire Protection Association**
N_2O	**nitrous oxide**
NO	**nitrogen**
NO_2	**nitrogen dioxide**
NOP	**Notice of Preparation**
NO_X	**oxides of nitrogen**
NPDES	**National Pollutant Discharge Elimination System**
NPPA	**Native Plant Protection Act**
NRCS	**Natural Resources Conservation Service**
NRDC	**Natural Resources Defense Council**
NSHP	**New Solar Homes Partnership**
NSLU(s)	**noise-sensitive land use(s)**
O_3	**ozone**
OAL	**Office of Administrative Law**
ODCs	**ozone-depleting chemicals**
OEHHA	**Office of Environmental Health Hazard Assessment**
OPR	**California Office of Planning and Research**
PA	**Planning Area**
Paleoservices	**Department of Paleoservices, San Diego Natural History Museum**
PAMA	**Pre-Approved Mitigation Area**
Pb	**lead**
P-C	**Production-Consumption**
PCBs	**polychlorinated biphenyls**
PCC	**Portland Cement Concrete**
PDC	**Project Design Consultants**
PDP	**Priority Development Project**
PDR	**Preliminary Design Report**
PDS	**Planning and Development Services (County of San Diego)**
PFCs	**perfluorocarbons**
PFE	**Public Facility Element**
PHMS	**Preliminary Hydromodification Management Study**
PLDO	**Park Land Dedication Ordinance**
PM_{10}	**respirable particulate matter smaller than 10 microns in diameter**
$PM_{2.5}$	**fine particulate matter smaller than 2.5 microns in diameter**
POC	**point of compliance**
POUs	**publicly owned utilities**
ppb	**parts per billion**
ppm	**parts per million**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

PRC	**Public Resources Code**
Project	**Campus Park West Project**
Proposed Project	**Campus Park West Project**
PRS	**pressure reducing station**
PUC	**Public Utilities Commission**
PVC	**polyvinyl chloride**
PWSI	**Public Works Standards, Inc.**
QSA	**Quantification Settlement Agreement**
RAQS	**Regional Air Quality Strategy**
RARE	**rare, threatened, or endangered species**
RASS	**Residential Appliance Saturation Survey**
RCP	**Regional Comprehensive Plan**
RCRA	**Resource Conservation and Recovery Act**
REAP	**Rain Event Action Plan**
REC	**REC Consultants, Inc.**
REC 1	**contact water recreation**
REC 2	**non-contact water recreation**
REL	**reference exposure level**
RHNA	**regional house needs allocation**
RMP	**Resource Management Plan**
rms	**root mean square**
RMWD	**Rainbow Municipal Water District**
RPO	**Resource Protection Ordinance**
RPS	**Renewables Portfolio Standard**
RTA	**Reservation Transportation Authority**
RTAC	**Regional Targets Advisory Committee**
RTIP	**Regional Transportation Improvement Plan**
RTP	**Regional Transportation Plan, or MOBILITY2030**
RWQCB	**Regional Water Quality Control Board**
SAA	**Streambed Alteration Agreement**
SANDAG	**San Diego Association of Governments**
SB	**southbound**
SBR	**sequential batch reactors**
SCAQMD	**South Coast Air Quality Management District**
SCIC	**South Coastal Information Center**
SCS	**Soil Conservation Service**
SDAB	**San Diego Air Basin**
SDAPCD	**San Diego Air Pollution Control District**
SDCWA	**San Diego County Water Authority**
SDG&E	**San Diego Gas and Electric**
SDHM	**San Diego Hydrology Model**
s.f.	**square feet, foot**
SF_6	**sulfur hexafluoride**
SIP	**State Implementation Plan**
SLRMWD	**San Luis Rey Municipal Water District**
SMARA	**Surface Mining and Reclamation Act of 1975**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

SO_2	**sulfur dioxide**
SOI	**sphere of influence**
SO_x	**oxides of sulfur**
SP	**Specific Plan**
SPA	**Specific Plan Amendment**
SR	**State Route**
SSA	**Special Study Area**
STIP	**State Transportation Improvement Plan**
Storm Water Manual	**Storm Water Standards Manual**
SUSMP	**Standard Urban Storm Water Mitigation Plan**
SWAMP	**Surface Water Ambient Monitoring Program**
SWEEPS	**3.1.3-3**
SWMP	**Storm Water Management Plan**
SWP	**State Water Project**
SWPPP	**Storm Water Pollution Prevention Plan**
SWRCB	**State Water Resources Control Board**
SWSAS	**Storm Water Sampling and Analysis Strategy**
T-BACT	**Toxics Best Available Control Technology**
TACs	**toxic air contaminants**
TCP	**Traffic Control Plan**
TDS	**total dissolved solids**
TIA	**Traffic Impact Analysis**
TIF	**Transportation Impact Fee**
TMDL	**total maximum daily load**
TNM	**Traffic Noise Model**
TOC	**time of concentration**
TSS	**total suspended solids**
TV	**typical view**
UBC	**Uniform Building Code**
Un	**under capacity**
UNEP	**United Nations Environment Program**
UNFCCC	**United Nations Framework Convention of Climate Change**
URMP	**urban runoff management plan**
U.S.	**United States**
USC	**United States Code**
USEPA	**United States Environmental Protection Agency**
USFWS	**United States Fish and Wildlife Service**
UST	**underground storage tank**
USGS	**U.S. Geological Survey**
UWI	**Urban-Wildland Interface**
UWMP	**Urban Water Management Plan**
V/C	**volume-to-capacity ratio**
VCMWD	**Valley Center Municipal Water District**
VMT	**vehicle miles traveled**
VOCs	**volatile organic compounds**

LIST OF ACRONYMS AND ABBREVIATIONS (cont.)

WARM	**warm freshwater habitat**
WB	**westbound**
Weston	**Weston Solutions, Inc.**
WILD	**wildlife habitat**
WWTP	**wastewater treatment plant**
WSA	**Water Supply Assessment**
WSDMP	**Water Surplus and Drought Management Plan**
µg/m^3	**micrograms per cubic meter**

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Summary

SUMMARY

S.1 Project Synopsis

S.1.1 Relevant Prior Documents

This document is an Environmental Impact Report (EIR) for the Campus Park West Project (hereafter referred to as "Proposed Project" or "Project"). This EIR is prepared in compliance with the California Environmental Quality Act (CEQA), and ensures that information required by the public as well as County of San Diego (County) decision makers is both adequate and available. Prepared prior to County Board of Supervisors consideration of the Proposed Project for approval or denial, the purpose of this EIR is to identify the potential occurrence of impacts, and the anticipated significance of those impacts, that could occur if the proposed Campus Park West Project is implemented.

This EIR is a "subsequent" EIR, as defined in CEQA Guidelines Section 15162. A subsequent EIR is prepared when a prior EIR has been certified as complete and adequate under CEQA by the CEQA lead agency; here the County of San Diego. (Details as to regulatory guidelines relating to determination of subsequent EIR applicability are provided in Chapter 1.0 of this EIR.)

In this instance, two previous certified EIRs from 1981 and 1983 evaluated the Project site. The 1981 Sycamore Springs Specific Plan EIR (EAD Log No. 79-2-197) addressed a 442-acre site adjacent to and east of Interstate 15 (I-15) and both north and south of State Route (SR-76) in the Fallbrook Community Planning area. The project proposed a total of 1,160 mobile homes as well as an 18-hole golf course and 7.5 acres of commercial and professional uses. The 1983 Campus Park Specific Plan EIR (EAD Log No. 82-2-95) addressed the same geographic location, but changed proposed uses to the Specific Plan site to accommodate a Hewlett-Packard research and development facility (including manufacturing uses). That plan included uses considered more intensive than the Proposed Project.

The proposed Campus Park West Project addresses a 116.5- to 118.6-acre site. Detail as to the Proposed Project is presented in Section 1.2.2 of this EIR. The Project proposes a tentative map PDS2005-3100-5424 (TM) to subdivide the property into 23 lots, a Specific Plan Amendment PDS2005-3813-05-001 (SPA to amend the 1983-approved Specific Plan to the currently proposed mix of uses, a rezone PDS2005-3600-05-005 (REZ) from S90 to S88, and a General Plan Amendment PDS2005-3800-05-003 (GPA) to revise or reconfigure land use designations as well as amend the County General Plan Mobility Element. Project components include 283 multi-family residential homes, general commercial with a mixed-use core, limited impact industrial/business professional uses, on- and off-site infrastructure adequate to support all of these uses, and open space. The uses would be divided into six Planning Areas (PAs).

In addition to the changes in Project design, substantial portions of the earlier Specific Plan area have been severed to accommodate development proposals by others (the Palomar College District to the north and Campus Park project to the east and northeast).

In the time since the 1981 and 1983 EIRs were certified, there has been virtually no change at all to the physical state of the property parcels. There have, however, been changes in: (1) required analyses due to changes in regulations; and/or (2) changes to surrounding conditions that would potentially affect the previously identified impacts.

For these reasons, the Proposed Project cannot simply rely on the earlier certified EIRs for accurate and complete disclosure with regard to potential impact type, impact magnitude (i.e., significance) and appropriate mitigation. Although the document incorporates and relies upon the certified 1981/1983 EIRs to the extent appropriate/reasonable/feasible, new information is provided where warranted. Introductions to each topical discussion within Chapters 2.0 and 3.0 of this EIR provide information regarding how the earlier certified EIRs apply to the current subsequent document and environmental analyses within it.

S.1.2 Location

The Project site is located in the unincorporated portion of San Diego County in the community of Fallbrook, approximately 7 miles southeast of the Fallbrook town center and 46 miles north of downtown San Diego. The Project site is within the northeast and southeast corners of the I-15/SR-76 interchange. SR-76 separates the northern parcel from the three southern parcels. The western edge of the northern area of the property is bordered by I-15.

S.1.3 Description

The current Project is a proposed amendment to the Hewlett-Packard Campus Park Specific Plan; and is the result of changes in land ownership and regional planning goals, generally consistent with the 2011 County General Plan. The current project proposes two design scenarios. One (**Scenario 1**) is sited within the original project boundaries and covers approximately 116.5 acres. The other (**Scenario 2**) would incorporate approximately 2.1 additional acres into the project that are currently held as SR-76 right-of-way by the California Department of Transportation (Caltrans). Because SR-76 is now built to its final anticipated configuration and the excess right-of-way is not anticipated to be required for state route operations, this area would be decertified and could be sold to the Project Applicant. Should this occur, the Project would encompass a total of 118.6 acres.

Under **Scenario 1**, the Proposed Project would comprise a community including multi-family residential, general commercial with a mixed use component, limited impact industrial, and open space. As described above, the uses would be divided into six PAs. Limited impact industrial uses would be located within PA 1 on 12.6 acres of land in the northern portion of the Project site, north of Pala Mesa Drive. PA 2 would consist of general commercial uses with a mixed-use core, and would be sited on approximately 46.1 acres in the southwestern portion of the site north of SR-76 and west of Pankey Road. PA 3 would be dedicated to multi-family residential development and includes a total of 248 units on 12.4 acres of land, in the southeastern portion of the site north of SR-76 and east of Pankey Road. PAs 4 and 5, south of SR-76, also would be dedicated to general commercial uses. Combined with PA 2, these areas would total 52.4 acres, and contain approximately 503,500 s.f. of commercial space. The mixed-use core integrated into PA 2 would contain commercial and office space, as well as up to 35 multi-family residences.

Three homeowner association-maintained lots (approximately 1.4 acres) would contain manufactured slopes, landscaped areas, and drainage facilities. Four biological open space lots would total approximately 31 acres. In addition to the on-site uses, the Proposed Project would require the construction of on- and off-site infrastructure improvements associated with roads, water, and sewer.

Scenario 2 assumes that based on recent improvements to SR-76 in conjunction with projected traffic volumes, Caltrans would release current right-of-way that is no longer planned for potential SR-76 widening. The amount of right-of-way subject to decertification totals 2.1 acres, with approximately 0.85 acre located north of SR-76 and 1.2 acres located south of SR-76. Under that scenario, the Project could purchase that decertified right-of-way and the Project would incorporate that additional acreage into commercial and open space uses. Decertified Caltrans right-of-way north of SR-76 would remain undeveloped except for a Project monument sign (and associated grading) to identify the entrance to Campus Park West. Decertified right-of-way south of SR-76 would be incorporated into PA 5 and developed with an additional 10,000 s.f. of General Commercial uses. The number of lots would remain the same, regardless of scenario.

The environmental impacts for the design scenarios are analyzed within Chapters 2.0 and 3.0 of this EIR.

Discretionary actions and permits anticipated for the Project are detailed on the Discretionary Approval/Permit matrix in Chapter 1.0. Approving agencies include the County, as well as the: U.S. Army Corps of Engineers (ACOE), U.S. Fish and Wildlife Service, California Department of Fish and Wildlife (CDFW), California Department of Transportation (Caltrans), San Diego Regional Water Quality Control Board, and Local Agency Formation Commission. Local detachments/attachments to service districts would occur with regard to the San Luis Rey Municipal Water District, Rainbow Municipal Water District, San Diego County Water Authority and Metropolitan Water District of Southern California. School district authorizations would be required from the Fallbrook Union High School District and Bonsall Union Elementary School District.

S.1.4 Setting

The Proposed Project is located in a valley bisected by the I-15 corridor. Located to the north of the Project site are Monserate Mountain and its foothills, a portion of which make up a resource conservation area owned and managed by the Fallbrook Land Conservancy. The Campus Park Specific Plan Area is located easterly of the Project site. Citrus and avocado groves and passive agriculture are the main land uses east of the Project site (between the property and Monserate Mountain), and scattered large-lot single-family residences also are present. Numerous single-family homes and some nursery facilities are located among the hills north of the Project site. Lancaster Mountain and an open space corridor exist southeast of the Project site, associated with the San Luis Rey River.

The Project site primarily is comprised of disturbed, agricultural, and non-native vegetation, while riparian woodland and a variety of native vegetation are present near property borders.

One of three parcels south of SR-76 is currently in citrus production, while the other two southerly parcels are undeveloped and contain low lying grasses and some scattered small trees. North of SR-76, the Project site is undeveloped and historically has been used for dry farming or has lain fallow. Currently, the Project site supports a non-permitted recreation center for radio-controlled model aircraft, which includes an airstrip and miscellaneous features such as shade structures, fences, and storage located in the northern area of the property.

S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

Project design elements that factor into Project impact analyses are detailed in Table 1-3, Additional Environmental Design Considerations, of this EIR. The analysis contained in this EIR shows that the Proposed Project would result in significant impacts related to aesthetics (direct and cumulative), air quality (direct and cumulative), transportation/traffic (direct and cumulative), cultural resources (direct), noise (direct), biological resources (direct), and paleontological resources (direct).

The nature of the impacts, the recommended mitigation measures, and the effectiveness of the mitigation in reducing the associated impacts, are identified in Table S-1, Summary of Significant Effects.

S.3 Areas of Controversy

A Notice of Preparation (NOP) was distributed on June 11, 2009 for a 30-day public review and comment period. A public scoping meeting was held on June 22, 2009 at Live Oak Elementary School in Fallbrook. Public comments were received on the NOP for this EIR and reflect concern or controversy over a number of environmental issues. (Refer to Appendix A for the NOP and NOP comment letters.) Environmental issues were raised in 10 letters commenting on the NOP, as listed below:

- California Department of Toxic Substances Control
- California Department of Fish and Game (now CDFW)
- California Department of Transportation (Caltrans)
- California Native American Heritage Commission
- San Diego Association of Governments
- San Diego Local Agency Formation Commission
- CalFire
- San Diego County Archaeological Society
- Fallbrook Community Planning Group Individuals
- Mr. Gerald Wilson, Bonsall Resident

Issues raised in the NOP comment letters include concerns regarding the following issue areas:

- Biological Resources (e.g., updated surveys for sensitive species, revegetation plan, and long-term management plan for on- and off-site mitigation)
- Traffic (e.g., preparation of a comprehensive Traffic Impact Study that identifies impacts and required mitigation, consideration of transit services, and consultation with North County Transit District and Caltrans)
- Water Availability (e.g., completion of a water study to determine if water would be available to the Project)
- Cultural Resources (e.g., probability of cultural resources to occur on site, inclusion of mitigation for impacts to unknown resources, consideration of avoidance of archaeological resources)
- Fire Service (e.g., provision/upgrading of fire suppression facilities/equipment, provision of adequate access to Project property, installation of sufficient fire hydrants and sprinklers, proper clearance of vegetation from structures)
- School Facilities (e.g., school district boundaries)
- Land Use (e.g., consistency with the General Plan, Fallbrook Community Plan, the North County Multiple Species Conservation Program Subarea Plan, and the Regional Transportation Plan; as well as smart growth policies)

Issues raised within these letters are evaluated in this EIR in Chapters 2.0 and 3.0.

S.4 Issues to be Resolved by the Decision-making Body

An EIR is an informational document intended to inform the public agency decision makers and the public of the significant effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The lead agency (in this case the County) must respond to each significant effect identified in this EIR by making "Findings" for each significant effect. The issues to be resolved include whether or how to mitigate the associated significant effects, including whether to implement a project alternative, the determination of which is to be made by the decision makers. Preparation of a Statement of Overriding Considerations (explaining the overriding value of the project despite adverse effects) is required for any remaining significant and unmitigated impacts (i.e., those associated with aesthetics, traffic, and air quality).

Issues to be resolved that are directly related to the Proposed Project include the choice among alternatives and whether or how to mitigate the significant effects. In particular, the County must decide if the significant and unmitigated effects identified for the issues of aesthetics, traffic, and air quality can be reduced further, and determine if the significant impacts associated with noise, biological resources, cultural resources, and paleontology have been fully mitigated to below a level of significance. In addition, the County must determine whether any of the Project alternatives would substantially reduce significant aesthetics, traffic, air quality, noise, and biological resources effects while still meeting key Project objectives.

S.5 Project Alternatives

Chapter 4.0 of this EIR considers two no project alternatives and three modified project alternatives. The No Project/No Development Alternative evaluates the environmental effects of maintaining the property in its current condition in the long-term. The No Project/Existing Specific Plan Alternative evaluates the potential use of the property based on allowed land uses under the existing Specific Plan. The General Plan Alternative would result in development of land uses as detailed in the 2011 General Plan. The Reduced Footprint Alternative would delete Project development north of Pala Mesa Drive. The Fewer Residential Units Alternative would eliminate all residential units from the commercial area in PA 2, and 25 units from the PA 3 residential uses.

Based on impact comparison between the Proposed Project and evaluated alternatives (summarized in Table S-2, Comparison of Environmental Effects of the Proposed Project with Project Alternatives), an environmentally superior alternative has been identified. The discussion below starts with the environmentally superior alternative and continues with summaries of remaining alternatives in order of increasing impact.

S.5.1 Reduced Footprint Alternative

S.5.1.1 *Description*

This alternative would delete development of the northernmost portion of the Project site north of Pala Mesa Drive in order to reduce the intensity of proposed development and increase the amount of biological open space. Specifically, 6.6 acres of limited impact industrial development would be eliminated from the Proposed Project, which proposes a total of 12.6 acres of this use. All other uses south of Pala Mesa Drive proposed under the Proposed Project would remain the same, including 283 multi-family residential units and general commercial acreage, as well as on- and off-site utility and road upgrades.

S.5.1.2 *Environmental Impact Comparison with Proposed Project*

As shown in Table S-2, the Reduced Footprint Alternative would be expected to result in generally similar impacts as described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as design features (e.g., development types and potentially more open space preservation in the northern portion of the site), as well as related modifications to factors including traffic generation, air quality emissions, and noise generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Reduced Footprint Alternative would meet the identified Project objectives, although to a slightly lower extent than the Proposed Project, relative to the ability to provide a mix of employment opportunities on site.

S.5.2 No Project/No Development Alternative

S.5.2.1 *Description*

The No Project/No Development Alternative consists of leaving the site in its current condition. The approximately 96 acres of native and non-native habitat throughout the site would remain intact, as would the existing paved/unpaved roadways, agricultural operations, and the unpermitted recreational use area for radio-controlled model aircraft and cars.

S.5.2.2 *Environmental Impact Comparison with Proposed Project*

As shown in Table S-2, the No Project/No Development Alternative would avoid a number of significant and potentially significant impacts associated with the Proposed Project, including: (1) significant and unmitigated aesthetic, air quality and transportation/traffic impacts; and (2) significant and/or potentially significant impacts related to biological resources, cultural resources, noise, and paleontology, all of which would be avoided or reduced below a level of significance through identified mitigation measures and/or design features. The No Project/ No Development Alternative would, however, be inconsistent with existing land use designations under the approved Specific Plan, as well as the General Plan. This No Project Alternative also would not meet any of the Project goals.

S.5.3 Fewer Residential Units Alternative

S.5.3.1 *Description*

This alternative would eliminate all residential use (35 units) from the mixed-use core within commercial area in PA 2, and 25 units from the PA 3 multi-family residential. These unit reductions would allow the Applicant to develop up to 223 multi-family residential units (as compared to the 283 units under the Proposed Project). All other uses associated with the Proposed Project would remain the same, including the acreage of limited impact industrial and general commercial uses. Although this alternative would be lower in development intensity than the Proposed Project, the same on- and off-site utility and road upgrades would be required.

S.5.3.2 *Environmental Impact Comparison with Proposed Project*

The Fewer Residential Units Alternative would be expected to result in impacts generally similar to those described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise, and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as reductions in units, as well as related modifications to factors including traffic generation, air quality emissions, noise generation, water demand and wastewater generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Fewer Residential Impacts Alternative would meet the identified Project objectives, although to a slightly lower extent than the

Proposed Project, relative to the ability to provide housing within a walkable distance of work and shops.

S.5.4 No Project/Existing Specific Plan Alternative

S.5.4.1 *Description*

This alternative addresses the land uses and densities currently permitted under the approved Specific Plan for the Project site. The uses proposed for the Campus Park West portion of the approved Specific Plan include a 10.5-acre neighborhood commercial center and open space area located south of SR-76, a 150-unit condominium development located in the northern portion of the Campus Park West Project site (north of Pala Mesa Drive), and a 336-unit mobile home park located in the southern portion of the Campus Park West Project site (between Pala Mesa Drive and SR-76, refer to Figure 3.1.5-2). Because the 10.5-acre area south of SR-76 was identified as "neighborhood commercial center and biological open space," those parcels potentially could contain either more or less development than proposed under the Proposed Project, although it is considered most likely that they would be in open space.

S.5.4.2 *Environmental Impact Comparison with Proposed Project*

As shown in Table S-2, the No Project/Existing Specific Plan Alternative would lessen some, but not all, of the significant and unmitigable impacts identified for the Proposed Project under the issues of air quality and transportation/traffic. Similarly, this alternative would lessen significant and mitigable noise impacts identified for the Proposed Project. The No Project/Existing Specific Plan Alternative would result in similar contributions to significant and unmitigable direct construction-period, as well as cumulative, aesthetic impacts as identified for the Proposed Project; based on visual conflicts with existing visual quality/character, and effects to panoramic views from scenic highways and recreational areas in concert with other projects proposed east of I-15. This alternative would also result in similar significant but mitigable impacts as described for the Proposed Project in the areas of biological resources, cultural resources, and paleontology, based on the generally comparable nature, location and extent of associated development. It would fail to meet the identified Project objectives regarding creating a balanced mix of land uses; provision of both housing and employment opportunities; and incorporating sustainable design concepts and balanced environmental, economic and social equity concerns.

S.5.5 General Plan Alternative

S.5.5.1 *Description*

This alternative would result in development of a mix of uses identified in the General Plan. Unlike the Proposed Project, which includes a mix of commercial, industrial and residential uses, the majority of the site under this alternative would be designated as general commercial. Specifically, general commercial development would encompass approximately 79.2 acres in the western portion of the northern Project site (i.e., north of SR-76), with 5.6 acres of limited impact industrial located in the northernmost portion of the project. Approximately 12.4 acres in

the eastern portion of the northern Project site would be designated as multi-family residential, with a density of 7.3 dwelling units per acre, allowing up to 90 multi-family dwelling units. Areas south of SR-76 are identified as Specific Plan, with potential uses in this area including neighborhood commercial and open space consistent with the Campus Park West portion of the adopted Specific Plan.

S.5.5.2 *Environmental Impact Comparison with Proposed Project*

As shown in Table S-2, the General Plan Alternative would be expected to result in impacts generally similar to those described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise, and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as design features (e.g., development types and potentially more or less open space preservation south of SR-76), as well as related modifications to factors including traffic generation, air quality emissions, noise generation, water demand and wastewater generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The General Plan Alternative would fail to meet the identified Project objectives to create a mix of land uses on these parcels to the same extent as the Proposed Project since the commercial uses would be expanded, and residential and limited impact industrial uses would be minimized.

S.5.6 Environmentally Superior Alternative

Although the No Project alternatives would result in minimal to substantially reduced environmental impacts, Section 15126.6(e)(2) of the State CEQA Guidelines requires identification of an alternative other than the No Project as the environmentally superior alternative.

Based on the above CEQA requirement, the Reduced Footprint Alternative is identified as the environmentally superior alternative. This is the result of elimination of 6.6 acres of limited impact industrial use north of Pala Mesa Drive in PA 1; which would result in reduction of approximately 1,400 fewer ADT (with associated incremental improvements in Project-related traffic effects and air quality), as well as fewer biological impacts to non-native grassland, coast live oak woodland, southern riparian forest and Diegan coastal sage scrub; with a resultant increase in retained biological open space.

Table S-1
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Aesthetics (Subchapter 2.1)			
AE-1 (Direct)	Visual effects during the Project construction period related to grading and ongoing development would be substantial until buildout occurs and all vegetation is installed.	There are no mitigation measures to reduce AE-1.	**Significant**
AE-2 (Cumulative)	The visual environment of the I-15 corridor viewshed in the Project area is being affected by the change in composition introduced by the cumulative projects; incompatible with the prior visual character of the area.	There are no mitigation measures to reduce AE-2.	**Significant**
AE-3 (Cumulative)	The cumulative conversion of the viewshed from a rural area with abundant open space to a developed area with less open space, and development encroaching into westerly facing slopes would adversely affect this panoramic vista.	There are no mitigation measures to reduce AE-3.	**Significant**
Air Quality (Subchapter 2.2)			
AQ-1 (Direct)	Near-term Project operational emissions of VOCs, CO, and PM_{10} for Planning Area 2 would exceed the significance thresholds.	**M-AQ-1:** Future tenants shall implement a Low VOC Consumer Products Educational Program through the provision of educational materials (such as a display case, kiosk, or brochures) regarding the use of Low-VOC paints and consumer products in a prominent area accessible to residents and employees.	**Significant**
AQ-2 (Direct)	Near-term Project emissions of VOCs, CO, and PM_{10} for the combined construction and operational phases would exceed the significance thresholds.	There are no mitigation measures to reduce AQ-2.	**Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Air Quality (Subchapter 2.2) (cont.)			
AQ-3 (Direct)	Long-term total Project operational emissions of VOCs, CO, and PM_{10} from traffic in 2025 would exceed the significance thresholds.	There are no mitigation measures to reduce AQ-3.	**Significant**
AQ-4 (Cumulative)	With the potential of construction activities occurring concurrently at the Proposed Project as well as neighboring Campus Park and Meadowood, cumulative construction projects in the area would result in a cumulatively considerable net increase in VOCs, NO_X, PM_{10}, and $PM_{2.5}$.	**M-AQ-4a:** All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT documentation, and CARB operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/specifications shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists: • A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement; • A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the Proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or • A contractor has ordered a control device for a piece of equipment planned for use on the Proposed Project, or the contractor has ordered a new piece of controlled equipment to	**Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Air Quality (Subchapter 2.2) (cont.)			
AQ-4 (Cumulative) (cont.)		replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the Proposed Project has the controlled equipment available for lease. **M-AQ-4b:** All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on site or to transport materials to and from the site shall comply with 2010 emission standards, where available. In addition, all on-road trucks shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified EPA rating, BACT documentation, and CARB or SDAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/specifications shall be met unless the contractor is able to provide proof that one of the four circumstances specified in M-AQ-4a, above, exists. **M-AQ-4c:** The following measures, at minimum, shall be part of the contractor dust control plan: • Contractors shall apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas;	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Air Quality (Subchapter 2.2) (cont.)			
AQ-4 (Cumulative) (cont.)		• Construction contractors shall provide temporary wind fencing around sites being graded or cleared; • Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code; • During wet conditions, construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off tires of vehicles and any equipment leaving the construction site; and • Trucks hauling materials such as debris or fill shall be fully covered while operating off the property site. **M-AQ-4d:** The following types of measures shall be required on construction equipment (including on-road trucks): • Use diesel oxidation catalysts and catalyzed diesel particulate traps. • Maintain equipment according to manufacturers' specifications. • Restrict idling of construction equipment to a maximum of five minutes when not in use. • Install high-pressure fuel injectors on construction equipment vehicles.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Air Quality (Subchapter 2.2) (cont.)			
AQ-5 (Cumulative)	The cumulatively considerable net increases of the non-attainment criteria pollutants VOCs and PM_{10} during the near-term when construction and operation emissions are assumed to combine would exceed the significance thresholds. Emissions of VOCs and PM_{10} would exceed the significance thresholds for Project operations at full build-out in 2025, and therefore be cumulatively considerable.	There are no mitigation measures to reduce AQ-5.	**Significant**
AQ-6 (Cumulative)	Near-term Project emissions of the non-attainment criteria pollutants VOCs, NO_X, PM_{10}, and $PM_{2.5}$ for the combined construction and operational phases added cumulatively to emissions from other projects would exceed significance thresholds.	There are no mitigation measures to reduce AQ-6.	**Significant**
AQ-7 (Cumulative)	Long-term Project operational emissions of the non-attainment criteria pollutants VOCs, NO_X, PM_{10}, and $PM_{2.5}$ from traffic in 2025 added cumulatively to emissions from other projects would exceed significance thresholds. The Project's contribution to VOC and PM_{10} emissions would be cumulatively considerable.	There are no mitigation measures to reduce AQ-7.	**Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
SIGNIFICANT AND UNAVOIDABLE IMPACTS			
Transportation/Traffic (Subchapter 2.3)			
TR-1 (Direct)	The Existing Plus Project conditions could have a potential significant, direct temporary impact on four segments of SR-76 from South Mission Road to Old Highway 395. Caltrans' SR-76 East Project (TransNet SR-76 Widening) is currently under construction and will improve these four segments to four lanes by 2017. If the Proposed Project were to be occupied prior to completion of these improvements, a short-term, unmitigated impact would occur until Caltrans completes the SR-76 East Project.	**M-TR-1:** Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening), which will improve these segments to four lanes by 2017 and mitigate the Project's direct impacts. In addition, the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over build out of the Project.	**Significant in the short term; Less than Significant following completion of Caltrans improvements and Project payment of fair share contribution**
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Transportation/Traffic (Subchapter 2.3)			
TR-2, 2a, 3, and 3a (Direct)	Under Existing Plus Project conditions, both **Scenarios 1** and **2** of the Proposed Project would have a significant direct impact to the SR-76/I-15 SB and NB ramps signalized intersections in the p.m. peak hour.	**M-TR-2, 2a, 3, and 3a:** Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening) and has completed improvements to the SB and NB ramp intersections identified in these impacts. In addition, the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over build out of the Project.	**Less than Significant**
TR-4 (Direct)	Under Existing Plus Project conditions, the Proposed Project would have a significant, direct impact to the Reche Road/Old Highway 395 unsignalized intersection (a.m. and p.m.).	**M-TR-4:** A traffic signal warrant analysis will be performed prior to construction of the first unit to determine the need for a traffic signal. The Project Applicant shall install a traffic signal at Reche Road/Old Highway 395 based on the warrant analysis and final engineering to the satisfaction of the Director of PDS.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Transportation/Traffic (Subchapter 2.3) (cont.)			
TR-5 (Direct)	Under Existing Plus Project conditions, the Proposed Project would have a significant, direct impact to the SR-76/Pankey Road unsignalized intersection (a.m. and p.m.).	**M-TR-5:** Development of the Project would require signalization, widening and improvement of the SR-76/Pankey Road intersection, as follows: • NB approach: provide two left lanes, one through lane and one right lane • SB approach: provide one left lane, one through lane and two right lanes (with overlap phase) • EB approach: provide two left lanes, two through lanes and one right lane • WB approach: provide one left lane, one through lane and one right lane	**Less than Significant**
TR-6 (Cumulative)	The Proposed Project would contribute to a significant cumulative impact to eight analyzed roadway segments, including: • Five segments of Old Highway 395 from East Mission Road to SR-76 • Old Highway 395 from Dulin Road to West Lilac Road • Reche Road from Live Oak Park Road to Gird Road • Pala Mesa Drive from Wilt/Sage Road to Old Highway 395	**M-TR-6:** Payment of the TIF is the Proposed Project's mitigation responsibility to this road segments impact.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Transportation/Traffic (Subchapter 2.3) (cont.)			
TR-7 (Cumulative)	The Proposed Project would contribute to a significant cumulative impact to 11 roadway segments of SR-76, including: • Nine segments from Melrose Drive to I-15 SB ramps • Rice Canyon Road to Couser Canyon Road • Couser Canyon Road to Pala Mission Road	**M-TR-7:** Payment of the TIF is the Proposed Project's mitigation responsibility to this SR-76 segments impact.	**Less than Significant**
TR-7a (Cumulative)	The Proposed Project (**Scenario 2**) would contribute to a significant, cumulative impact to the segment of SR-76, from Old Highway 395 to I-15 SB ramps.	**M-TR-7a:** Payment of the TIF is the Proposed Project's mitigation responsibility to this SR-76 segment impact.	**Less than Significant**
TR-8a and 8b (Cumulative)	**Scenarios 1** and **2** of the Proposed Project would contribute to a significant cumulative impact at the following 11 signalized intersections: • East Mission Road/Old Highway 395 • Mission Road/I-15 SB ramps • Mission Road/I-15 NB ramps • SR-76/East Vista Way • SR-76/North River Road • SR-76/Olive Hill Road • SR-76/South Mission Road • SR-76/Gird Road	**M-TR-8a and 8b:** Payment of the TIF is the Proposed Project's mitigation responsibility to this signalized intersections impact.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Transportation/Traffic (Subchapter 2.3) (cont.)			
TR-8a and 8b (Cumulative) (cont.)	• SR-76/Old Highway 395 • SR-76/I-15 SB ramps • SR-76/I-15 NB ramps		
TR-9 (Cumulative)	The Proposed Project would contribute to a significant cumulative impact to the following eight unsignalized intersections: • Reche Road/Old Highway 395 • Stewart Canyon Road/Old Highway 395 • Pala Mesa Drive/Old Highway 395 • SR-76/Via Monserate • SR-76/Sage Road • SR-76/Pankey Road • SR-76/Rice Canyon Road • SR-76/Couser Canyon Road • Dulin Road/Old Highway 395	**M-TR-9:** Payment of the TIF is the Proposed Project's mitigation responsibility to this unsignalized intersections impact.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4)			
CR-1, 2, and 3 (Direct)	There is Project potential for impacts to previously unrecorded, potentially significant archaeological resources (including human remains) both on and off site, during construction.	**M-CR-1, 2, and 3:** Prior to approval of grading or improvement plans, the Applicant shall implement a grading monitoring and data recovery program to mitigate potential impacts to undiscovered, buried archaeological resources to the satisfaction of the Director of PDS and to a level below significant. This grading monitoring program shall include, but not be limited to, the following actions: 1. Provide evidence to the PDS that a County-approved archaeologist (consulting archaeologist) has been contracted to implement a grading monitoring and data recovery program to the satisfaction of the Director of PDS. A letter from the consulting archaeologist shall be submitted to the Director of PDS. The letter shall include the following guidelines: a. The consulting archaeologist shall contract with a Luiseño Native American monitor to be involved with the grading monitoring program as outlined in the 2007 County Report Format and Content Guidelines. b. The consulting archaeologist/historian and Luiseño Native American monitor shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program as outlined in the 2007 County Report Format and Content Guidelines. c. The consulting archaeologist and Luiseño Native American Monitor shall monitor all areas identified for development, including off-site improvements.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		d. An adequate number of monitors (archaeological/historical/Native American) shall be present to ensure that all earthmoving activities are observed and shall be on site during all grading activities for areas to be monitored (on and off site). e. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Luiseño Native American monitor(s) shall be on site full time to perform full-time monitoring. Inspections will vary based on the rate of excavation, materials excavated, and presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Principal Investigator in consultation with the Native American monitor. The Principal Investigator, in consultation with the Luiseño Native American monitor, will determine whether to monitor the cutting of previously disturbed deposits. f. Isolates and clearly non-significant deposits shall be minimally documented in the field, and the monitored grading can proceed. Should the cultural materials or isolates and non-significant deposits not be collected by the Project Archaeologist, then the Luiseño Native American monitor may collect the cultural material for transfer to a Tribal curation facility or repatriation program.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		g. In the event that previously unidentified potentially significant cultural resources are discovered, the archaeological monitor(s) or, Luiseño Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Principal Investigator shall contact the County Archaeologist at the time of discovery. The Principal Investigator, in consultation with the County staff archaeologist and Luiseño Native American monitor, shall determine the significance of the discovered resource(s). The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. A Research Design and Data Recovery Program to mitigate impacts to significant cultural resources shall be prepared by the consulting archaeologist in coordination with the Luiseño Tribes. The County Archaeologist shall review and approve the Program, which shall be carried out using professional archaeological methods. Coordination with the Luiseño Tribes shall consist of providing a copy of the Data Recovery Program for review and comment. The Tribes shall have 14 days to provide comment.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		The Research Design and Data Recovery Program shall include: (1) reasonable efforts to preserve (avoid) unique cultural resources as defined in CEQA Section 21083.2(g), or sacred sites; (2) the capping of identified sacred sites or unique cultural resources and placement of development over the cap, if avoidance is infeasible; and (3) data recovery for non-unique cultural resources as defined in CEQA Section 21083.2(h). The preferred option is preservation (avoidance). h. If any human remains are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the MLD, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5(b and c) and Public Resources Code Section 5097.98 shall be met. As part of the consultation, the MLD shall be given the opportunity to review the artifacts identified in proximity to the burial site. i. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Principal Investigator shall determine the amount of material to be recovered for an adequate artifact sample for analysis. The Project Archaeologist shall consult with the Luiseño Native American monitor regarding artifact sensitivity and type.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		j. In the event that previously unidentified cultural resources are discovered: (1) All prehistoric cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Documentation of this curation shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid. Or Alternatively, the prehistoric archaeological materials may be repatriated to the appropriate Luiseño Native American Tribe. Evidence of repatriation shall be in the form of a letter from the tribe confirming that the archaeological materials have been received. (2) Historical cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		collections and associated records, including title, shall be transferred to an appropriate curation facility within San Diego County, and shall be accompanied by payment of the fees necessary for permanent curation. Documentation of curation shall be in the form of a letter from the curation facility confirming that the archaeological materials have been received and that all fees have been paid. k. Monthly status reports shall be submitted to the Director of PDS and the Luiseño Native American Tribes starting on the date of the notice to proceed through termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation phase, a final report shall be submitted to the Director of PDS and the Luiseño Native American Tribes describing the plan compliance procedures and site conditions before and after construction. l. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the Director of PDS, prior to the issuance of any building permits. The report shall include Department of Parks and Recreation Primary and Archaeological Site forms. A copy of the report shall be submitted to the Luiseño Native American Tribes.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Cultural Resources (Subchapter 2.4) (cont.)			
CR-1, 2, and 3 (Direct) (cont.)		m. In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of PDS and the Luiseño Native American Tribes by the consulting archaeologist confirming that the grading monitoring activities have been completed. 2. If the Proposed Project would construct any facilities within 100 feet of archaeological site CA-SDI-682, including loci A and B, the Project Applicant shall prepare and implement a temporary fencing plan to protect the site. The fencing plan shall be prepared in consultation with a qualified archaeologist and in coordination with the Luiseño Native American monitor to the satisfaction of the Director of PDS. The fenced area shall include a buffer sufficient to protect the archaeological site; in no event shall the buffer be less than 20 feet in width. The fence shall be installed under the supervision of the qualified archaeologist and the Luiseño Native American monitor, prior to commencement of grading or brushing and be removed only after grading operations in the vicinity of CA-SDI-682 have been completed. A Luiseño Native American monitor shall be invited to be present during the removal of the temporary fencing.	
CR-4 (Direct)	Potential impacts to unknown cultural resources in areas subject to the RPO could be potentially significant.	**M-CR-4**: If the Proposed Project uncovers resources in areas that are not RPO exempt, and scientific excavation is not authorized, grading will be halted or diverted in accordance with M-CR-1, 2, and 3.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Noise (Subchapter 2.5)			
N-1 (Direct)	At buildout, Project-proposed elevated outdoor use areas (e.g., balconies) associated with multi-family residential uses in PAs 2 and 3 could experience future traffic noise levels greater than 65 dBA CNEL.	**M-N-1:** Buildout traffic noise levels at the elevated outdoor use areas within proposed PA 2 mixed-core residential uses and PA 3 multi-family residential areas shall be mitigated to County standards of 65 dBA CNEL through the following measure: • All elevated outdoor residential use areas in PAs 2 and 3, including decks and balconies, will require noise shielding by a 5.5-foot high noise control barrier. Required sound attenuation barriers shall be solid and constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, with no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be either a single layer of tongue and groove (which must be at least one-inch total thickness or have a density of at least 3½ pounds per s.f.) or a double layer of overlapped fencing (shiplap) so that no seam between boards or sheets matches with a seam on the other layer. Where architectural or aesthetic factors allow, glass or clear plastic 3/8 of an inch thick or thicker may be used on the upper portion, if it is desirable to preserve a view. Sheet metal of 18-gauge (minimum) may be used, if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Any door(s) or gate(s) must be designed with overlapping closures on the bottom and sides and	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Noise (Subchapter 2.5) (cont.)			
N-1 (Direct) (cont.)		meet the minimum specifications of the wall materials described above. The gate(s) may be of one-inch thick or better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with prefabricated door jambs. • The conservative analysis indicates that a barrier is required when no consideration is given to potential shielding provided by the Project buildings or additional attenuation due to distance. Final building design, however, may provide substantial shielding, thus reducing the final required barrier heights necessary to provide compliance with the 65 CNEL exterior requirements. The Applicant may provide an updated acoustical analysis by a County-approved noise consultant demonstrating compliance for all required exterior outdoor use areas with the County 65 dBA CNEL requirement, completed to the satisfaction of the Director of the PDS with a lower height balcony noise control barrier.	
N-2 (Direct)	At buildout, potential Project-proposed ground-level outdoor use areas associated with multi-family residential uses in PA 3 adjacent to Pankey Road would experience noise levels greater than 65 dBA CNEL from Pankey Road traffic noise sources.	**M-N-2:** Buildout traffic noise levels at the ground level outdoor uses areas within proposed PA 3 multi-family residential uses shall be mitigated to County standards of 65 dBA CNEL through the following measure: • A 5.5-foot high sound attenuation barrier shall be sited along the eastern side of Pankey Road (excluding driveway entrances) for the length of the multi-family housing area with returns to the north and south. The wall shall follow the curved portion of the driveway entrance terminating at a location where it would run parallel to the entrance. The final barrier shall conform to the standards indentified in M-N-1, above.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Noise (Subchapter 2.5) (cont.)			
N-3 (Direct)	At on-site multi-family residences in PAs 2 and 3 where the exterior noise would be significant, interior noise levels would have the potential to exceed 45 dBA CNEL.	**M-N-3:** An exterior to interior noise control plan provided by a County-approved noise consultant for the second story or higher living areas of all multi-family homes in PAs 2 and 3 on the Project site shall be prepared prior to obtaining building permits for the Project. Consistent with the County Noise Ordinance, the report shall confirm that interior noise levels will not exceed 45 dBA CNEL. The report shall finalize the noise requirements based on actual building design specifications, and shall be completed to the satisfaction of the Director of PDS. Noise reduction measures could include the following: • A "windows closed" condition shall be provided that requires a means of mechanical ventilation for the second floors of all multi-family residences. • The second floors of all multi-family residences shall be provided with weather-stripped solid-core exterior doors. • Exterior wall/roof assemblies shall be free of cutouts and openings. • Upgraded windows shall be provided for the second or higher floors of multi-family residences.	**Less than Significant**
N-4 (Direct)	Noise levels associated with commercial uses and residential HVAC units may result in exterior noise levels exceeding the associated property lines as stated in the Noise Ordinance, including abutting property lines adjacent to multi-family residential uses in PAs 2 and 3.	**M-N-4:** Potential impacts to proposed multi-family residences from commercial uses and residential HVAC units shall be mitigated as follows: • A final noise study for the second story or higher living areas of all mixed use residential areas and businesses proposed in or adjacent to the mixed use areas shall be prepared during site plan and building permit approval for the mixed use portion of the Project. The report shall finalize the noise requirements based on actual building design specifications to ensure	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Noise (Subchapter 2.5) (cont.)			
N-4 (Direct) (cont.)		compliance with the County Ordinance limitations of 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. (arithmetic average of multi-family and commercial noise limits) or 65 CNEL at multi-family residential locations. Exterior and interior noise reduction requirements necessary to comply with the County Noise Ordinance for residential uses shall be presented in the final noise report. Noise control methods may include screening noise sources, relocating noise sources at a greater distance from residences and/or a combination of these measures. Implementation of noise control features would ensure compliance with County standards.	
N-5 (Direct)	Sheriff's station siren testing in PA 1 would have the potential to exceed the Noise Ordinance property line noise limits for residential uses in PAs 2 and 3 and cause direct impacts from noise levels exceeding the one-hour average L_{EQ} sound level limits.	**M-N-5:** Siren test noise at the on-site Sheriff's station shall not exceed the following Noise Ordinance standards: 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits], or 65 CNEL at the property line. These maximum noise levels shall be attained through site plan design. Two options are available: selecting the location of the sheriff's station such that it is not in close proximity to the residences, and using an assumed on-site building as an intervening noise control structure; or constructing the parking area further away from the residences, and designating a specific siren test location. If the latter option is chosen for implementation, the location could be selected so that the sirens would face away from the residential structures, and a wall could be erected on both sides of the test area to further attenuate noise. A final noise study for the Sheriff's station shall be prepared during site plan approval. The report shall finalize the noise	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Noise (Subchapter 2.5) (cont.)			
N-5 (Direct) (cont.)		control requirements based on actual building design specifications, including identification of additional noise reducing measures as necessary to ensure compliance with County noise standards (i.e., 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits] or 65 CNEL at the property line between the sheriff's station and proposed multi-family residential uses).	
N-6 (Cumulative)	Cumulative noise levels associated with commercial uses and adjacent residential HVAC units may result in cumulative impacts related to exterior noise levels exceeding 65 dB CNEL at nearby multi-family residential and/or commercial uses in PAs 2 and 3.	**M-N-6:** Cumulative commercial and residential noise impacts in PAs 2 and 3 will be mitigated through the implementation of M-N-4.	**Less than Significant**
Biological Resources (Subchapter 2.6)			
BI-1 (Direct)	The Project would result in direct impact to the location of three observed least Bell's vireos, a federally and state listed endangered species. There is also potential for indirect impacts to the species.	**M-BI-1:** The significant impacts to three least Bell's vireos will be mitigated through the creation, enhancement, and preservation of habitat occupied by the least Bell's vireo (refer to M-BI-4a and M-BI-4b for additional details).	**Less than Significant**
BI-2 (Direct)	The Project would result in direct loss of up to 43.75 acres of raptor foraging habitat (non-native grassland and pasture).	**M-BI-2:** The loss of up to 43.75 acres of raptor foraging habitat (non-native grassland and pasture) will be mitigated through implementation of measures M-BI-4e and M-BI-4f, below.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Biological Resources (Subchapter 2.6) (cont.)			
BI-3a (Direct)	Potential indirect/edge effects could occur to habitat and associated sensitive species during Project construction and over the long term.	**M-BI-3a** Indirect impacts to habitat and associated sensitive species shall be largely addressed through Project design features identified in Subchapter 2.6 and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of construction outside the breeding season. A Resource Avoidance Area (RAA) shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be utilized. Surveys shall be done to determine if any nests are located within 300 feet of brushing, clearing and/or grading activities. If nests are located within this distance, no brushing, clearing or grading shall be done in this area until the nests are no longer active or until temporary barriers adequate to ensure that noise does not exceed 60 dBA at the nests have been installed.	**Less than Significant**
BI-3b (Direct)	Potential indirect/edge effects could adversely impact nesting success during Project construction and over the long term.	**M-BI-3b** Indirect impacts to nesting success shall be largely addressed through Project design features identified in Subchapter 2.6 and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Biological Resources (Subchapter 2.6) (cont.)			
BI-3b (Direct) (cont.)		construction outside the breeding season. A RAA shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be completed as required in M-BI-3a.	
BI-4a (Direct)	The Project would result in direct impact to up to 8.66 acres of southern riparian forest, including 7.56 acres on site and 1.1 acres off site.	**M-BI-4a:** Significant **Scenario 2** direct impacts to 7.56 acres on site and 1.10 acres off site of southern riparian forest shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 25.98 acres. **Scenario 1** impacts to southern riparian forest would total 7.55 acres on site and 1.10 acres off site, for a total of 8.65 acres. These impacts shall be mitigated by the on-site preservation of a minimum of 10.93 acres (**Scenario 1**) and 10.95 acres (**Scenario 2**) of southern riparian forest. In addition, a minimum acreage of 8.66 creation and 6.37 enhancement (**Scenario 2**) or 8.65 creation and 6.35 enhancement (**Scenario 1**) of southern riparian forest shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Biological Resources (Subchapter 2.6) (cont.)			
BI-4b (Direct)	The Project would result in direct impact to 3.31 acres of on-site southern riparian scrub.	**M-BI-4b**: Significant direct impacts to 3.31 acres of southern riparian scrub shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 9.93 acres. Up to 1.21 acres of southern riparian scrub shall be preserved/enhanced on site. The remaining required acreage shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.	**Less than Significant**
BI-4c (Direct)	The Project would result in direct impact to 0.20 acre of on-site coast live oak woodland.	**M-BI-4c**: Significant direct impacts to 0.20 acre of coast live oak woodland shall be mitigated at a 3:1 ratio, for a total of 0.6 acre preserved off site.	**Less than Significant**
BI-4d (Direct)	The Project would result in direct impact to 2.27 acres of Diegan coastal sage scrub, including 2.03 acres on site and 0.24 acre off site.	**M-BI-4d**: Significant direct impacts to 2.27 acres of Diegan coastal sage scrub on and off site shall be mitigated at a 2:1 ratio, for a total of 4.54 acres. A total of 1.29 acres shall be preserved/restored on site and 3.25 acres shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.	**Less than Significant**
BI-4e (Direct)	The Project would result in direct impact to 43.17 acres of non-native grassland, including 38.7 acres on site and 4.47 acres off site.	**M-BI-4e**: Under **Scenario 2**, significant direct impacts to 43.17 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 21.59 acres. A total of 7.98 acres shall be preserved/restored on site and 13.61 acres shall be preserved off site. Under **Scenario 1**, significant direct impacts to 41.9 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 20.95 acres. A total of 7.98 acres shall be preserved/restored on site and 12.97 acres shall be preserved off site.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Biological Resources (Subchapter 2.6) (cont.)			
BI-4e (Direct) (cont.)		Additionally, 0.29 acre of pasture or non-native grassland that will function as raptor foraging habitat shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.	
BI-4f (Direct)	The Project would result in direct impact to 0.58 acre of off-site pasture.	**M-BI-4f:** Significant direct impacts to 0.58 acre of off-site pasture shall be mitigated at a 0.5:1 ratio, for a total of 0.29 acre preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.	**Less than Significant**
BI-5 (Direct)	The Project would result in direct impact to 3.26 acres of ACOE wetland on site and 0.59 acre of ACOE wetland off site; and 10.97 acres of CDFW jurisdictional area on site and 0.67 acre of CDFW jurisdictional area off site.	**M-BI-5:** Significant direct impacts to southern riparian forest and southern riparian scrub shall require permits from the ACOE and CDFW as jurisdictional wetlands/waters and mitigation at a ratio of 3:1, with a minimum 1:1 creation component to ensure no net loss of wetlands. The Project shall include on-site preservation/enhancement of 12.16 acres of riparian habitat as described in the Conceptual On-site Wetland Enhancement Plan (Appendix K of EIR Appendix G) and creation/enhancement of additional wetland habitat off site as described in the Conceptual Off-site Wetland Creation and Enhancement Plan (Appendix L of EIR Appendix G; also see M-BI-4). Additional off-site mitigation will be provided for any of the proposed on-site habitat enhancement that is not accepted by the County.	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Biological Resources (Subchapter 2.6) (cont.)			
BI-6 (Direct)	The Project would result in direct impacts associated with the adequacy of the wetland buffer to protect the functions and values of existing wetlands.	**M-BI-6:** Significant, temporary impacts to low-quality non-native grassland and disturbed habitat areas from grading within the wetland buffers shall be mitigated through revegetation of the slopes with native (yet low fuel) vegetation. The revegetation of these slopes will provide higher quality buffer habitat to the adjacent riparian habitat, and the buffer areas shall be included in the Resource Management Plan to ensure that the sensitive resources of the adjacent habitat are protected.	**Less than Significant**
Paleontological Resources (Subchapter 2.7)			
P-1 (Direct)	The Project could result in potential impacts to unknown paleontological resources within terrace deposits, during on-site grading and excavation activities.	**M-P-1:** A qualified paleontologist shall be at the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual having an M.S. or Ph.D. in paleontology or a related field (e.g., sedimentary or stratigraphic geology, evolutionary biology, etc.), and who has knowledge of San Diego County paleontology and documented experience in professional paleontological procedures and techniques. A qualified paleontologist or paleontological monitor (under the supervision of the qualified paleontologist) shall be on site on a full-time basis during the original cutting of previously undisturbed deposits of moderate paleontological resource sensitivity (i.e., Quaternary river terrace deposits) to inspect exposures for fossils. A paleontological monitor is defined as an individual with at least one year of experience in field identification and collection of fossil materials. The paleontological monitor shall work under the direct supervision of the qualified paleontologist. The Project Applicant shall: (1) submit a copy of a letter signed by the qualified paleontologist or paleontological monitor which states that the applicant has retained their services and acknowledges agreement to	**Less than Significant**

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Paleontological Resources (Subchapter 2.7) (cont.)			
P-1 (Direct) (cont.)		perform and/or be responsible for concurrence with the Project mitigation measures; and (2) authorize the qualified paleontologist to direct, divert, or halt any grading activity, and to perform all other acts required by the provisions listed below. If the qualified paleontologist or paleontological monitor ascertains that the river terrace deposits are not fossil bearing, the qualified paleontologist shall have the authority to terminate the monitoring program. If paleontological resources are unearthed, the qualified paleontologist or paleontological monitor shall: 1. Direct, divert, or halt any grading or excavation activity until the sensitivity of the resource can be determined and the appropriate recovery implemented. 2. Salvage unearthed fossil remains. 3. Record stratigraphic and geologic data to provide a context for the recovered fossil remains. 4. Prepare collected fossil remains for curation. 5. Curate, catalog, and identify all fossil remains to the lowest taxon possible, inventory specimens, assign catalog numbers, and enter the appropriate specimen and locality data into a collection database. 6. Transfer the cataloged fossil remains to an accredited institution (museum or university) in California that maintains paleontological collections for archival storage and/or display. The qualified paleontologist shall prepare a final Paleontological Resources Mitigation Report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.	

Table S-1 (cont.)
SUMMARY OF SIGNIFICANT EFFECTS

Impact No.	Impact	Mitigation	Significance of Impact After Mitigation
IMPACTS MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE			
Paleontological Resources (Subchapter 2.7) (cont.)			
P-2 (Direct)	The Project could result in potential impacts to unknown paleontological resources within terrace deposits, during off-site grading.	**M-P-2:** Potential impacts to unknown paleontological resources within terrace deposits during off-site grading will be mitigated through the implementation of M-P-1, above.	**Less than Significant**

Table S-2
COMPARISON OF ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT WITH PROJECT ALTERNATIVES (DIRECT/CUMULATIVE)

Environmental Issue	Proposed Project	No Project/ No Development	No Project/ Existing Specific Plan	General Plan	Reduced Footprint	Fewer Residential Units
Aesthetics	SU Direct and Cumulative	Less; NI	Similar; SU	Similar; SU	Similar; SU	Similar; SU
Air Quality	SU Direct and Cumulative	Less; NI	Less; SU	Similar; SU	Similar; SU	Similar; SU
Transportation/Traffic	SU Direct and SM Cumulative	Less; NI	Less: SU	Similar; SU	Similar; SU	Similar; SU
Biological Resources	SM	Less; NI	Greater; SM	Similar; SM	Similar; SM	Similar; SM
Cultural Resources	SM	Less; NI	Similar; SM	Similar; SM	Similar; SM	Similar; SM
Noise	SM	Less; NI	Less; SM	Similar; SM	Similar; SM	Similar; SM
Paleontological Resources	SM	Less; NI	Similar; SM	Similar; SM	Similar; SM	Similar; SM

NI: No Impact
SM: Significant but mitigable
SU: Significant and not mitigable

CHAPTER 1.0

PROJECT DESCRIPTION, LOCATION, AND ENVIRONMENTAL SETTING

CHAPTER 1.0 – PROJECT DESCRIPTION, LOCATION, AND ENVIRONMENTAL SETTING

1.1 Project Objectives

The purpose of the Campus Park West Project (hereafter referred to as "Proposed Project" or "Project") is to create a mixed-use community providing opportunities to live, work, shop and recreate in the same community. The overall objectives of the Project are to:

- Create a mix of land uses for the Campus Park West Specific Plan area that is compatible with and contributes to the existing character and planned balanced mix of land uses proposed for the SR-76 and I-15 quadrant communities, as well as community and resource agency open space planning goals and objectives.

- Provide housing, retail, and jobs so that residents have an opportunity to work and shop within a walkable/bikeable distance to their homes.

- Conserve significant environmental resources consistent with the goals of the Fallbrook Community Plan and the Multiple Species Conservation Program (MCSP).

- Develop a logical multi-modal Project transportation network encouraging safe and efficient travel throughout the Project and neighboring areas.

- Provide for adequate public services and facilities to accommodate the permitted Specific Plan land uses.

- Create a unique identity for the Project which is compatible with surrounding development and the character of the Fallbrook community.

- Incorporate sustainable design concepts into the development.

1.2 Project Description

1.2.1 Background

The Proposed Project is located on property (Figures 1-1, Regional Location Map, and 1-2, Aerial Photograph) that has been the focus of a number of planning efforts since 1974. That year the County Board of Supervisors adopted the Fallbrook Community Plan General Plan Amendment (GPA 74-02), designating this site as a specific planning area (SPA 2.75). Following adoption of the GPA, the Sycamore Springs Specific Plan (SP 81-01) was developed. That Specific Plan proposed a total of 1,152 mobile home units in a rental park and a planned residential development, along with an 18-hole golf course and commercial center on 442 acres. The associated Environmental Impact Report (EIR) (Log #79-2-197) was certified in 1981. Much of the Sycamore Springs property subsequently was acquired by Hewlett Packard, and the Hewlett Packard Campus Park Specific Plan (SP-83-01) was developed; proposing a research and development/manufacturing facility, with associated residential and commercial uses. The

uses proposed for the Campus Park West portion of the Hewlett Packard Specific Plan included a 10.5-acre commercial center, a 150-unit townhouse project, and a 336-unit mobile home park. The Hewlett Packard Campus Park Specific Plan was approved and the EIR (EAD Log #82-2-95) was certified in 1983. This plan was not implemented.

On June 1, 1988, the County of San Diego (County) Board of Supervisors approved the Interstate 15/Highway 76 Interchange Master Specific Planning Area (MSPA). The MSPA anticipated that this area would become a logical node of future development because of its location at the intersection of interstate (I-15) and state (SR-76) highways. This area encompasses approximately 1,178 acres of land located within the four quadrants of the interchange and includes multiple owners.

On July 23, 2004, the County Planning Commission granted a Resource Protection Ordinance (RPO) exemption for the parcels addressed under the Hewlett Packard Specific Plan (including Campus Park West development) because the proposed development met the conditions of Article V.2 of the RPO, which exempts all or any portion of a Specific Plan Area that has at least one Tentative Map or Tentative Parcel Map approved prior to August 10, 1988.

The initial project (Figure 1-3a, 2005 Land Use Plan) proposed by the current Applicant included 37 acres of residential use, comprised of 109 single-family residential units and 457 multi-family residential units. Office-professional uses were proposed on eight acres, and included another 87 multi-family residential units (for a total of 566 units). General commercial and freeway commercial uses were allotted 12 and 10 acres, respectively. Approximately 23 acres would have been in open space and parks. Based on the large number of residential units in an area planned for the I-15/SR-76 business node, and the presence of many residential uses immediately adjacent to I-15, County staff requested revision to the plan.

In 2008, a new project was evaluated (Figure 1-3b, 2008 Land Use Plan). This project deleted residential uses adjacent to I-15, deleted all single-family residential uses, and eliminated 136 multi-family residences. It also eliminated freeway commercial uses and expanded general commercial uses (to 28.81 acres). Approximately 20.6 acres of light industrial uses were added. In addition, a 6.1-acre mixed use area was identified to bridge the commercial and residential uses on site; this included 48 multi-family units in the area central to industrial, general commercial, and multi-family residential uses, respectively. Overall, residential uses totaled 369, a reduction of 197 units from the 2005 plan. Biological open space increased to approximately 23.4 acres, with another 11.8 acres of maintained open space. This design also realigned Pankey Road to the eastern perimeter of the site, with the goal being to decrease through traffic and to function as a buffer between developed uses and adjacent open space. The location of Pankey Road adjacent to sensitive riparian open space and general density of planned uses resulted in County staff requesting a revised plan.

In 2010, that revised plan was evaluated (Figure 1-3c, 2010 Land Use Plan). That plan included a total of 28 acres of general commercial uses, 20 acres of office/light industrial uses, a reduction in residential units to a total of 355 units (320 in multi-family residential and 35 in a mixed-use area), and incrementally increased open space overall to 36 acres. Pankey Road was realigned to provide a more direct route through the site, and pull the road away from the abutting open space

on the east side of the property. County staff and the Applicant have worked to refine that project to propose 77.7 (**Scenario 1**) to 79.6 (**Scenario 2**) developed acres, with the rest in open space, as described in Section 1.2.2, Project's Component Parts, below, and as evaluated in this Subsequent EIR.

The Project Specific Plan Amendment (SPA)/General Plan Amendment (GPA) Report (Project Design Consultants [PDC] 2014) addresses the current approximately 116.5 to 118.6-acre Campus Park West Specific Plan Area, and proposes multi-family residential uses, a central mixed-use core, general commercial, limited impact industrial/business professional uses, and open space (Figure 1-4, Land Use Plan). Project elements include a tentative map (TM 5424), a GPA (GPA 05-003), a SPA (SPA 05-001), and a rezone (REZ 05-005). The remaining areas of the original Hewlett Packard Campus Park Specific Plan Area are currently under separate ownership and have been addressed as separate projects (Campus Park [now known as Horse Creek Ridge] to the east and Palomar College to the north).[1]

1.2.2 Project's Component Parts

The current Project is a proposed amendment to the Hewlett Packard Campus Park Specific Plan; and is the result of changes in land ownership and regional planning goals, generally consistent with the 2011 County General Plan.

The Project site is located in the unincorporated portion of San Diego County in the community of Fallbrook, approximately 7 miles southeast of the Fallbrook town center and 46 miles north of downtown San Diego (Figure 1-1) in the northeastern and southeastern quadrants of the I-15/ SR-76 interchange. The site consists of non-contiguous parcels separated by Pankey Road, SR-76, and Shearer Crossing (Figure 1-2), with approximately 85 percent of the site located north of SR-76 and approximately 15 percent located south of SR-76. The Project contains parcels with the following Assessor Parcel Numbers (APNs): 108-121-14, 125-061-01, 125-063-01, 125-063-07, and 125-063-08.

The current Project proposes two design scenarios. One (**Scenario 1**) is sited within the original Project boundaries and covers approximately 116.5 acres. The other (**Scenario 2**) would incorporate approximately 2.1 additional acres into the Project that are currently held as SR-76 right-of-way by the California Department of Transportation (Caltrans). Because SR-76 is now built to its final anticipated configuration and the excess right-of-way is not anticipated to be required for state route operations, this area would be decertified and could be sold to the Project Applicant. Should this occur, the Project would encompass a total of 118.6 acres.

[1] The Palomar College project was previously approved and its EIR was certified by the College. The Campus Park EIR was approved by the County Board of Supervisors in May 2011. Subsequent to project approval, the Campus Park development was re-named Horse Creek Ridge. For purposes of consistency with County approvals and publically circulated documentation, the Campus Park name is retained in this document.

Under both **Scenarios 1 and 2**, the Project includes review and proposed approval of four discretionary actions. These include:

- A tentative map PDS2005-3100-5424 (TM) to subdivide the property into 23 lots;
- A Specific Plan Amendment PDS2005-3813-05-001 (SPA) to amend the 1983-approved Specific Plan to the currently proposed mix of uses;
- A rezone PDS2005-3600-05-005 (REZ) from S90 to S88;
- A General Plan Amendment PDS2005-3800-05-003 (GPA) to revise or reconfigure land use designations as well as amend the Mobility Element (ME).

Specifically, the GPA would: (1) change the Regional Category on two parcels south of SR-76 from Rural to Village; (2) change the land use designation of three parcels south of SR-76 from Specific Plan to General Commercial and Rural Lands 40; (3) expand Limited Impact Industrial uses north of SR-76 south to Pala Mesa Drive; (4) reconfigure land use designations north of SR-76 to reflect the Project SPA; and (5) amend the ME to reclassify Pankey Road from a Collector to a Boulevard with Class II bike facilities from Pala Mesa Drive to Shearer Crossing, apply Class II bike facilities to the portion of Pala Mesa Drive within Project boundaries, and designate Pala Mesa Drive between the western Project boundary and Old Highway 395 as a Class III bike route.

As noted above, under **Scenario 1** the Project would abut right-of-way owned by Caltrans in its existing configuration. Under this scenario, the Proposed Project would comprise a community including multi-family residential, general commercial with a mixed use component, limited impact industrial, and open space. The uses would be divided into six Planning Areas (PAs) (Figure 1-4). Limited impact industrial uses (approximately 120,000 square feet [s.f.] of light industrial/office space) would be located within PA 1 on 12.6 acres of land in the northern portion of the Project site, north of Pala Mesa Drive. PA 2 would consist of general commercial uses with a mixed-use core, and would be sited on approximately 46.1 acres in the southwestern portion of the site north of SR-76 and west of Pankey Road. PA 3 would be dedicated to multi-family residential development and includes a total of 248 units on 12.4 acres of land, in the southeastern portion of the site north of SR-76 and east of Pankey Road. PAs 4 and 5, south of SR-76, also would be dedicated to general commercial uses. Combined with PA 2, these areas would total 52.4 acres, and contain approximately 503,500 s.f. of commercial space. The mixed-use core integrated into PA 2 would contain commercial and office space, as well as up to 35 multi-family residences. Three homeowner association-maintained lots (approximately 1.4 acres) would contain manufactured slopes, landscaped areas, and drainage facilities; and are shown as HOA-maintained open space on Figure 1-4. Four biological open space lots would total approximately 31 acres. Table 1-1, Proposed Land Uses, provides a summary of the land uses proposed for the Project, and Figure 1-5, Site Plan, shows the proposed lot configurations. In addition to the on-site uses, the Proposed Project would require the construction of on- and off-site infrastructure improvements associated with roads, water, and sewer.

Scenario 2 assumes that based on recent improvements to SR-76 in conjunction with projected traffic volumes, Caltrans would release current right-of-way that is no longer planned for potential SR-76 widening. The potential for this to occur, and the subsequent inclusion of the decertified property into the Proposed Project is addressed throughout this EIR as a design option. The

amount of right-of-way subject to decertification totals 2.1 acres, with approximately 0.85 acre located north of SR-76 and 1.2 acres located south of SR-76, as depicted on Figure 1-4. Under that scenario, the Project could purchase that decertified right-of-way and would incorporate that additional acreage into commercial and open space uses. Decertified Caltrans right-of-way north of SR-76 would remain undeveloped except for a Project monument sign (and associated grading) to identify the entrance to Campus Park West. Decertified right-of-way south of SR-76 would be incorporated into PA 5 and developed with an additional 10,000 s.f. of General Commercial uses. The number of lots would remain the same, regardless of scenario (Lot 17 as shown in **Scenario 1** would no longer be necessary, so the area north of SR-76 would become a new Lot 17 and the area south of SR-76 would be incorporated into Lot 16.

Each of the land use categories and design element requirements discussed below would be the same, regardless of whether **Scenario 1** or **Scenario 2** is approved by decision makers. As indicated above, the difference would relate to acreage, with an associated amount of additional ground disturbance and development square footage, and some differences in fuel modification related to parcel location. Details regarding each Project component follow, with any differences between development **Scenarios 1** and **2** identified as appropriate.

1.2.2.1 *Land Uses*

Community-wide Design

The Proposed Project contains a variety of uses in order to provide opportunities for on-site work/live balance. In order to unite these uses into a community, some overarching design principles have been developed. These emphasize pedestrian/non-motorized activity, and architectural design, as summarized below.

To encourage walkability along roadways, the Project would include a mix of land uses within a comfortable walking distance. This has been accomplished by placing residential and commercial uses within the same development bubble in the mixed-use core area, and placing multi-family residential uses directly across the street (proposed Pankey Road) from general commercial and light industrial office uses. The furthest in-site walking distance (from the southern-most residential use to the northernmost light industrial use) would be just over a half mile (approximately 0.6 mile). Front or side building façades would be sited parallel to and abutting streetscape where feasible and appropriate. Entry plazas, courtyards, outdoor dining spaces and other gateway areas, as well as shaded sidewalks are incorporated into overall design. Sidewalks along Project roads would be linked to walkways within the separate land uses as well as trails and pathways, where possible. Bicycle parking facilities would be provided to encourage alternative transit, particularly for employees, shoppers, and residents.

Building design would express a single architectural style with substantial and consistent architectural detailing. The site is encumbered with a "B" designator for site plans. If the Project is approved, County staff will review each site plan submitted for consistency with Project design guidelines. Architectural style options that may be used throughout the Campus Park West community to ensure compatibility among the various land use districts as well as with the adjacent approved Campus Park and Meadowood projects, include rural ranch,

Mediterranean, urban Victorian and cottage, as depicted on Figure 1-6, Architectural Characteristics. Variation in design element specifics will be acceptable so long as the general overall characteristics are conformed to and are consistent with other developments in the area. These architectural vernaculars are described below.

The rural ranch architectural style features characteristics often associated with rural areas of San Diego County. Typical characteristics include barn-like building forms, low to moderately pitched gables, hipped roofs, exposed wood and timber structural detailing, galleries and balconies integrated into upper-stories, tower elements that punctuate the roofscape, ground floor arcades defined by piers and covered with a pitched shed roof form, and clerestory windows.

The urban Victorian style is apparent in many of the buildings in downtown Fallbrook. Typical characteristics include vertically proportioned architectural elements, an ornamental cornice along the top edge of the building, contiguous street façades, a large display window capped by a storefront cornice at sidewalk level, decorative window treatments, regularly spaced windows, and awnings above storefronts.

The "Mediterranean"-like climate of the Fallbrook area, the gently rolling countryside, and the rural environment support use of this style. Traditionally, common building elements that define Mediterranean architecture include the use of stone, terracotta tiles on the rooftop, arches, simple columns, wrought iron details, generous use of stucco, and a non-symmetric expression of building form, massing, design and placement of windows, and detailing. Use of quoins at building corners, keystones on arched openings, and shallow hip roofs is often present. Various shades of yellow, orange, and rust, as well as muted shades of creams, light grays, and soft beiges are common. Accent colors generally include tomato red, cobalt blue, golden sunflower, olive green, and forest green.

The cottage style is characterized by simple massing and forms. It emphasizes function and relies minimally on stylistic effects to define character. Features such as porches, bays, windows, and other appendages are incorporated to interrupt structure scale. This style often utilizes steep roof pitches, ornamentation that is utilitarian rather than decorative, a variety of colors to create individuality, and materials such as stucco, board and batton, and horizontal siding. The use of stone, brick, and wood in select locations can emphasize certain features.

Structures generally would be no more than 35 feet in height above grade, unless otherwise approved by the North County Fire Protection District (NCFPD). Architectural projections may extend above 35 feet, subject to NCFPD review and approval.[2]

Overall, building form, mass and elevations would be articulated to create interesting roof lines, shadow patterns, and architectural detailing. This is typical of the way development naturally occurs over time, with each new building reflecting the stylistic norms of the day. Individual storefronts may exhibit different but compatible themes. Emphasis would be on a harmonious

[2] Currently, the NCFPD cannot ladder three story buildings. Unless the NCFPD acquires appropriate equipment or otherwise determines greater heights may be safely allowed, residential structures with pitched roofs are limited to a top fascia height of 24 feet and topmost ridgeline of 35 feet, and non-residential buildings with flat roofs over 24 feet would require an exterior ladder in order to reach the roof.

development, human-scale architecture and a pedestrian-friendly environment.[3] As a general rule, building façades over 50 feet in length would incorporate changes in plane and architectural features that provide visual interest (projections, recesses, cornices, balconies, etc.). Blank unarticulated (or large uninterrupted expanses of) walls would not be permitted for building sides visible from a street or common area. Façade articulation may consist of changes in the wall plane, use of openings and projections, cornice details, overhangs, material and color variations, windows, recesses, changes in the roof line, loggias, towers and turrets, signs, etc.

Primary building entrances would be emphasized so that their location is apparent and clear, using such architectural cues as porches, loggias, canopies, and recessed or corner entries. Corner buildings at the intersections of Pankey Road and full turn movement entry drives may include articulated building elements in the form of towers, domes or turrets, ornamental parapets, bays or other details that emphasize the focal nature of these buildings. These architectural elements are proposed to extend no more than 5 feet above the Project maximum building height (generally 35 feet) and require NCFPD approval. These projections are consistent with architectural projections proposed for the adjacent approved Campus Park development.[4] If NCFPD acquires upgraded equipment supporting service of structures exceeding the overall 35 foot height limit, additional focused modifications to the height limit may be permitted subject to NCFPD approval as discussed under the mixed-use core and general commercial categories, below.

Residential Uses

A total of 248 multi-family dwelling units (DU) are proposed in PA 3, located east of Pankey Road. PA 3 consists of approximately 12.4 acres on four lots; residential density would be 20 DU per gross acre (du/ac).[5] As noted above, the Project Specific Plan (PDC 2014) does not propose rigid adherence to a single style, but supports structures that would share fundamental architectural characteristics, thereby allowing both visual compatibility and variety within an overall community theme, each of which would be approved during review by County staff as noted above. Figure 1-7 illustrates "Examples of Acceptable Architectural Character for the Proposed Multi-family Residential Area." Design elements such as wall offsets, balconies, deep openings and entryways, windows, roof pitches, gables, tower elements, arches, and roof structures would be encouraged. Also as noted above, the maximum building height would be 35 feet. The third floor of multi-family units could be reviewed for the potential to incorporate "step backs" to minimize perceived height and scale of the structures. Courtyards would be included within the residential areas, and would be oriented either toward open space (on the north and east sides of the Project) or to the south (to provide a more climatically protected

[3] "Human scale" refers to a building and its details, including: garage doors, pedestrian entries, windows, plate heights and balconies as they are in proportion to the height of an average person.

[4] While higher projections would not result in aesthetic issues (see Subchapter 2.1 of this EIR), it is understood that it could result in additional concerns on the part of the NCFPD. Modifications to allowable heights would require additional review by the NCFPD.

[5] While proposed zoning would allow for a variety of housing options, including duplex or two-family residential area, a multi-family residential area, or an area with a variety of single-family, duplex, two-family, or multi-family product types; the higher density option was selected to provide a more affordable solution to those who do not want to live in, or cannot afford, a traditional single-family detached residence.

setting). Front building façades would be sited parallel to Project streets, and oriented to create common area courtyards interior to the development or facing Pankey Road.

Free-standing garages would not be permitted directly in front of a building or along adjacent roadways. Garages and covered parking structures, mailboxes and trash enclosures all would be designed to complement the architectural style of the residential structures. Tubular steel fencing, or an acceptable alternative, may be utilized around the perimeter of the multi-family residential area, and also would be required around the perimeter of a pool area. This fencing would provide division of uses for safety reasons, and would not extend further than needed for safety purposes. It also would route pedestrians crossing Pankey Road to commercial or light industrial uses on the west side to locations appropriate for street crossing. Parking would be located internal to the development; garages and covered parking structures would not be permitted directly in front of a building or along adjacent roadways. Parking between buildings and Pankey Road would be avoided to the extent feasible.

Canopy trees on the south and west sides of a building would be sited every 50 linear feet and a minimum 20-foot-wide landscaped street edge zone would separate residential uses from Pankey Road. This landscaped zone would contain at least one tree for each 300 s.f. of landscaped area. Interior and rear yard property lines would have a minimum five-foot-wide landscaped setback, also with trees sited a minimum of one per each 300 s.f. of landscaped area. Any parking adjacent to Pankey Road would be screened with a low wall, hedge, berm, or combination thereof; and would also contain planting islands. Every designated parking space would be within 30 feet of the trunk of a tree. For all parking lots greater than 6,000 square feet, in addition to all other guidelines, an internal area equivalent to a minimum of five percent of the total parking area would be planted with a combination of trees and shrubs. Parking lot perimeters would terminate a minimum of two to five feet from the face of a building. If the location is not visible from a public street, a two-foot minimum planted area may be installed between the parking lot and building. The wider five-foot-wide area would be landscaped, unless used as a pedestrian walkway, as discussed in Specific Plan Chapter 6, Design Guidelines.

General Commercial

Under **Scenario 1,** the proposed general commercial areas would consist of six lots in PA 2, comprised of 46.1 acres located southwest of the residential area, and two lots in PAs 4 and 5, comprised of 6.3 acres located south of SR-76 (Figure 1-4). It would be the largest use on site, totaling approximately 52.4 acres with a total of approximately 503,000 s.f. of commercial space (476,000 s.f., 9,000 s.f. and 18,500 s.f. in PAs 2, 4 and 5, respectively). These numbers would be the same for **Scenario 2** with two exceptions: the total amount of general commercial area would increase to 513,000 s.f., and PA 5 square footage would increase to 28,500 s.f. As noted above, buildings generally would be a maximum of 35 feet high, with architectural projections proposed as described above. The commercial uses would serve Project residents as well as the existing surrounding community and motorists using the I-15 corridor. PAs 4 and 5, south of SR-76, would be more likely to contain visitor-serving commercial uses. The general commercial district has the capability to include a variety of structures ranging from large retailers to small stores, as well as potential office uses.

The site design of the commercial district would allow for large (70,000 s.f. or larger), mid-sized (20,000 to 70,000 s.f.) and small (20,000 s.f. or smaller) format buildings. All-size format buildings may back onto I-15, SR-76 or Pala Mesa Drive. Small-sized format buildings may also back onto the eastern property line of PA 4. Buildings would front onto Pankey Road to the extent feasible, and fifty percent articulation would be required for the front (primary entrance) of a building, as well as rear and/or side walls of a building facing a street or common area. Large and mid-size format buildings would be set back a minimum of 50 feet from mixed-use core structures (see below). Small format retail buildings (pad buildings) would be located in areas that would define street edges, intersections, entries, and public spaces, particularly lining the Pankey Road street edge.

Figures 1-8, Examples of Acceptable Architectural Character for the Proposed Mixed-use Core and General Commercial Areas, and 1-9, General Commercial Typical Site Design Characteristics, depict possible architectural character and designs for the general commercial areas. Permitted building façade materials include poured-in-place, tilt-up, or pre-cast concrete; cast stone; integrally colored split-face CMU; integrally colored honed-face CMU; "Dryvit"-type systems; stucco; flat stone veneers; architectural metals; decorative steel elements; painted surfaces that complement the primary building material; backlit decorative steel; floating steel trellises; concrete siding (such as Hardi-plank) or similar; glass block; tinted storefront glass (non-reflective); and wood. Along the central drive aisle, windows would comprise 30 percent of the storefront length along the building's main entrance façade for small format retailers. (Medium and large format retail tenants would be excluded from this requirement.) A building parapet or similar architectural screening would screen all roof-mounted equipment.

Loading areas/docks would be permitted only on sides of a building that do not face Pankey Road. Views into service areas from street rights-of-way would be prohibited. Loading areas should be located towards the rear of all buildings; loading areas on the sides of buildings would only be permitted if adequately screened. All refuse collection areas would be located where least visible to the public and must allow for adequate ingress/egress by collection vehicles. Refuse collection areas that would otherwise be visible from a street or common area would be screened by building walls or screen walls (six to eight feet high) constructed of the same or similar exterior building material as adjacent structures. All refuse collection areas would be delineated on site plans with appropriate screening.

Pedestrian connections with one shade tree for every 50 linear feet and/or pergolas would link commercial projects to adjacent development through the mixed-use core to support internal circulation. Plazas would be encouraged in the general commercial district, as they would serve as open space focal points that would accommodate passive use by shoppers, residents of the multi-family land use district, and employees of the limited impact industrial district. Designed as places for informal gatherings, the plazas could facilitate social interaction within the community. Canopies, booths, and other ancillary buildings would be consistent with the architectural detail, materials, and character of the adjacent uses. Where arcades or covered walkways are proposed, these features would have a minimum width of six feet.

Thirty percent of building façades would be located on Pankey Road (i.e., between the corner of Pala Mesa Drive and Pankey Road south to the last non-signalized right-in/right-out driveway

into the general commercial district north of Pankey Place in PA 2). A single drive aisle between the building façade and Pankey Road would be permitted.

Mixed-use Core

The mixed-use core area could contain approximately 35 DU in addition to commercial and office space. The intent of the mixed-use core district, designated within PA 2 on Figure 1-4, is to provide a centrally located mix of uses with pedestrian and vehicular connections to the commercial and residential land uses. This mixed-use core is intended to be a pedestrian-oriented community center characterized by wide sidewalks and smaller scale buildings lining a two-lane roadway/drive aisle, large storefront windows on the ground floor with retail, office, or residential uses on the second/third stories, sidewalk cafes, pedestrian plazas, and shade trees, street lamps, benches, bike racks, and other amenities that encourage pedestrian activity. This mixed-use core would be within an approximately 10-minute walk from anywhere within the Campus Park West community north of SR-76 and would be accessed via one drive aisle, edged by 15-foot wide sidewalks on either side. Maximum building height would be consistent with other uses at 35 feet, with the potential for architectural projections as discussed above. The relatively low height of the buildings and incorporation of public spaces, width of the above-noted sidewalks, and parking configuration are all intended to emphasize the pedestrian and create a central attraction for the area's residents, shoppers, and workers. PA 2 development would be sited on a pedestrian-oriented drive aisle/traditional "main street" with parking separating the vehicular traffic from pedestrians. Figure 1-10, Mixed-use Core Typical Site Design Characteristics, shows the conceptual design of the mixed-use area.

Structure façade materials would duplicate those identified for the general commercial area described above. Building façades longer than 50 feet would be articulated. Changes in plane may include an offset, reveal, or projecting rib that includes a color, texture, or material change; and the verticality of solid walls would be interrupted with horizontal lines such as cornices, windows, openings, punch-outs, medallions, balconies, columns or arches. No mirrored or reflective glass would be used.

Awnings, arcades, covered walkways, and pergolas would be required on storefront façades to shelter pedestrians from the sun and promote walkability, and shade trees would be planted throughout landscaping and parking areas. Corner buildings may incorporate towers, domes, ornamental parapets, bays, etc. to emphasize their focal nature. In general, excepting sides facing biological open space, all sides of a building would show articulation, although the front (primary entrance) or side facing residential uses would require the greatest amount of articulation. Stepbacks on upper floors should be considered to reduce the apparent height/scale of the development. Figure 1-8 shows examples of possible architectural character for mixed-use structures.

The buildings would be oriented so the fronts face the central drive aisle/traditional main street. Only one bay of parking (diagonal, parallel or perpendicular) would be permitted in the front of buildings along the central drive aisle/traditional main street, with the remainder of the parking located behind the buildings. Shade trees (potentially aligned with structural bays) would be

spaced 30 feet on center and planted in the sidewalk within planter strips with a minimum unpaved width of 5 feet.

At least one 10- to 20-foot pedestrian connection (covered, partly covered or open) from the front of the buildings to the rear parking lots would be required for every 300 feet of building façade as would at least one mid-block crossing, located between 250 and 350 feet from the drive aisle intersection. Benches and trash containers would be placed for every 250 linear feet of front-facing building façade/storefront, which would be compatible with the building architecture and design and other street furniture in the Project.

Loading areas would be separated and screened from main circulation and parking areas and located to the rear of buildings, to the extent possible. As discussed for the overall general commercial area, trash dumpsters and mechanical units within PA 2 would be screened (by buildings or screen walls of six to eight feet in height) if they would otherwise be visible from a street or common area. Screen walls would be compatible with building architecture and exterior wall materials, and visible portions also would be landscaped, with a minimum vegetation height of three to six feet at maturity.

Street lights and lighting along sidewalks and walkways along the front of the buildings would not exceed 12 feet in height. For all other parking areas in the mixed-use core, a maximum height of 25 feet would be permitted. A maximum length of 300 feet would be allowed for a single line of connected shops. Sidewalk cafes would provide for a minimum of six feet of public access, across the pedestrian flow of traffic. If building "jogs" are used for sidewalk cafes, the jog may not be greater than 5 feet from the 15-foot wide sidewalk and may not have a length greater than 50 feet.

Limited Impact Industrial Uses

The proposed limited impact industrial areas would be located to the north of the commercial use areas, west of Pankey Road, and east of I-15 (Figure 1-4). They would consist of four lots totaling approximately 12.6 acres within PA 1, and would contain a maximum of 120,000 s.f. of industrial space. A variety of light industrial, office, and service facilities may be located within this district.

The architectural concept is compatible with architectural styles proposed in the approved nearby Meadowood and Campus Park projects and consistent with the architectural styles listed in the Fallbrook Community Plan. This would be achieved using similar architectural styles and quality materials, complementary roof forms, signage, colors, and decorative pavement. Buildings generally would be located parallel to the adjacent street or may be oriented to create common area courtyards interior to the development, or facing Pankey Road or adjacent open space. Walkways and/or plazas connecting the sidewalks and parking lots to sidewalks in Pala Mesa Drive or Pankey Road would be required. In order to interrupt the lengthy expanses of horizontal roofline, articulation would be provided on building façades; including variation in roof section height, or change in color, materials, forms, etc. Main entrances to the buildings would be defined and articulated, with distinctive features such as roof, arcade, fenestration, overhangs, columns, recess, or projections. Minor entrances would include features, such as

minor offsets, overhangs, color accents, special materials, canopies, porches, arcades, or pergolas. Articulated rooflines and parapet structures would be used to interrupt lengthy expanses of rooflines. Where rooftop equipment cannot be screened from view, it would be enclosed in housing that is consistent with the architecture of the main building or organized on the roof to give an orderly, uncluttered appearance and painted to match the roof color. Rooftop equipment screening would be identified on site plans. Loading, service and refuse collection areas would be screened by walls or vegetation and set back a minimum of 20 feet from front and side street property lines. Outdoor open space (e.g., for lunch areas) would be provided on site.

Primary materials may include tilt-up or pre-cast concrete with textures and colors; split-face block with textured surfaces; steel frame with glass or masonry and glass exterior (glass shall not exceed 80 percent of the exterior); and/or tile, brick and stone. Enameled or ribbed metal panels, wood, glass, and stucco may be used as decorative elements. Sloped roof materials maybe ribbed metal, clay, or concrete tile. Earth tones and warm, light colors are preferable. Bright, contrasting colors would be used for trims and accents only.

Figure 1-11, Limited Impact Industrial Typical Site Design Characteristics, shows a possible design for the industrial areas.

Open Space

This open space includes developed areas associated with on-site residential uses within PA 3.

Group Usable Open Space

At least 200 square feet of group usable open space would be provided per dwelling unit. These common areas would have a less than 10 percent slope and may be composed of sitting areas, play equipment, shade structures, a plaza, gazebos and pavilions, gardens, a pool area, or other similar features; and would incorporate a surface appropriate to the activity, with concrete or asphalt discouraged except for use on play courts. Plantings would be provided to allow for shade, spatial definition, and aesthetic considerations. Group usable open space is permitted anywhere on the same lot as the dwelling unit it serves. Up to 20 percent of the group usable open space requirement may be located on the rooftops of residential buildings.[6] Adequate guard railings or other protective devices would be incorporated into Project design, but would not be more than four feet high and would conform to the requirements of the height designator.[7]

[6] "Green roofs" provide a number of benefits such as reducing the urban heat island effect, reducing storm water runoff, improving the energy efficiency of buildings by providing greater insulation, improving air quality, and increasing aesthetic value.

[7] An area of contiguous space would result in any rectangle inscribed within it having no dimension less than 15 feet. Narrow strips of open space, such as landscaped strips, adjoining but projecting away from such a rectangle would not be counted toward the usable open space requirement. If space is located on a roof, any area occupied by vents or other structures that do not enhance usability of the space would not be counted toward the 15-foot dimension.

Children's Play Area

As part of the group usable open space requirement, at least one children's play area of 400 square feet would be provided for the first 25 dwelling units with an additional 100 square feet required for each additional 25 dwelling units. One large play area is preferred to several smaller ones. Although not anticipated at this time, if all Project multi-family housing is developed as a senior residential project, this requirement would be waived.

Private Usable Open Space

At least 100 square feet of private usable open space is required per dwelling unit. Private open spaces on the ground would be a minimum of eight feet in each dimension and would be screened from public view by landscaping, a wall, privacy fence, or other acceptable method. Decks used for upper floor private open space would have a minimum dimension of six feet.

Open Space Set-aside

On-site undeveloped open space consists of biological open space and homeowner's association (HOA) or maintenance district areas. These open space uses combined would account for approximately 27.5 percent of the Project site area.

Four biological open space lots totaling approximately 31 acres would be dedicated on site (Figure 1-12, Open Space/Conservation Plan). These lots would preserve wetlands and wetland buffers on the northern and eastern sides of PAs 1 and 3, south and southeast of PA 2, and in the western portion of PA 5, as well as all of PA 6, south of SR-76/Pala Road. PA 6 also contains a 20-foot wide recreational trail easement for the San Luis Rey River Trail, with connections to this trail from both Shearer Crossing and Pankey Road south of SR-76. In addition, three lots totaling approximately 1.4 acres comprised of manufactured slopes, landscaped areas, and drainage facilities would be maintained by an HOA.

Based on quality of the resource, wetland buffers would vary from 25 to 100 feet in width. A 100-foot buffer from sensitive wetlands would be located along the eastern portion of the Project site adjacent to proposed residences. The proximity of the residential uses to biological open space protected through identification of the proposed development hardline could allow for views to natural areas and contribute to an atmosphere of openness. Passive recreational uses[8] would be permitted within the open space in PA 6 associated with the San Luis Rey River trail. Otherwise, the only activities allowed in biological open space would be open space enhancement activities, utility crossings, and fencing. Where ultimately designed as surficial (rather than subsurface) facilities, detention basins and adjoining perimeter areas also may be designed as passive-use open space areas for residential and commercial users and in pedestrian traffic areas, where appropriate. These HOA-maintained areas could include benches or tables for sitting and picnicking, a defined trail for walking and jogging, and interesting/colorful plant material at key nodes for additional interest.

[8] Passive recreation includes activities such as hiking, bird watching, and biking.

1.2.2.2 *Access and Circulation*

Regional access to Campus Park West would be provided from SR-76, which connects to I-15 to the west. A park and ride facility was recently built on the west side of I-15/SR-76, which will serve this area. In addition, the Project would reserve space for one to two bus stops along Pankey Road to accommodate future bus service based on standards provided by the North County Transit District (NCTD).

Figure 1-13, Circulation Plan, depicts local access to the Project site and proposed improvements to roadways. The main access to the Project site would be from Pankey Road, which would be improved to extend north from SR-76 and connect to Pala Mesa Drive, providing access to the west side of I-15. Horse Ranch Creek Road, located east of the Project site within the Meadowood and Campus Park Specific Plan Areas, would provide north/south access from SR-76 to Stewart Canyon Road. The Campus Park Project would include an east/west road (Pankey Place) connecting Pankey Road with Horse Ranch Creek Road, providing an easterly access point for Campus Park West. Figure 1-14, Proposed Off-site Roadway Improvements, shows off-site roadway improvements proposed as part of the Project. These proposed on- and off-site improvements are discussed below.

SR-76/Pankey Road Intersection

From the I-15 northbound ramp easterly a distance of approximately 1.4 miles, SR-76 is four lanes in width. The Project would improve SR-76 at Pankey Road. Figure 1-15, SR-76 Cross-section Near the Intersection with Pankey Road, depicts proposed improvements. This intersection would be widened to provide additional turn lanes in the northerly and southerly directions. Grading and drainage improvements would be implemented along SR-76 within Caltrans right-of-way.

- The eastbound segment of SR-76 west of Pankey Road would be widened to add an additional northbound left turn lane (for a total of two left-turn lanes), and one southbound right-turn lane. Improvements would extend approximately 1,100 feet along SR-76 west of the intersection.

- The westbound segment of SR-76 east of Pankey Road would be widened to add an additional northbound right-turn lane, and a southbound left-turn lane. The existing bridge over Horse Ranch Creek would be widened by one lane on the north (westbound) side. Improvements would extend approximately 1,000 feet along SR-76 east of the intersection.

- The northbound segment of Pankey Road south of SR-76 would be widened to add two westbound left-turn lanes and one eastbound right-turn lane. The southbound segment of Pankey Road south of SR-76 would be widened to add an additional southbound lane, for a total of two southbound lanes.

- The southbound segment of Pankey Road north of SR-76 would be widened to add two westbound right-turn lanes and one eastbound left-turn lane. The northbound segment of

Pankey Road north of SR-76 would be widened to add an additional northbound lane, for a total of two northbound lanes.

Pankey Road

The on-site portion of Pankey Road extends north from SR-76 in a paved condition for approximately 820 feet. Pankey Road currently continues north as a dirt road for an additional approximately 1,000 feet. The Project proposes to modify on-site Pankey Road as illustrated on Figure 1-16, Existing and Proposed Mobility Element Plan. The Project proposes to reclassify Pankey Road between Pala Mesa Drive and Shearer Crossing from a Community Collector to a Boulevard and apply Class II bike facilities to the roadway. To accommodate the proposed alignment and width of Pankey Road, portions of the existing right-of-way that are no longer needed would be vacated and additional area would be dedicated to the County.

Pankey Road would serve as the main backbone road for the Project, curving through the center of the Project site and separating the commercial and limited impact industrial land uses from the residential area. Interior roads/drive aisles would branch off from Pankey Road to access residential, commercial, mixed-use core and limited impact industrial uses. As the Project would include a GPA to reclassify Pankey Road between Pala Mesa Drive and Shearer Crossing to a Boulevard, the roadway would utilize the County's Boulevard road classification, consisting of a four-lane roadway with low design speed and a wider parkway (suited for villages where higher traffic volumes are combined with on-street parking, pedestrian, bicycle, and transit activities). Pankey Road also would contain a raised median to control access, provide dedicated turn lanes, and increase road capacity.

Pankey Road would terminate in a cul-de-sac in the limited impact industrial district approximately 425 feet north of Pala Mesa Drive. A road modification would be required to permit this cul-de-sac where traffic would exceed 1,000 average daily trips (ADT).

Approximately 550 feet north of the Pankey Road/SR-76 intersection, a new three-way signalized intersection would be constructed. This intersection would be located immediately south of a new bridge to be constructed over Horse Ranch Creek (see above description of SR-76/Pankey Road intersection improvements). Pankey Place would extend east of this intersection and would be constructed in accordance with the 2011-approved Campus Park Tentative Map. A design modification request for reduced intersection spacing (less than 600 feet) for this three-way intersection is part of the Campus Park West application.

Between SR-76 and Pala Mesa Drive, Pankey Road would consist of four 12-foot-wide travel lanes with two 8-foot-wide Class II bike lanes, a 14- to 26-foot-wide raised median, and two 14-foot-wide parkways to accommodate landscaping and a sidewalk/pathway (Figure 1-17, Pankey Road Cross-sections). One side of Pankey Road would contain a five-foot-wide sidewalk and the other side would contain an eight-foot-wide meandering soft-surface pathway to accommodate non-motorized users. The total right-of-way width of this section of Pankey Road would be 106 to 118 feet.

North of Pala Mesa Drive, Pankey Road would transition into a two-lane collector with two 12-foot-wide travel lanes, two 8-foot-wide paved shoulders, two 6-foot bike lanes, and two 10-foot-wide areas containing a 5-foot-wide sidewalk separated from the roadbed by a 5-foot-wide landscaped strip on one side of the road, and a 10-foot-wide landscaped area on the other side of the road (Figure 1-17). The total right-of-way width for this segment would be 72 feet.

Pankey Road south of SR-76 would be realigned to transition directly into Shearer Crossing. As a result of this realignment, portions of the existing right-of-way would be vacated and additional right-of-way would be dedicated to the County. Between SR-76 and the junction with Shearer Crossing, Pankey Road would have a total right-of-way width of 118 feet, and would contain six 12-foot-wide travel lanes (including two southbound and four northbound, of which two would be dedicated left-turn lanes), two 8-foot-wide paved shoulders for bike lanes, and an 8-foot-wide soft-surface pathway for non-motorized users on both sides of the road separated from the roadbed by a 5-foot-wide landscaped strip (Figure 1-17). The five-foot wide sidewalk would connect to Shearer Road and allow for connection to the San Luis Rey River Park via multi-use trails identified in the San Luis Rey River Park Master Plan and schematically represented on Figure 1-13. A road modification has been requested for this segment of Pankey Road to allow for a grade break of 1.5 percent at the southerly edge of the eastbound SR-76 travel lane and to allow for a reduction in design speed from 40 miles per hour (mph) to 30 mph, in the curve segment between SR-76 and Shearer Crossing.

Pankey Road trends west from Shearer Crossing to provide access to general commercial uses in PA 6. This portion of Pankey Road would be comprised of a 72-foot-wide right-of-way with two 12-foot-wide travel lanes, two 8-foot-wide paved shoulders for bike lanes, and two 16-foot-wide parkways. Each parkway would contain five-foot-wide sidewalks separated from the roadbed by five-foot-wide landscaped strips (Figure 1-17). The bike lanes and sidewalks would terminate at the crossing of junction of Pankey Road and the San Luis Rey River Park multi-use trail.

Pankey Road South / Shearer Crossing Intersection

This intersection would be realigned to allow for access and circulation to the proposed commercial parcels south of SR-76. Pankey Road south would extend southerly and connect with Shearer Crossing at a four-way signalized intersection, approximately 400 feet south of the SR-76 intersection. The main commercial entrance to the PA 4 commercial parcel would extend to the east off this new four-way intersection. Shearer Crossing would continue south and Pankey Road would turn westerly, providing access to commercial uses in PA 5, before ending in a cul-de-sac at the western boundary of PAs 5 and 6. The extent of improvements for the realigned Pankey Road/Shearer Crossing south of SR-76 is approximately 1,200 feet in length, and requires grading and drainage improvements, some of which would occur within adjacent private and Caltrans property.

South of the intersection, improvements would transition from a 94-foot right-of-way into the existing Shearer Crossing, with a 60-foot-wide right-of-way with two 12-foot travel lanes, a 14-foot-wide striped median, two 8-foot-wide paved shoulders, and a 5-foot-wide sidewalk on

the west side of the road. The sidewalk would be separated from roadway by a 5-foot-wide landscaped strip and a 14-foot-wide planted area (designed not to obstruct line-of-sight) would be located on the other side of the road. The sidewalk would terminate at the crossing of Shearer Crossing by the San Luis Rey River Park multi-use trail (Figure 1-18, Shearer Crossing Cross-section).

Pala Mesa Drive

Pala Mesa Drive on site would have a 72-foot right-of-way width (Figure 1-19, Pala Mesa Drive and Old Highway 395 Cross-sections). It would contain two 12-foot-wide travel lanes, two 8-foot-wide paved shoulders, two 6-foot-wide bike lanes, and two landscaped areas. A 5-foot-wide sidewalk separated from the road by a 5-foot wide parkway would be located on the northern side of the road; the southern side of the road would contain a 10-foot wide landscaped area. At the bridge crossing of I-15, the road would narrow to an existing 40-foot curb-to-curb crossing that includes a left-turn lane and a through right lane in the westbound direction and a single lane eastbound. A design modification would be required to allow the existing 40-foot bridge width, rather than widening the bridge to meet the standard 52-foot curb-to-curb width. A GPA would be required to apply a Class II bike lane designation along Pala Mesa Drive within the Project boundary and designate a single Class III bike route lane on Pala Mesa Drive west of the Project boundary, providing a connection to the Class II facilities on Old Highway 395. A pedestrian crossing would also be located on one side of the bridge.

Old Highway 395/Pala Mesa Drive Intersection

This intersection would be widened and improved to provide additional turn capacity. Minor grading and drainage improvements are required to improve this intersection.

- The northbound segment of 395 south of Pala Mesa Drive currently has adequate hardscape. The road would be re-striped to include an 80-foot long, 11-foot-wide eastbound right-turn lane onto Pala Mesa Drive.

- The southbound segment of 395 north of Pala Mesa Drive would be widened from a roadway surface varying in width from 40 to 50 feet to 47 feet for a distance of approximately 1000 feet. An eastbound left-turn lane onto Pala Mesa Drive would be added.

- The east-bound segment of Pala Mesa Drive west of Old Highway 395 would be widened from a roadway surface width of approximately 38 feet to 46 feet for a distance of approximately 600 feet. The right- and left-turn movements would be retained, and a through lane to Pala Mesa Drive would be added.

Parking

Off-street parking would be provided for all on-site uses pursuant to County parking space requirements for specific land uses. Parking lot sizes, designs, and locations, as well as number of parking spaces, would be determined based on ultimate land use and design based on

Sections 6750 through 6799 of the Zoning Ordinance. On-street parallel parking would be permitted on Pala Mesa Drive, subject to County parking standards and Project street design. On-street parking (parallel, diagonal, or perpendicular) also would be permitted on the central drive aisle/traditional main street in the mixed-use core. When any parcel or adjoining parcels of land are proposed to be used for two or more of the distinguishable uses (as listed below), an adjustment of the minimum number of parking spaces required to serve the mix of occupancies would be determined as discussed under Shared Parking.

Carpool Parking

Priority parking would be provided for autos and vans carrying multiple passengers (carpool parking) in PAs 1 and 2. It would be provided at a ratio of 1 space per lot, up to 10 spaces, consolidated and split between these planning areas. This is part of the required Project parking spaces and would not result in additional hardscape.

Shared Parking

All mixed-use core and general commercial zoned areas would be allowed to use the on-site shared parking option as well as building adjacent on-street parking in order to meet parking demand. Property owners sharing parking spaces would be required to enter into a shared parking agreement with the County and between each other.

Shared parking requirements would use a form acceptable to County Counsel and include the following:

1. Shared parking requests would serve two or more different land uses located adjacent or near to one another;
2. Shared parking facilities would be located within 600 foot of the uses served;
3. Shared parking facilities would provide signs on the premises indicating the availability of the facility for patrons of the participating uses; and
4. Modifications to the structure in which the uses are located or changes in tenant occupancy would require review by the Director of Planning and Development Services (PDS) for compliance with this section.

Non-motorized Circulation

In addition to the Class II bike lanes along Pankey Road and Pala Mesa Drive and the Class III bike route along Pala Mesa Drive west of the Project boundary, non-motorized circulation facilities are provided throughout the Project site. There is a non-contiguous Type D Special Pathway along Pankey Road that provides multi-modal circulation opportunities and connects to pathways in adjacent projects. There are also the noted 5-foot community sidewalks along all Project roadways and a minimum 15-foot sidewalk would be located within the mixed-use core area to facilitate pedestrian activity. A 20-foot easement would be provided in PA 6 to accommodate the San Luis Rey River Park Trail. The sidewalks and bike lanes would provide connections to the San Luis Rey River Park Trail.

1.2.2.3 *Utilities*

The Proposed Project would require the extension of waste water and potable water pipelines, as well as gas, electric, and phone/cable lines throughout the development and to off-site connection points. All existing public utilities and services would be improved and new facilities would be constructed and available concurrent with need. All new on-site utility lines, as well as the existing 69-kilovolt (kV) overhead lines, would be installed underground within improved roadbeds. As described in more detail below, off-site utility improvements would be required to connect to existing or proposed utilities.

The potable water, recycled water, and wastewater facilities required for the Proposed Project are addressed in the Atkins 2012 Water and Sewer System Studies; a copy of this report is included in Appendix S to this EIR.

The majority of Campus Park West is located within the San Luis Rey Municipal Water District (SLRMWD) sphere of influence (SOI), with a small percentage in the Rainbow Municipal Water District (RMWD). RMWD is a member agency of the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (MWD), and obtains 100 percent of its supply from the SDCWA aqueduct system. RMWD also provides sewer service to portions of its service area, including the portions immediately west and south of Campus Park West. SLRMWD manages groundwater resources of the San Luis Rey River, its sole source of water, and does not provide retail water service. Water and sewer service would therefore be provided to Campus Park West by RMWD, with specific provisions for service outlined in a pre-annexation agreement dated May 22, 2012. Campus Park West would initiate annexation into the RMWD (and SDCWA and MWD) and an amendment to the District's SOI if the Project is approved.

Potable Water

The proposed potable water system is shown in Figure 1-20, Conceptual Potable Water Plan: On-site and Approved Off-site Facilities.

To provide potable water system redundancy, RMWD would require two supply connections. Within the Proposed Project boundaries, the potable water pipelines would be sited in Pala Mesa Drive and Pankey Road. Pipeline size would be 12 inches. These lines would tie into facilities to the west and south. For lines tying into the west, an above-ground pressure reducing station would be located on site just east of the Pala Road crossing of I-15, and the tie-in would occur near the property line. In addition, Project lines would tie into water lines being installed by the approved Campus Park development to the east. That project is installing 16-inch lines from Pankey Road east to Horse Ranch Creek Road (to be completed) and north along Horse Ranch Creek Road to Stewart Canyon Road (in place). Campus Park (working with RMWD) plans a 12-inch line extending from Pankey Road west along SR-76 to join an existing 12-inch potable water line located in SR-76 which begins at Old Highway 395 and extends easterly across I-15 to approximately mid-way between I-15 and Pankey Road. Campus Park West lines would tie into the SR-76 lines north and south of the Pankey Road junction with SR-76. A pressure reducing station also would be provided by the Campus Park development at SR-76 and Pankey Road. If

(for some currently unanticipated reason) the Campus Park project construction slows, it is anticipated that RMWD would continue to install these facilities as part of the SR-76 improvements. In this event, Campus Park West would work with RMWD to implement installation of the necessary Campus Park/RMWD planned lines. For that reason, analysis of environmental impacts associated with installation of off-site lines not already completed (e.g., within the approximately 2,400 foot-long section along SR-76) is included within this EIR.

Wastewater

Wastewater service also would be provided by RMWD. Figure 1-21, Conceptual Sewer Plan: On-site and Approved Off-site Facilities, depicts existing RMWD lines, as well as pipelines: (1) previously installed in SR-76 (including during early Hewlett Packard Campus Park evaluation) and (2) currently under construction by the adjacent Campus Park Project in Horse Ranch Creek Road, SR-76, and Pankey Road north of SR-76; as well as the location of the approved Campus Park lift station. Figure 1-22, Project Vicinity Sewer Facilities, depicts the anticipated ultimate configuration of facilities.

Flows from Campus Park West would be conveyed to the planned Campus Park Lift Station and discharged into the existing SR-76/Pala Road force main and gravity sewer, which are part of the backbone sewer system for the RMWD. This gravity sewer extends westerly, with ultimate conveyance to the City of Oceanside San Luis Rey Wastewater Treatment Plant. The system would include not only construction of new facilities proposed by Campus Park or Campus Park West, but also abandonment of existing lines by RMWD. As depicted, sewage would be collected from the Project site via 8- and 12-inch-diameter PVC gravity pipelines placed in excavated trenches in existing and planned roadways. On-site lines would be sited within Pala Mesa Road and Pankey Road. These would tie into off-site systems located to the west and south. The project would tie into 12-inch mains located in SR-76 and extending from approximately mid-way between the I-15 off-ramps and Pankey Road east to Horse Ranch Creek Road and northerly to Stewart Canyon Road. A pump station (also to be constructed by approved Campus Park) would be sited on a 0.2-acre site on Campus Park property in the northeast quadrant of the Pankey Road/SR-76 intersection. Facilities from the adjacent Campus Park project are currently anticipated to be completed in 2014. The sewer lift station would pump all wastewater generated by the Project to an existing 12-inch force main in SR-76. During CEQA evaluation and approval of the Campus Park project pump station, a conceptual plan was provided (see Figure 1-23, Preliminary Design for the Campus Park Sewer Lift Station). That plan proposed three structures: (1) a lift station wet well for influent sewage and three submersible pumping units, (2) emergency storage to accommodate six hours of average daily sewage flow, and (3) a valve vault. A number of pump station elements would be located below grade. These would include the pump station wet well, with the top of the wet well set at finished grade; the emergency storage structure concrete vaults; and liquid holding vaults with only access shafts at grade. Above-grade facilities would include an emergency bypass connection, and an emergency generator (sized to run two pumps in addition to all auxiliary electrical and mechanical systems). The preliminary size of the generator was identified as 60 kilowatts. In addition, the site is proposed to include an odor control system. Gated access to the sewer lift station would be provided from the trail staging area immediately to the north and the entire site would be enclosed by a six-foot-high chain-link fence. Exterior lights would be

pole mounted and located on the site to provide adequate visibility of all equipment and facilities. Final design coordination is underway between Campus Park and RMWD.

It is anticipated that these facilities would be in place prior to mass grading for Campus Park West. In that instance, Campus Park West would contribute fair share (as determined by RMWD) to construction of these facilities by Campus Park. If for any reason Campus Park is unable to complete construction of this facility and necessary off-site pipelines, Campus Park West would complete these efforts. Should implementation of the adjacent Campus Park lift station be delayed, RMWD would permit (on an interim basis) the discharge of Campus Park West flows to the Plant B Interceptor until the Campus Park lift station is operational.

In addition to these Project-required facilities, RMWD has requested that the Project environmentally clear some actions proposed by RMWD for their overall system. Their proposed facilities would result in abandonment of existing facilities located in environmentally constrained areas as well as provide features that would convey sewage generated off site (west of I-15) to the north. In order to support these actions, a pump station also would be needed at the northerly extent of Campus Park West. Three alternative locations for this northerly station are evaluated in this EIR, but only one would be required. The three alternative locations are all north of Pala Mesa Road, with one located immediately within Project boundaries (C), and two located west of I-15 (A and B). West of I-15, the southernmost alternative site is located between Old Highway 395 and I-15 and the northernmost site is located west of Old Highway 395 (see Figure 1-22). Options A and B would be sited near the existing gravity sewer and would require construction of a new force main extending south and then east across I-15 in the Pala Mesa Drive overpass. Option C would utilize the existing gravity sewer crossing I-15. A new force main would be constructed to convey flows south and then west in Pala Mesa Drive, discharging to the proposed Campus Park West gravity sewer in Pankey Road. All options would require a new section of force main from the east side of the bridge to the proposed gravity sewer in Pankey Road. Options A and B would also require sections of new force main on the west side of I-15 and in the Pala Mesa I-15 overpass, and Option C would require an additional section of force main along the east side of I-15, as depicted in Figure 1-22.

Regardless of location, the RMWD pump station would be a submersible package sewer. An above-grade motor control center and electrical panel would be required. Equipment would be shielded by an approximately three foot by three foot by four foot fiberglass reinforced plastic enclosure, with a control panel mounted on the wall. This would be located on a pad not to exceed 10 by 10 feet in size (see Figure 1-24, "Typical" for the RMWD Sewer Pump Station).

Recycled Water

RMWD currently does not generate or distribute recycled water. Furthermore, due to the financial impacts of acquiring or producing recycled water combined with installing and maintaining a recycled water transmission and distribution system, a recycled water system is not planned at this time. A potentially viable option for recycled water in the future would be the proposed Meadowood project to the east. That project, approved in 2011, includes a wastewater treatment plant. If the approved development is built, RMWD could obtain recycled water from that Valley Center MWD-owned and operated facility. Under these scenarios, a recycled water

pipeline in Pankey Road could serve irrigation use within the project. It is recommended that RMWD review the status and likelihood of a reclamation facility in the area at the time of improvement plan processing and determine if a recycled pipeline should be required within Campus Park West.

Because current RMWD plans do not propose use of recycled water, it has not been incorporated into the Proposed Project. As indicated above, however, if recycled water becomes available, it could be routed to the Project via pipelines installed wholly within disturbed SR-76 and Pankey Road right-of-way. Other options could include recycled water from Fallbrook Public Utilities District or Valley Center MWD's Moosa Canyon plant with a recycled water pipeline extension to the District's Beck reservoir. The potential for these alternatives is speculative at this time. If RMWD determines that recycled water would be available, and requires recycled water use within Campus Park West, the locations of such pipelines and potential environmental effects with their installation would be confirmed at that time. If an option other than tying into the Meadowood facility is chosen, it would require additional CEQA review.

Drainage

Currently, there are no drainage improvements on site, and drainage flows overland in its natural state. The Proposed Project would generally maintain existing drainage patterns.

The County Watershed Protection Ordinance (WPO) requires that all development projects use Low Impact Development (LID) planning and storm water management techniques to maximize infiltration, provide retention, slow runoff, minimize the impervious footprint and constructed widths of the project, and direct runoff from impervious areas into landscaping (Section 67.806.c.2 of the WPO). LID elements required as part of Project design of Campus Park West include: use of pervious surfaces wherever appropriate, disconnection of impervious surfaces and design of them to drain into properly designed pervious areas, and implementation of site design Best Management Practices (BMPs). These required elements can be attained through use of:

- Bio-retention swales, basins and slopes
- Permeable pavement such as permeable concrete and pavers
- Subsurface reservoir bed or underground storm water storage below the pavement surface of parking lots
- Discharging roof downspouts directly into landscaped areas via swales or a pipe that daylights some distance from the building foundation

A storm drain system would collect and convey site runoff within the Project limits to Horse Ranch Creek at various locations (Figure 1-25, Conceptual Drainage Plan). The Proposed Project's storm drain system also would convey runoff from the existing I-15 storm drain systems. The proposed system would include four detention basins to ensure post-Project peak flow rates do not exceed pre-Project peak flow rates.

1.2.2.4 *Landscape/Hardscape*

Landscaping would be installed to enhance the visual character of the Project, provide amenities for pedestrians, encourage walkability throughout the Project, and provide erosion control. The primary proposed landscape theme for the proposed development is described as "Mediterranean." It would reflect the natural setting in and around Campus Park West, which includes broad agricultural pastures and groves, dense riparian corridors, oak woodlands, and boulder-strewn steep hillsides.

The landscape theme would be consistent throughout the community, serving as a cohesive link for the various land uses of the Proposed Project as well as visually integrating the Project with the surrounding pastures and groves, riparian corridors, and oak woodlands. Hardscape would include traditional materials such as stone, wood and stucco to reference the natural and rural landscape as well as building materials common to Mediterranean architecture. Accent landscaping would be used at entry points to the Project site, and at entry points to the various parcels within the Project site. In these areas, the landscape would include transition features including focal plantings, decorative stone walls, vine arbors, and signage. A series of low-scaled entry monuments, fencing, lighting, and pedestrian pathways would provide further design continuity for the Project. Project irrigation would require screening of equipment, water conservation through appropriate irrigation heads and hydrozones, and moisture sensors and rain gauges. In the event of future mandatory water restrictions, the Project would employ drought response conservation measures based on the (then current) Drought Management Plan approved by SDCWA.

Landscape Zones

A series of landscape zones has been delineated to guide the selection of plant species. Figures 1-26a through e, Landscape Zones/Sections, depict the general location of each zone, as well as typical cross-sections of zone planting. A plant palette has been developed for each zone; listing potential species appropriate to a zone's location next to open space, internal to the Project, and/or within a brush management zone (Table 1-2, Proposed Plant Palettes). The zones and palettes are consistent with the intent of the I-15 Scenic Preservation Guidelines, the landscaping plans for the adjacent Campus Park and Meadowood projects, the "Customized Acceptable Plant List" as prepared by Firewise 2000, Inc. for Campus Park West, and the County's "Suggested Plant List for a Defensible Space" (Appendix K). The palettes also include drought-tolerant plant material that does not require a high degree of maintenance, fertilizer, or insect control. The plant palettes are grouped into six sections:

- Section I: Fuel Modification Zones
- Section II: Public Streets (Pankey Road, Pala Mesa Drive, and Shearer Crossing)
- Section III: Slopes (manufactured slopes outside fuel modification zones)
- Section IV: Drainage Swales and Detention Basins
- Section V: Parking Lots
- Section VI: Mixed-Use Core Central Drive/Traditional Main Street and Project Entries

Within Section I, the fuel modification zones would include riparian and upland areas. The riparian areas correspond to the existing drainages and low areas, including Horse Ranch Creek along the eastern edge of the Project site, along the southern property boundary north of SR-76, and along the western boundary of PA 5. Landscaping in these areas would provide transitional planting between the developed and upland areas, and the existing riparian habitat. Fuel modification zones beyond riparian areas generally consist of graded flat pads adjacent to I-15. These areas would be planted with trees and shrubs selected for fire resistance and compatibility with the landscape themes.

Specifically with regard to fuel treatment locations, under **Scenario 1** a Zone 1 50-foot wide swath of irrigated landscaping/fuel modification/limited building zone would extend from building edge on the north and east sides of PA 1 (excluding only where the PA abuts Pala Mesa Drive and Pankey Road; the west, south and southeastern sides of PA 2 (excluding only where the PA abuts Pala Mesa Road and Pankey Road); the northeastern, eastern and southeastern sides of PA 3 (excluding only where the PA abuts Pankey Road and SR-76); the north and west sides of PA 5 (excluding only where the PA abuts Pankey Road); and the east and south sides of PA 4 (excluding only where the PA abuts Pankey Road). Beyond the Zone 1 areas, a Zone 2 fuel modification/limited building zone generally would be implemented. In these areas, thinning and maintenance of native vegetation would occur. PA 6 does not require any fuel management. Under **Scenario 2**, the same fuel management elements (or lack thereof) would occur for PAs 1, 2, 3, 4 and 6. For PA 5, however, Zones 1 and 2 would continue along the western boundary of the PA to the southern edge of SR-76; neither zone would be required adjacent to SR-76/Caltrans right-of-way.

Section II plantings include Pankey Road, Pala Mesa Drive, and Shearer Crossing. All Section II landscaping would be placed in a manner to preserve sight lines and safety setbacks along the other roadways within the Project site and encourage pedestrian use of sidewalks (e.g., low scale plantings [not to exceed three feet in height] would be used adjacent to driveway entrances and street corners to maintain visibility for pedestrian safety). Planting would occur within the right-of-way (in the median and along road edge) and within the required landscape setbacks outside of the right-of-way pursuant to an encroachment removal agreement between the County and Project Applicant/property owner/Project Developer, as appropriate. An HOA, landscape maintenance district (LMD) or other funding mechanism, such as a Community Facility District (CFD), would be formed to maintain the landscaping within the right-of-way and non-public areas needing maintenance. The size and spacing of trees shall comply with County and fire district standards. Along Pankey Road and Pala Mesa Drive, 15-foot-wide landscaped zones would be provided adjacent to commercial uses, and 20-foot-wide landscaped zones would be provided adjacent to residential and limited impact industrial uses. At least one tree would be located for each 300 s.f. of landscaped area. Massing of shrubs beneath trees would be used to enhance the rural visual quality of the Fallbrook community, and to provide color, screening, and buffering. Streets within each land use area would be planted with consistent canopy street plantings to create distinct streetscape identities, while being consistent with the overall landscape theme. Sizing and spacing of trees would be consistent with County fire requirements.

On internal slopes in Section III that are located within the Project boundary but outside of fuel modification zones, plants would be staggered and spaced irregularly, with trees installed along

contour lines in undulating groups to create a naturally clustered appearance. Shrubs of varying heights, groundcover, and perennials (or combination thereof) would be planted between tree groupings. Shrubs higher than three feet and trees would not be planted near street or driveway intersections in order to preserve line of sight. Groundcover would be used for erosion control. Slopes within fuel modification zones would be planted with vegetation from the applicable fuel modification zones plant list. Manufactured slopes within MSCP open space preserve areas would be revegetated with native low fuel plants, consistent with the Onsite Enhancement Plan prepared by REC Consultants, Inc. Exterior slopes, located beyond the Project boundary, would be stabilized with suitable BMPs to control erosion and storm water runoff in accordance with County of San Diego standards and with plants from the slopes plant list.

Detention basin locations are provided on Figure 1-26a; with specific design of these basins being determined during site plan review. Plants that can withstand both drought and occasional flooding would be used within the drainage swales and potential ground-surface (as opposed to underground) detention basins (Section IV). Please note that drainage swales and ground-surface detention basins within fuel modification zones would be planted with vegetation from the applicable fuel modification zones plant list.

Detention basins and perimeter areas would be used as passive recreation areas where appropriate, and would be designed to facilitate nature viewing and other quiet activities that do not require large open spaces. Amenities in these areas may include benches and tables, trails, and colorful plants.

Shade trees, shrubs, and hedges for screening would be used within parking lots (Section V), with landscaping for parking lots located in fuel modification zones being pulled from the plant list in Section I. The Project Specific Plan notes particular requirements for commercial, mixed-use core, industrial and multi-family areas. Consistent with the Fallbrook Design Guidelines, where the total square footage of a parking or service area exceeds 6,000 square feet, in addition to all other guidelines, an internal area equivalent to a minimum of five percent of the total area would be planted with a combination of trees and shrubs. Each parking stall would be within 30 feet of the trunk of a shade tree. Throughout the Project, parking lot perimeters would terminate a minimum of five feet from the face of a building. This area would be landscaped, unless used as a pedestrian walkway. Space may be decreased to a minimum of two feet of planted area between the parking lot and building, if the location would not be visible from a public street. The planted perimeter (regardless of size) does not apply to locations where a service area—as opposed to parking space—would be located.)

The Section VI mixed-use core is intended to become a major focal point in the Campus Park West community. As such, the mixed-use core drive aisle/traditional main street as well as other Project entries would display distinctive characteristics evoking a sense of arrival to each district and using the plants specified.

Walls and Fencing

Use of high solid sound and retaining walls along public streets would be minimized to the extent feasible given safety and sound attenuation considerations, and access to sidewalks and

road crossings would be a priority. Where Project sound walls would block views to scenic resources, inclusion of transparent materials, where feasible and appropriate, could be considered. Where feasible and space permits, the use of berms and landscaping in conjunction with the sound walls to reduce their visible height would be implemented. All walls and fences over three feet in height that face a public street would provide a fully landscaped five-foot-buffer between the wall or fence and the street.

If safety fencing is needed for a dual use detention/play area, it could include materials such as tubular steel fencing or an acceptable alternative, and would include wire mesh between posts and rails. Within fuel modification zones, materials that are non-combustible and/or have a minimum one-hour fire resistance rating (e.g., wood treated with a fire-retardant coating or Class A fire-rated composite or treated wood) would be required. Although materials would differ, fencing design would be the same for both fuel modification zone areas and non-fuel modification zone areas.

A six-foot-high fire wall would be constructed along the western, southern and eastern boundaries of the southernmost portion of PA 2, as well as the northern boundary of PA 5 as part of Project design. (The reader is referred to Figure 3.1.3-1 in Section 3.1.3, Hazards and Hazardous Wastes, of this EIR.) The walls would be solid, approximately 2,300 and 450 feet in length, respectively, and constructed of non-combustible material. The walls may contain a view wall (tempered glass) in the upper half as long as design remains solid and non-combustible. Under **Scenario 2**, there would not be a fire wall along the northern boundary of PA 5.

Biological open space areas also would be fenced off from the proposed development. In addition, signage would be placed along the edge of the biological open space area to deter human incursion.

Additional sound barriers are proposed as mitigation for Project-related noise within PA 3 along Pankey Road and between portions of PA 3 residential development and open space. Please refer to Sections 2.5, Noise, and 2.6, Biological Resources, for information on these proposed mitigation measures.

Lighting

In general, lighting is proposed to be the minimum necessary for safety and clarity of view for nighttime pedestrians. Street lighting would be provided along all streets and designed to meet the illumination standards established by the County for public safety. Exterior light fixtures would be incorporated into the building designs to provide adequate lighting for all walkways and plazas that is compatible with building styles. Each land use type also would provide adequate lighting for all walkways from building entrances to sidewalks leading to a nearby transit stop, if appropriate.

Parking field area light fixtures would use a fully shielded, low-pressure sodium vapor light or equivalent source to avoid illumination of adjacent land uses, in compliance with the County Light Pollution Code (LPC), and would be encouraged to be energy efficient. Other lamp types above 4050 lumens are permitted subject to the requirements of the LPC. Prohibited lighting

includes fluorescent, high-pressure sodium, laser, floodlights, lights that move or flash, and searchlights; light fixtures would be equipped with appropriate reflection and shielded to prevent illumination of the adjacent land uses/areas, and all bulbs and fixtures must be non-glare. Exterior light fixtures would be incorporated into building design and would be restricted to the first floor.

The maximum height of light poles in parking lots would be limited to 25 feet in non-residential areas and 15 feet in the multi-family residential areas. Pedestrian walkway lighting in the multi-family area would be between 8 and 12 feet. Walkways and plazas interior to the development generally would provide exterior lighting with a maximum height of 15 feet. (If the walkway/plaza is adjacent to 25-foot-high parking lot lighting, however, and the walkways and plazas are well lit and meet point-to-point illumination requirements, then the 15-foot fixtures may not be required.) Similar to walkway lighting in PA 3, lighting along sidewalks and walkways in front of buildings in the mixed-use core would not exceed 12 feet in height. Lighting for pedestrian walks would be designed for point-to-point illumination with an emphasis on clearly defined pedestrian walkways and direction of travel. Mounting of light fixtures on buildings would be limited to the first floor.

Special consideration would be taken for lighting along the riparian corridor to the east of the Project, including use of full cut-off lighting that accepts only long wavelength (580 nanometers [nm] or longer). Lights with permanent filters that filter all light below that standard also would be acceptable.

Signage

Primary Project identification signage would be located at the Project's entrance at SR-76/Pankey Road. Secondary Project identification signage would be included at two locations: (1) the intersection of Pankey Road/Pala Mesa Drive; and (2) the intersection of Pankey Road/proposed Pankey Place. Primary and secondary Project identification signage would be composed of low horizontal stone walls.

Informational and directional signs would be on plaques and vertical monuments located at gateways, on or adjacent to rights-of-way, and at Project entries to both provide needed information and result in the fewest number of signs. The general commercial, mixed-use core, and limited impact industrial districts would utilize a variety of signage, including: street banners; wall-mounted tenant identification proportional to the store front; hanging signs below arcades; and low, horizontal monument signs for pad tenants. Mixed-use tenants would be permitted two wall signs (one facing the central drive aisle/traditional main street and one facing the rear/parking lot area), corner tenants would be permitted two wall signs, and tenants that back or side onto Pala Mesa Drive, SR-76, or I-15 would be permitted to have up to three wall signs. Lighting would be consistent on Project signs, but may vary on wall-mounted tenant signs. Allowable sign lighting would include internally or back-lit individual letters and internally illuminated logos. On a per-store basis, preferred sign coloration could include three colors in addition to black and white, but additional colors would be permitted where required for specific business or corporate logos or to adequately represent the business. Sign posts or

other structural elements should be of wood or metal, with a preference for black, white or dark colors, or natural stain finish.

Prohibited signage includes: roof and parapet signs, internally illuminated plastic light box signs, pole signs greater than six feet in height, portable or mobile signs, and signs that cover or interrupt architectural features. Specific guidelines as to allowable sign types and size per building frontage are provided in the Project Specific Plan, Chapter 6, Design Guidelines, for the multi-family residential, mixed use-core, general commercial, and limited impact industrial uses. Where there is a conflict between the Fallbrook Design Guidelines and/or the San Diego County Zoning Ordinance Sign Regulations, the Project Specific Plan would control. Where the Specific Plan is silent, the County Zoning Ordinance (Sections 6200 and 6250) would prevail.

1.2.2.5 *Grading*

The existing elevation for the Project site ranges from approximately 290 feet above mean sea level (amsl) on the portion of the property located north of SR-76 to 261 feet amsl on the property south of SR-76 between existing knolls. Given the conservative (worst-case) nature of the grading projections, combined with the very small acreage variation between the development scenarios, regardless of whether **Scenario 1** or **Scenario 2** is approved, the Project would grade approximately 91.2 acres (or 78 percent) of the Project site, resulting in a total of 850,000 cubic yards (cy) of balanced cut and fill for the site proper.

Because the site is underlain primarily by alluvial deposits to some depth, need for blasting during mass grading is considered highly unlikely. It is anticipated that the site would be rippable (i.e., able to be excavated with conventional excavation equipment). As a result, blasting is not assumed for the Project. Potential for off-site blasting also is considered unlikely. As described above, any off-site utility connections (currently anticipated to be completed by others, but conservatively incorporated into the Project in the event that associated projects stall in development) would be completed within existing roads such as SR-76, or in ground already prepared for roadways such as Horse Ranch Creek Road; with any necessary excavation, preparation, recompaction, etc. necessary to support these roadways already accomplished as part of existing road work. Roadway improvements to Old Highway 395 or SR-76 would either be completed under the same assumption, or be completely surficial and related to striping. In the unlikely event that need for blasting is identified, subsequent CEQA review would be undertaken.

The slope ratio of manufactured slopes would not exceed 2:1, and the maximum cut and fill height would be just under 30 feet (29.9 feet) and 43 feet (42.5 feet), respectively. The finished grade would range from 294 feet amsl within the northern area to 274 feet amsl within the southern area. The finished grades adjacent to I-15 would be four feet below the elevation of the interstate within the northern portion of the site, and one foot above the interstate in the central and southern portions of the site. Lots 15 and 16, located south of SR-76, have average existing elevations of 266 and 263 feet amsl, respectively. Proposed elevations under **Scenario 1** would be 272 and 268 feet amsl, respectively. For **Scenario 2**, in order to retain the existing southerly drainage pattern, the decertified portion of PA 5 would have a northerly elevation of 270 feet amsl**.**

Should any oversize rock be produced through Project grading, it would be either buried on site in deep fill or hauled off site (off-site transport is anticipated to go to the Granite Construction facility approximately 0.3 mile east of SR-76 and Pankey Road). No rock crushing would occur on site.

1.2.2.6 *Project Phasing*

Market conditions, funding for public facilities, and similar conditions beyond the control of the developer would drive specific product phasing, as well as controlling the overall implementation period. Nonetheless, an overall approach to Project development has been designed that would ensure a logical and orderly expansion of roadways, public utilities, and infrastructure. The first phase focuses on overall site grading and infrastructure installation. The second phase addresses "vertical" development of the Project.

Grading and Primary Infrastructure

If mass grading does not occur in a single phase addressing PAs 1 though 5, it could occur in two or more phases. Phase 1 could include the commercial parcels south of SR-76, the commercial parcel north of SR-76 and west of Pankey Road, and Pankey Road and Pala Mesa Drive. Under this scenario, Phase 1 would include approximately 500,000 cubic yards of cut and fill; including approximately 50,000 cubic yards of borrow from either the multi-family parcel east of Pankey Road or the general commercial area west of Pankey Road.

Soil removed from north of SR-76 would be used to raise pad elevations above the flood plain in the southern portion of the Project. During earth-moving operations, grading quantities would be balanced on site and there would be no need to import or export soil off site. Construction vehicles would access the site via SR-76, with staging and storage areas located within the proposed grading areas for the project. Since the site is designed to balance, Project-related traffic would be restricted to construction workers and supplies for construction.

Construction efforts could require driven piles for the bridge footings as part of Pankey Road bridge construction. Alternatively, cast-in-drilled-holes could be used. The potential for driven piles was evaluated during Project noise and biological technical studies with regard to environmental effects. Specifics of construction would be verified or modified as necessary to ensure conformance with all applicable regulatory requirements and industry standards.

Regardless of location, following the first grading phase, backbone infrastructure would be installed. This would include all elements necessary to support proposed developed uses; such as construction of Pankey Road, intersection improvements along SR-76, road connections to Pala Mesa Drive, off-site connections to a potable water source and sewer lines to ensure redundancy, a pump station construction, and connection of all utility lines between these facilities and the Project boundary. The backbone storm drain systems in Pankey Road, Pala Mesa Drive, and SR-76 also would be completed during this phase.

These efforts are anticipated to take between six months and a year, and, depending on the timing of other projects, some of these infrastructure improvements may be completed by either

Campus Park or Meadowood prior to construction of Campus Park West. For the purposes of environmental review throughout this EIR, assumptions also have been made regarding construction equipment operations. The grading operation would require various equipment including, but not limited to, 5 crawler tractors, 20 dumpers, 2 graders, 1 off-highway tractor, 10 off-highway trucks (including water trucks), 2 rollers, 12 rubber tired dozers, 2 rubber tired loaders, 12 scrapers, 2 skid steer loaders, and 2 backhoe loaders/tractors.

Dedication of Project biological open space areas adjacent to any area for which grading activities are proposed would occur as first actions preceding grading, with concurrent monitoring of construction activities adjacent to any open space set aside. Regardless of order of Project construction and operation, mitigation requirements by individual Project lots have been specified in Appendix G of this EIR to ensure that appropriate biological mitigation would occur prior to grading impacts.

Phase 2 of the grading plan could include approximately 300,000 cubic yards of cut and fill to complete the grading of the multi-family parcel and the light industrial parcels north of Pala Mesa Drive. Grading equipment would be the same as identified above.

Structures, interior site roads, utilities, and storm drains within specific development sites, along with associated parking and landscape areas, would be implemented concurrently with build out of the specific use areas, as described below.

On-site Development

Once the above grading and infrastructure construction efforts are completed, vertical construction could begin. This phase is anticipated to take 10 to 15 years. This would include all the structures required for the mixed use, residential, general commercial and limited impact industrial development, as well as interior site roads, installation of Project streetscape, etc. Utilities and storm drains within development sites, as well as associated parking areas and landscaping would be implemented concurrently with build out of the specific use areas.

As noted above, the specific order of development would be market driven and cannot be specified at this time. A logical likely projection of the order of development, however, is provided in Figure 1-27, Conceptual Phasing Plan. This plan anticipates that the commercial parcels south of SR-76 would be developed first (PAs 4 and 5), the general commercial area north of SR-76 (PA 2) would be developed second, the residential area (PA 3) would be developed third, and the light industrial/office area (PA 1) would be developed last. In order to provide conservative environmental evaluation, Project analyses assume that residents associated with multi-family or mixed-use core portions of the Project would be on site while adjacent Project construction would be ongoing.

In order to provide conservative (worst-case) analysis of potential Project effects, projected years are also identified so that Project-related modeling can incorporate assumptions regarding vehicle standards, etc. for air and noise assessments. These assumptions project that Project grading would be completed within a shorter period of time (thus disturbing more soil per day) and that build out would be completed within 10 years overall (so that fewer older cars with

higher emissions rates have been phased out of anticipated use rates). For these worst-case projections, Project ground breaking is assumed to occur in 2015, with all Project buildout completed within 10 years.

1.2.3 Technical, Economic, and Environmental Characteristics

The economic characteristics of the Project include responsibilities for land acquisition/dedication, construction and maintenance of the Project elements, and the mitigation of Project-related impacts, to the extent that economic responsibilities have been determined.

Environmental considerations shaping the Project include the presence of sensitive biological resources and the need to comply with relevant ordinances, wildfire concerns, floodway concerns related to Horse Ranch Creek, and noise control issues related to Project-generated noise combined with ambient conditions largely generated by I-15. Technical and environmental commitments are proposed that are both standard construction operating measures as well as those of specific Project design to minimize potential long-term adverse effects associated with the Project for each of the above noted (and additional) elements. These environmental design considerations are listed on Table 1-3, Additional Environmental Design Considerations, and are included in Chapter 7.0. Topics for which environmental design measures are proposed as part of the project description are listed on Table 1-3 in the order they are discussed in this EIR.

1.3 Project Location

The Project site is located in the unincorporated portion of San Diego County in the community of Fallbrook, approximately 7 miles southeast of the Fallbrook town center and 46 miles north of downtown San Diego (Figure 1-1). The Project site is within the northeast and southeast corners of the I-15/SR-76 interchange. SR-76 separates the northern parcel from the three southern parcels. The western edge of the northern area of the property is bordered by I-15 (Figure 1-2).

1.4 Environmental Setting

1.4.1 Project Vicinity

The Proposed Project is located in a valley bisected by the I-15 corridor. The area surrounding the site is topographically varied. Located to the north of the Project site are Monserate Mountain and its foothills, a portion of which make up a resource conservation area owned and managed by Fallbrook Land Conservancy. The highest point in the Monserate Mountain range is 1,567 feet amsl. Neighboring peaks in this range step downward to the south, with the lowest peak reaching a height of 814 feet amsl. The Campus Park Specific Plan Area is located easterly of the Project site. Rosemary's Mountain, a large rocky peak and quarry site east of the Project site, reaches a height of 992 feet amsl. Citrus and avocado groves and passive agriculture are the main land uses east of the Project site (between the property and Monserate Mountain), and scattered large-lot single-family residences also are present. Numerous single-family homes and some nursery facilities are located among the hills north of the Project site.

Lancaster Mountain and an open space corridor exist southeast of the Project site, associated with the San Luis Rey River. The San Luis Rey River trends from the east toward the west

within approximately 0.25 mile of the southern extent of the Project site. The river is identified as a Resource Conservation Area in the General Plan and includes large patches of riparian woodland vegetation. South of the river is the Lake Rancho Viejo residential subdivision, a master-planned development of approximately 500 single-family homes and associated community amenities. Farther to the south, the hills rise to 1,485 feet amsl, creating the southeastern boundary of the valley through which I-15 extends.

Another north/south trending series of peaks creates the valley's western boundary (west of the Project site). The highest among these peaks rises to approximately 929 feet amsl. Pala Mesa Resort, a private resort with a golf course, numerous guest rooms, and a restaurant, is located at the bottom of the hills to the northwest of the Project site, adjacent to I-15 and Old Highway 395. This area also includes housing developments, a hotel/restaurant, and commercial uses near Old Highway 395, and single-family residences on large lots located among the hills, as well as small-scale agricultural facilities (e.g., nurseries and citrus or avocado groves). Some native vegetation and undeveloped areas are scattered among these hills. Beck Reservoir, owned by RMWD, is located to the northwest of the Project site and the Engel Family Preserve, owned by Fallbrook Land Conservancy, is located to the west (refer to Figure 1-2).

1.4.2 Project Site

The approximately 116.5-acre Project site consists of four non-contiguous properties separated by SR-76, Pankey Road (which dead ends into the property north of SR-76), and Shearer Crossing (Figure 1-2). SR-76 separates the northern parcel from the three southern parcels. The Project site is approximately 2,000 feet across (east-west) at its widest point and approximately 5,600 feet (roughly one mile) from the northern to southern boundary.

The majority of the site, approximately 100 acres, is located north of SR-76 and consists of gently sloped knolls dissected by a south-flowing drainage and several east flowing tributaries, which are steep-sided and densely vegetated. Topography in the 17 acres south of SR-76 is generally flat, but does steepen slightly to the south and east as the property approaches the San Luis Rey River, where riparian vegetation dominates. The Project site primarily is comprised of disturbed, agricultural, and non-native vegetation, while riparian woodland and a variety of native vegetation, including mule fat, tamarisk, and coastal sage scrub, are present near property borders. One of three parcels south of SR-76 is currently in citrus production, while the other two southerly parcels are undeveloped and contain low lying grasses and some scattered small trees.

North of SR-76, the Project site is undeveloped and historically has been used for dry farming or has lain fallow. Currently, the Project site supports a non-permitted recreation center for radio-controlled model aircraft, which includes an airstrip and miscellaneous features such as shade structures, fences, and storage located in the northern area of the property. The remnants of old citrus orchards are present atop two knolls in the northern area of the property, some of which are still standing and some are graded away. The southern knolls were formerly orchards, but have been graded and cleared.

Shearer Crossing also divides the southern parcels, where it continues south to connect Pankey Road and SR-76 to the Lake Rancho Viejo development.

1.5 Intended Uses of the EIR

This EIR is prepared in compliance with CEQA, and ensures that information required by the public as well as County decision makers is both adequate and available. Prepared prior to County Board of Supervisors consideration of the Proposed Project for approval or denial, the purpose of this EIR is to identify the potential occurrence of impacts, and the anticipated significance of those impacts, that could occur if the Proposed Campus Park West Project is implemented.

This EIR is a Subsequent EIR, as defined in CEQA Guidelines Section 15162 and discussed in the Project Notice of Preparation of an EIR (published June 11, 2009, and located in Appendix A to this document). As discussed in Section 1.2.1, Background, two previous certified EIRs addressed the Project site. The 1981 Sycamore Springs Specific Plan EIR (EAD Log #79-2-197) addressed a 442-acre site adjacent to and east of I-15 and both north and south of SR-76. The 1983 Campus Park Specific Plan EIR (EAD Log #82-2-95) addressed the same geographic location, but changed proposed uses in the northern portion of the Specific Plan site to accommodate a Hewlett Packard research and development facility (including manufacturing uses).

Current project planning began in 2004, with approval of Plan Amendment Authorization. As indicated in Figures 1-3a through 1-3c, the Project has been refined (and impacts lessened) since initial plan submittal. The current Campus Park West Project addresses an approximately 116.5-acre site. Detail as to the current Proposed Project is presented in Section 1.2.2 of this chapter, and reflects reductions in development intensity from the first TM proposed to County staff as part of the current effort. In addition to the changes in Project design, substantial portions of the earlier Specific Plan area have been severed to accommodate development proposals by others (the Palomar College District and Campus Park). The reader is referred to Figure 3.1.5-2 in Section 3.1.5, Land Use, of this EIR. This figure provides a comparison of current Campus Park West Specific Plan boundaries with the 1981 and 1983 boundaries, as well as showing areas under development, or to be developed, by others (Palomar College, Campus Park).

Additionally, in the time since the 1981 and 1983 EIRs were certified, although there has been little change to the state of the property parcels, there have been changes in required analyses due to changes in regulations or known conditions. In other words, elements relating to existing conditions of the site itself (e.g., underlying geological formations, the primarily undeveloped state of the site itself) have remained constant, but the location and level of surrounding development has changed, which would potentially affect the severity of previously identified effects. In other instances, some of the laws and regulations applicable to the Project have changed. For instance, some sensitive species have been listed as threatened or endangered within this time period, and some community guidelines have become available which did not previously exist.

For these reasons, the current Proposed Project cannot simply rely on the earlier certified EIRs for accurate and complete disclosure with regard to potential impact type, impact magnitude (i.e., significance) and appropriate mitigation. Although the document incorporates and relies

upon the certified 1981/1983 EIRs to the extent appropriate/reasonable/feasible, new information is provided where warranted. The reader is referred to Chapters 2.0 and 3.0 of this EIR for complete discussion of how the earlier certified EIRs apply to the current subsequent document.

This Subsequent EIR, pursuant to the CEQA Guidelines Sections 15160 through 15170, is an informational document that has been prepared to: (1) inform public agency decision-makers and the public of the potential for significant environmental impacts as a result of Project implementation; (2) identify mitigation measures that would reduce Project impacts; and (3) identify alternatives that would reduce or avoid potentially significant impacts. The decision-makers will consider the information in this Subsequent EIR, along with social and economic information presented to the County, before taking action on the Proposed Project. This EIR may constitute substantial evidence in the record to support the agency's action on the Project.

The County is the lead agency for the Project under CEQA. For each significant impact identified in the EIR, the lead agency must make findings, and if appropriate, prepare a Statement of Overriding Considerations if mitigation presented does not reduce impacts to below a level of significance. Responsible agencies, identified below, will use this EIR in their discretionary approval processes.

1.5.1 Matrix of Project Approvals/Permits

This environmental analysis has been prepared to support the discretionary actions and approvals necessary for implementation of the Project. Potential required approvals and permits are listed in the following matrix.

Discretionary Approval/Permit	Approving Agency
GPA SPA Zone Reclassification Tentative Map I-15 Master Specific Planning Area modification to reflect SPA Roadway Modification Requests Right-of-way Vacation and Dedication "B" Special Area Designator Site Plans	County Department of Planning and Development Services (PDS)
Right-of-way Permit(s) Encroachment Permit Grading Permit(s) Final Map Improvement Plans Traffic Control Plan	PDS – Land Development California Department of Transportation (Caltrans)
4(d) Habitat Loss Permit	County U.S. Fish and Wildlife Service (USFWS) California Department of Fish and Wildlife (CDFW)
Section 401 Water Quality Certification National Pollutant Discharge Elimination System (NPDES) Permit General Construction Storm Water Permit Waste Discharge Requirements Permit	San Diego RWQCB
Section 404 Permit – Dredge and Fill	U.S. Army Corps of Engineers (ACOE)
Section 1602 Streambed Alteration Agreement (SAA)	CDFW
Section 7 Consultation or Section 10a Permit – Incidental Take	USFWS
State Highway Encroachment Permit	California Department of Transportation (Caltrans)
Detachment from San Luis Rey Municipal Water District and Annexation to Rainbow, MWD and SDCWA, as necessary, to provide water and sewer service	LAFCO MWD SDCWA RMWD SLRMWD
School District Authorization	Fallbrook Union High School District Bonsall Union Elementary School District

1.5.2 Related Environmental Review and Consultation Requirements

It would be necessary to consult with adjacent property owners wherever rights-of-way must be acquired and where temporary easements would be needed to finish construction. For the proposed improvements on SR-76, it would be necessary to consult with Caltrans. Consultation with various utility companies may be required to locate existing utilities in roadways and make

arrangements for relocation or replacement. In addition, consultation would be required with the wildlife agencies (USFWS and CDFW) with regard to sensitive species and associated habitats, and with the permitting/certification agencies (ACOE, CDFW, and RWQCB) with regard to jurisdictional waters. As noted on the matrix above, in addition to the "will serve" letters located in Appendix Q of this EIR, additional coordination would be required with water/sewer utilities and the school districts regarding annexation, detachment and authorization, as well as with NCTD regarding standards for bus stops along Pankey Road to accommodate future bus service. Coordination with the San Diego Local Agency Formation Commission (LAFCO) would occur regarding changes to service boundaries and special district SOIs.[9] Specifically with regard to the SOIs, at present, approximately 98 acres of the Project area are beyond the boundaries of the RMWD SOI but are within the SLRMWD SOI. LAFCO is currently considering a proposed expansion of the RMWD SOI boundary to include the remaining Project area as part of the *San Luis Rey Watershed: Bonsall and Pala Subareas MSR & SOI Update*. The SOI Update would also potentially remove the same territory from the SLRMWD SOI. The MSR/SOI Update has been analyzed as part of the Final Environmental Impact Report for Meadowood (certified in 2012), and information is also provided in Section 3.2 of this EIR with regard to agricultural data specific to the LAFCO action relative to Campus Park West.

LAFCO is likely to consider the MSR/SOI amendments prior to submittal of a request for a Campus Park West Reorganization. If the two amendments have not been acted upon prior to submittal, Campus Park West will make this request concurrent with the annexation.

Pursuant to California Government Code 65352.3, Native American consultation was initiated in 2010. The Native American Heritage Commission (NAHC) was contacted, as were a number of Native American individuals/bands/organizations potentially knowledgeable regarding cultural resources in the area. Representatives of the Pala Band of Mission Indians, Pauma and Yuima, Rincon Band of Mission Indians, San Luis Rey Band of Mission Indians, and La Jolla Band of Mission Indians were contacted. Two tribes responded: the San Luis Rey Band of Mission Indians and Pala Band of Mission Indians. The reader is referred to Chapter 2.4, Cultural Resources, for details of the Native American consultation.

1.6 Project Inconsistencies with Applicable Regional and General Plans

A number of plans, regulations, and ordinances apply to this development and were considered during the Project Applicant's preparation of the SPA and GPA. In particular, the 2011-approved General Plan, Fallbrook Community Plan (including Appendix 1, the Interstate 15/Highway 76 Interchange MSP, of Appendix B, the I-15 Corridor Subregional Plan), and Fallbrook Design Guidelines were reviewed for all applicable designations, goals, policies, and conditions. Other plans and regulations also were reviewed, including the County Zoning Ordinance, County Subdivision Ordinance, RWQCB's San Diego Basin Plan, federal Clean Water Act (CWA), National Pollution Discharge Elimination System (NPDES), San Diego Municipal Storm Water Permit, Regional Air Quality Strategy (RAQS) and State Implementation Plan (SIP), Natural Communities Conservation Program (NCCP), County LPC, and Congestion Management Plan (CMP). The Project's compliance or non-compliance with

[9] LAFCO is independent of County government. LAFCOs were designed to provide assistance to local agencies in overseeing jurisdictional boundary changes.

these plans and ordinances is evaluated throughout the EIR, with discussion in Chapters 2.0 and 3.0.

In summary, the Proposed Project would be consistent with the above-named plans and ordinances, with the exception of a few goals, standards, and/or policies of the Land Use Element of the General Plan, Mobility Element of the General Plan and Fallbrook Design Guidelines, and County Zoning Ordinance (see detailed discussions in Subchapter 2.6, Land Use, of this EIR). The Project Applicant is proposing a GPA and SPA that, when approved, would eliminate the potential land use policy inconsistencies; thereby resulting in less than significant land use policy impacts with regard to these documents. Similarly, approval of the rezone would result in Project compliance with the County Zoning Ordinance.

As addressed in Section 1.2.1, Background, the Proposed Project is exempt from RPO regulations.

1.7 List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area

The State CEQA Guidelines (Section 15355) state that a cumulative impact is "the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects." Sections 15065 and 15130 of the CEQA Guidelines require that an EIR address cumulative impacts of a project when the project's incremental effects would be cumulatively considerable; i.e., the incremental effects of the project would be "considerable when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects." Table 1-4, Cumulative Projects, provides a list of cumulative projects within the vicinity of the Proposed Project. Figure 1-28, Cumulative Projects, shows the general location of the projects listed in Table 1-4.

A total of 97 projects in the vicinity of the Proposed Project were considered for the analysis of cumulative impacts based on the Project Traffic Impact Analysis (TIA). The list consists of projects that are pending or recently approved within the County. Combined, all 97 cumulative projects would result in the addition of approximately 5,125 housing units to this portion of the County.

Each individual technical subject area within Chapters 2.0 and 3.0 analyzes cumulative impacts of the Project in relation to those projects that could potentially combine with the Project to result in cumulatively considerable impacts. A description of the cumulative projects study area relevant to each specific resource topic is identified within each subchapter.

1.8 Growth-inducing Impacts

As stated in State CEQA Guidelines Section 15126.2(d), whether or not a project may be growth inducing must be discussed in an EIR. The question to be asked is whether or not a "project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." Included are projects that would remove

obstacles to population growth. Examples of these types of actions include: (1) a "major expansion of a waste water treatment plant," that would thereby allow for more construction in service areas covered by the plant; and (2) actions that could encourage and facilitate "other activities" that could significantly affect the environment. Typically, the latter issue involves the potential for a project to induce further growth by the expansion or extension of existing services, utilities, or infrastructure. The CEQA Guidelines further state that "[i]t must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment" (Section 15126.2[d]). This Subsequent EIR therefore evaluates the Project's influence on growth in the Fallbrook area as a result of an increase in residential density and potential jobs through general plan/specific plan amendments and rezone applications, modifications and improvements to the circulation system, and extension of utility lines.

As described above, the Proposed Project would include development of 248 multi-family residential units, general commercial uses with a mixed-use core allowing for 35 additional multi-family residential units, and limited impact industrial uses. The infrastructure necessary to support the development would include on-site roadways, focused improvements to off-site roadways, sewer lines and water lines, as well as support for non-vehicular modes of transportation via pathways and sidewalks.

1.8.1 Growth Inducement Due to Construction of Housing

As discussed above, the key growth-inducement issue is the potential for a project to foster economic and population growth or the construction of additional housing in the area surrounding the project under review. Implementation of the Proposed Project would not in itself make it more likely that another housing development would be approved.

The addition of Project residents to the Fallbrook area would, however, incrementally increase the demand for goods and services in the Fallbrook community. This increased demand largely would be served by those services offered in the proposed commercial and mixed use areas of the Project site. Additional services would be provided by those future projects located in the vicinity of the Project site on lands currently zoned for commercial use, and within future planned developments in the area (e.g., the proposed Campus Park Town Center approved as part of the Campus Park project). Because the mix of land uses of the Proposed Project would generally serve the needs of the Project residents, off-site growth-inducing effects would not result from Project implementation.

Also relevant, the uses proposed for the Campus Park West portion of the Hewlett Packard Specific Plan included a 150-unit townhouse project and a 336-unit mobile home park, for a total of 486 DU. The Proposed Project would construct a maximum of 283 DU; thus, the Project is well below the allowable limits already specified for the area. The Project also would fulfill the intent of the Fallbrook Community Plan by providing housing within the Fallbrook area.

1.8.2 Growth Inducement Due to Provision of Public Facilities/Services

The Project would not provide new on-site public service facilities such as parks, schools, or fire stations as part of Project design. A shortfall of schools is identified in Section 3.1.7; however,

identified mitigation consists of payment of fees. Therefore, the Project would only support construction required to serve its own students. Although the Project would not provide a new sheriff's station, it would reserve land within PA 1 for potential purchase by the County, and would participate with others in the vicinity to fund such construction. Need for this station was identified in the San Diego County Sheriff's Department Facilities Master Plan (October 2005). As such, provision of a parcel for purchase to allow construction, and payment of fair share would address an existing identified need and would not be considered growth inducing.

1.8.3 Growth Inducement Due to Roadway Construction/Improvements

The construction of new roadways or the improvement of existing roadways and intersections could potentially induce growth if that development/improvement provides significantly improved accessibility to undeveloped or underdeveloped sites or removes an obstacle to development by providing greater roadway capacity than is needed to serve existing and cumulative development. The proposed development would include the construction of Pankey Road, a primary thoroughfare through the Project site that would extend from SR-76 northward through the property to a connection with Pala Mesa Drive. Some local drivers may use Pankey Road to access Old Highway 395 on the west side of I-15, thereby circumventing the I-15/SR 76 interchange. This use by local motorists would be relatively minimal, however, given the areas accessed, and would not provide a basis for additional area growth. Because Pankey Road would be designed to only serve the Proposed Project, as well as already planned abutting projects (i.e., Campus Park), growth-inducing effects are not anticipated.

Internal roadways proposed on site would provide access to the Project's limited impact industrial, commercial, and mixed-used areas. No growth inducement is identified related to the construction of new internal roadways for the Proposed Project because all of the internal roadways would serve only the Project site.

Off-site improvements would all be very focused in nature and would not result in access to areas currently undeveloped beyond the Project. SR-76 from the I-15 northbound ramp easterly to a distance of approximately 1.4 miles has recently been widened from two to four lanes. Additional improvement of SR-76 in the immediate vicinity of Pankey Road would result from construction of turn lanes onto Pankey Road. Construction of the proposed turn lanes would be required to accommodate growth within the Campus Park West development and would not benefit other surrounding areas. Similarly, provision of turn lanes onto Pala Mesa Drive from Old Highway 395 would not provide access to new locations not already planned for development. The very minor improvements to Shearer Crossing south of its junction with Pankey Road are related only to termination of Project improvements and transitioning back to the existing condition on Shearer Crossing. As a result, the Proposed Project is not identified as growth inducing with regard to the very focused SR-76, Old Highway 395, and/or Shearer Crossing improvements.

1.8.4 Growth Inducement Due to Extension of Public Utilities

The extension of public water and sewer services into new areas or the increase in capacity of existing facilities is traditionally seen as having the potential to encourage either development of

existing, vacant properties adjoining utility improvements, or more intensive use of existing developed lots near these utilities. In the case of the Proposed Project, growth inducement due to Project upgrades is not likely to occur because utilities are generally already available in the Project area, serving other existing nearby development, and would extend service only to the Proposed Project, with existing or planned development by others surrounding the parcels.

As discussed previously within this chapter, the Project site would require annexation to and expansion of the RMWD service area for the provision of water and wastewater services. The extension of the water district boundary and SOI determination by LAFCO would address currently unserved areas, but would not have a growth-inducing impact because the areas being considered for service are wholly located within Project boundaries. With regard to the new RMWD pump station facilities being evaluated in this document and located north and west of the Project, as noted in Section 1.2.2.3 of this chapter, those facilities would replace existing lines located in environmentally sensitive and difficult to access locations. They would convey sewage from uses west of I-15, which are largely built out.

1.8.5 Growth Inducement Due to Land Use Policy Changes

To develop the Proposed Project, amendments to several land use policies would be necessary. Such amendments include elements of the Project's existing Specific Plan, General Plan, Fallbrook Community Plan, and Zoning Ordinance. In terms of CEQA analysis, changes to land use policies may be interpreted as inducing growth if the effect of those policy changes extends beyond the specific project or creates a precedent that could ultimately induce growth. While the Proposed Project includes residential development at a greater intensity than the existing General Plan, it is generally consistent. Furthermore, the Proposed Project is located in an area envisioned to support additional development as identified by the SANDAG Smart Growth Concept Map, I-15 Corridor Subregional Plan, and Interstate 15/Highway 76 Interchange Master Specific Plan (MSP).

The proposed amendments would not set a precedent for change due to the unique nature of site-specific development. Specifically, development of the Proposed Project pursuant to County requirements must occur under a Specific Plan. As a previous Specific Plan has been adopted for this site, and as all planning-related documents refer to the Project site under the Specific Plan, any changes to that Specific Plan would require an amendment to the existing Specific Plan and General Plan. Amendments to these existing planning documents would not induce growth in the area as all surrounding areas are developed or have planned developments (I-15, SR-76, Campus Park, Meadowood, Lake Rancho Viejo).

With regard to changes to the Zoning Ordinance, similar changes pursued by other property owners in the Project area also would be subject to review of the merits and details of an individual project regarding whether approval of a policy change should occur. This means that if a project with a requested policy change similar to that of the Proposed Project were to be submitted to the County, approval of that project request would depend upon the details of that project and whether such project would merit approval of an amendment to such land use policy (or policies). Precedence does not typically apply. The Project site is zoned S90 – Holding Area. Rezoning this area to allow for the Proposed Project would not encourage rezoning in surrounding areas as there is already planned development on adjacent properties. Furthermore,

this is not a change in zoning, as much as a "clarification." The previous zones had been supplemented by residential zones and a zone designating the need for detail. This Project provides that detail. Therefore, proposed changes to the General Plan, Specific Plan, and Zoning Ordinance by the Proposed Project would not induce growth.

Table 1-1
PROPOSED LAND USES

Land Use	Approximate Gross Acreage Scenario 1/ Scenario 2	Maximum Square Footage Scenario 1/ Scenario 2	Density (Dwelling Units per Acre) Both Scenarios	Number of Dwelling Units Both Scenarios
Residential	12.4/12.4	--	20	248
General Commercial	52.4/54.8	503,500/513,000	--	--
Mixed-use Core (within General Commercial)	--	--	20	35
Limited Impact Industrial/Office	12.6/12.6	120,000/120,000	--	--
HOA-maintained Open Space	1.42/1.09	--	--	--
Biological Open Space	31.0/31.0	--	--	--
Right-of-Way	6.7/6.7	--	--	--
TOTAL	**116.5/118.6**	**--**	**2.5 (overall)**	**283**

Table 1-2
PROPOSED PLANT PALETTES

Botanical Name	Common Name
I. FUEL MODIFICATION ZONE - RIPARIAN AREAS	
Trees	
Acer macrophylla	big leaf maple
Alnus rhombifolia	white alder
Platanus racemosa	California sycamore
Populus fremontii	Fremont cottonwood
Populus trichocarpa	black cottonwood
Salix spp.	willow
Umbellularia californica	California laurel
Shrubs	
Baccharis pilularis	dwarf coyotebush
Mimulus guttatus	mimulus
Ribes speciosum	fuchsia-flowering gooseberry
Ribes viburnifolium	evergreen currant
Rosa californica	rose
Trees	
Acer macrophyllum	big leaf maple
Acer saccharinum	silver maple
Arbutus unedo	strawberry tree
Archontophoenix cunninghamiana	king palm
Brahea armata	blue Mexican palm
Brahea edulis	Guadalupe palm
Ceratonia siliqua	carob
Cercis occidentalis	western redbud
Lophostemon conferta	Brisbane box
Pistacia chinensis	Chinese pistache
Platanus acerifolia	London plane tree
Populus alba	white poplar
Prunus ilicifolia	hollyleaf cherry
Prunus lyonii	Catalina cherry
Quercus agrifolia	coast live oak
Quercus engelmannii	Engelmann oak
Rhus lancea	African sumac
Umbellularia californica	California bay laurel

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
I. FUEL MODIFICATION ZONE - RIPARIAN AREAS (cont.)	
Shrubs	
Agave shawii	NCN
Amorpha fruticosa	false indigobush
Arctostaphylos spp.	manzanita
Atriplex canescens	hoary saltbush
Baccharis pilularis twin peaks	dwarf coyote bush
Ceanothus spp.	California lilac
Cneoridium dumosum	bush rue
Comarostaphylis diversifolia	summer holly
Convolvulus cneorum	bush morning glory
Dalea attenuata v. orcuttii	Orcutt's delea
Encelia californica	coast sunflower
Encelia farinosa	white brittlebush
Eriophyllum confertiflorum	golden yarrow
Fremontodendron californicum	flannelbush
Fremontodendron mexicanum	southern flannelbush
Heteromeles arbutifolia	toyon
Malacothamnus clementinus	San Clemente Island bush mallow
Malacothamnus fasciculatus	mesa bushmallow
Photinia spp.	photinia
Quercus dumosa	scrub oak
Rhamus alaternus	Italian buckthorn
Rhamus californica	coffeeberry
Rhaphiolepis spp.	rhaphiolepis
Rhus ovata	sugarbush
Rhus trilobata	squawbush
Ribes speciosum	fushia flowering gooseberry
Rosa californica	California wild rose
Salvia spp. *(except mellifera)*	sage
Sambucus spp.	elderberry
Symphoricarpos mollis	creeping snowberry
Yucca schidigera	Mojave yucca
Yucca whipplei	foothill yucca

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
I. FUEL MODIFICATION ZONE - RIPARIAN AREAS (cont.)	
Groundcover, Perennials	
Lupinus spp. *nanus*	lupine
Achillea millefolium	yarrow
Arctostaphylos spp.	manzanita
Cotoneaster spp. *(except lacteus)*	redberry
Drosanthemum hispidum	rosea ice plant
Dudleya pulverulenta	chalk dudleya
Ferocactus viridescens	coast barrel cactus
Helianthemum spp.	sunrose
Lasthenia alifornica	common goldfields
Lupinus spp.	lupine
Santolina chamaecyparissus	lavender cotton
Santolina virens	santolina
Verbena rigida	verbena
Viguiera laciniata	San Diego sunflower
Vinca minor	dwarf periwinkle
Coreopsis gigantean	giant coreopsis
Coreopsis grandiflora	coreopsis
Coreopsis maritime	sea dahlia
Coreopsis verticillata	coreopsis
Heuchera maxima	island coral bells
Iris douglasiana	Douglas iris
Penstemon spp.	penstemon
Sisyrinchium bellum	blue-eyed grass
Sisyrinchium californicum	golden-eyed grass
Solanum xantii	purple nightshade
Zauschneria 'catalina'	Catalina fuschia
Zauschneria californica	California fuschia
Zauschneria cana	hoary California fuschia

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
II. PUBLIC STREETS	
Trees	
Arbutus marina	madrone
Brachychiton populneus	bottle tree
Calodendrum capense	cape chestnut
Cassia leptophylla	Gold medallion tree
Heteromeles arbutifolia	toyon
Jacaranda mimosifolia	jacaranda
Koelreuteria bipinnata	Chinese flame tree
Lagerstroemia indica	crape myrtle
Platanus acerifolia	London plane tree
Pyrus calleryana	pear
Quercus agrifolia	coast live oak
Quercus engelmannii	Engelmann oak
Ulmus parvifolia	Chinese elm
Shrubs	
Agapanthus spp.	lily-of-the-nile
Abelia x grandiflora prostrata	prostrate abelia
Agava spp.	agave
Bougainvillea spp.	bougainvillea
Callistemon cintrinus Little John	dwarf bottlebush
Dietes bicolor	fortnight lily
Echium fastuosum	pride of Madeira
Hibiscus spp.	hibiscus
Leptospermum spp.	tea tree
Leucophyllum langmaniae	Texas ranger
Ligustrum japonicum	Japanese privet
Nandina domestica	Gulf Stream nandina
Santolina chamaecyparissus	lavender cotton
Strelitzia reginae	bird of paradise

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
II. PUBLIC STREETS (cont.)	
Groundcover	
Anigozanthos spp.	kangaroo paw
Baccharis pilularis	coyote bush
Ceanothus spp.	wild lilac
Cerastium tomentosum	snow-in-summer
Coprosma kirkii	creeping coprosma
Dymondia margaretae	N.C.N.
Festuca glauca	blue bolder
Helianthemum spp.	sunrose
Iva hayesiana	hayes Iva
Myoporum pavifolium	prostrate myoporum
Verbena rigida	sandpaper verbena
Santolina spp.	green or grey santolina
III. SLOPES	
Trees	
Geijera parviflora	Australian willow
Lophostemon conferta	Brisbane box
Platanus racemosa	California sycamore
Quercus agrifolia	coast live oak
Rhus lancea	African sumac
Sambucus mexicana	elderberry
Shrubs	
Anigozanthos spp.	kangaroo paw
Arctostaphylos spp.	manzanita
Artemesia douglasiana	sagebrush
Artemesia palmeri	sagebrush
Baccharis pilularis twin peaks	dwarf coyote bush
Cistus spp.	rockrose
Dietes bicolor	fortnight lily
Heteromeles arbutifolia	toyon
Lantana montevidensis	lantana
Mimulus guttatus	monkey flower
Photinia fraseri	photinia
Pluchea purpurascens	arrowweed

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
III. SLOPES (cont.)	
Shrubs (cont.)	
Raphiolepis spp.	raphiolepis
Ribes speciosum	fuchsia-flowering gooseberry
Rosa californica	rose
Ribes viburnifolium	evergreen currant
Rubus ursinus	California blackberry
Salvia spp. *(except mellifera)*	sage
Tecomaria capensis	cape honeysuckle
Groundcover	
Cerastium tomentosum	snow-in-summer
Coprosma kirkii	creeping coprosma
Dymondia margaretae	N.C.N.
Helianthemum spp.	sunrose
Iva hayesiana	gayes Iva
Verbena rigida	sandpaper verbena
IV. DRAINAGE SWALES AND DETENTION BASINS	
Trees	
Geijera parviflora	Australian willow
Lophostemon conferta	Brisbane box
Platanus racemosa	California sycamore
Quercus agrifolia	California live oak
Rhus lancea	African sumac
Umbellularia californica	California bay laurel
Shrubs	
Arctostaphylos spp.	manzanita
Atriplex canescens	saltbush
Carex spissa	San Diego sedge
Cistus spp.	rockrose

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
IV. DRAINAGE SWALES AND DETENTION BASINS (cont.)	
Shrubs (cont.)	
Heteromeles arbutifolia	toyon
Mahonia spp.	mahonia
Leptospermum scoparium	New Zealand tea tree
Raphiolepis spp.	raphiolepis
Photinia fraseri	photinia
Rhus spp.	sumac
Salvia spp. *(except mellifera)*	sage
Sambucus mexicana	Mexican elderberry
Tecomaria capensis	cape honeysuckle
Groundcover	
Baccharis pilularis	coyote bush
Ceanothus spp.	California lilac
Lantana montevidensis	lantana
Lasthenia glabrata	goldfields
Lotus scoparius	deerweed
V. PARKING LOTS	
Shade Trees	
Albizia julibrissin	silk tree
Arbutus marina	strawberry tree
Brachychiton populneus	bottle tree
Calodendrum capense	cape chestnut
Cassia leptophylla	gold medallion tree
Gingko biloba 'fairmount'	maidenhair tree
Jacaranda mimosifolia	jacaranda
Koelreuteria bipinnata	Chinese flame tree/Chinese golden rain tree
Lophostemon conferta	Brisbane box
Pistachia chinensis	Chinese pistache
Platanus acerifolia	London plane tree
Platanus racemosa	California sycamore
Quercus agrifolia	coast live oak
Tipuana tipu	tipu tree
Rhus lancea	African sumac
Ulmus parvifolia	Chinese elm

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
V. PARKING LOTS (cont.)	
Screen Shrubs/Hedges	
Altriplex canescens	saltbush
Baccharis piluaris twin peaks	Dwarf coyote bush
Buxus harlandi	boxwood
Buxus microphylla	boxwood
Escallonia spp.	escallonia
Ligustrum japonicum	ligustrum
Melaleuca ericifolia	honey myrtle
Melaleuca gibosum	honey myrtle
Pittosporum spp.	pittosporum
Prunus ilicifolia	California laurel cherry
Rhamus alaternus	blackthorn
Rhamus californica	blackthorn
Rhaphiolepis indica	Indian hawthorn
Rhaphiolepis ovata	Hawthorn
Rhaphiolepis umbellate	yeddo hawthorn
Rhus laurina	lemonade berry
Rhus lentii	laurel sumac
Ribes viburnifolium	squawbush
Teucorium fruticans	bush germander
Xylosma congestum	shiny xylosma
VI. MIXED-USE CORE CENTRAL DRIVE AISLE/TRADITIONAL MAIN STREET AND PROJECT ENTRIES	
Accent Trees	
Arbutus marina	madrone
Brachychiton populneus	bottle tree
Calodendrum capense	cape chestnut
Cassia leptophylla	gold medallion tree
Eriobotrya Biloba 'Fairmount'	maidenhair tree
Hymenosporum flavum	sweetshade
Jacaranda mimosifolia	jacaranda
Koelreuteria bipinnata	Chinese flame tree/Chinese golden rain tree
Pistaachia chinensis	Chinese pistache
Rhus lancea	African sumac
Spathodea campanulata	African tulip

Table 1-2 (cont.)
PROPOSED PLANT PALETTES

Botanical Name	Common Name
VI. MIXED-USE CORE CENTRAL DRIVE AISLE/TRADITIONAL MAIN STREET AND PROJECT ENTRIES (cont.)	
Ornamental Shrubs	
Abelia 'Edward Goucher'	glossy abelia
Aeonium arboretum atropurpureum	purple aeonium
Anigozanthos 'Bush Blaze'	'bush blaze' kangaroo paw
Kalanchoe 'Fantastic'	kalanchoe
Buxus microphylla	boxwood
Callistemon 'Little John'	dwarf callistemon
Ceanothus g. *horizontalis Yankee Point*	yankee point Carmel creeper
Calliandra haematocephala	pink powder puff
Dietes vegeta	fortnight lily
Escallonia spp.	escallonia
Grewia caffera	starflower grewia
Lavendula angustifolia	French lavender
Leucophylum frutescens	Texas ranger
Ligustrum japonicum	ligustrum
Muhlenbergia rigens	deergrass
Nandina domestica 'Gulf Stream'	dwarf heavenly bamboo
Phormium tenax 'Pink Stripe'	'pink stripe'
Pittosporum Tobira	mock orange
Rhaphiolepis 'Pink Lady'	rhaphiolepis 'pink lady'
Salvia clevelandii	N.C.N.
Santolina chamaecyparissus	lavender cotton
Strelitzia juncea	narrow leaf bird of paradise
Teucorium fruticans	bush germander
Xylosma congestum	shiney xylosma
Cotoneaster Low Fast	low fast cotoneaster
Gazania Hybrid sp.	gazania
Lantana montevidensis	purple lantana
Rosmarinus 'Collingwood'	rosemary
Trachelospermum jasminoides	star jasmine
Senecio serpens	blue chalksticks

Table 1-3
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Aesthetics – Construction

- Native topsoil stockpiles will not be greater than six feet high and will be re-spread following completion of construction activities.

Aesthetics – Operation

- High solid walls located along public streets will be minimized. Where scenic views are available, transparent panels may be evaluated as an alternative method of attenuating unwanted sound.
- Where cost and space permit, the installation of berms in conjunction with landscaping would be preferred for noise attenuation.
- All walls and fences over three feet in height facing a public street will provide a fully landscaped buffer at least five feet deep at plant maturity between the street and wall or fence.
- Where safety fencing is required for a dual use detention/play area that will be visible from a street or common area, rural character wood fencing would be allowed.
- No loading areas in mixed use areas will be permitted between a building front and the central parking bay, Pankey Road, or internal streets.
- All trash dumpsters/compactors/receptacles within mixed use areas will be screened (by buildings or screen walls) if they would otherwise be visible from a street or common area. Mechanical units also will be screened.
- Screen walls will be compatible with building architecture and exterior wall materials, and also will be landscaped with a minimum hedge row with a height of three to six feet at maturity.
- Extensive flat roofs will be avoided. When flat roofs are necessary in large commercial and industrial buildings, they will incorporate shed roofs, trellises, loggias, changes in parapet height, turrets and towers, and architectural embellishments.
- Roof-top equipment would be screened from view from adjacent roads, properties, and pedestrian areas in PAs 2, 3, 4 and 5. This equipment is expected to include HVAC, etc. In the area north of Pala Mesa Drive, where shielding of routine roof equipment may not be possible, equipment would be organized in an orderly, uncluttered fashion and painted to match the roof color. Rooftop equipment screening would be identified on site plans.
- To ensure consistency in format and content of signs, a comprehensive sign package will be developed and submitted to PDS as part of the site plan application.
- Prohibited signage includes: roof and parapet signs, light box signs (rectangular plastic signs that are intentionally illuminated), pole signs greater than six feet in height, portable or mobile signs, and signs that cover or interrupt architectural features.

Air Quality – Construction

- The entire construction fleet will be required to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters, and/or California Air Resources Board (CARB)-certified Tier 4 equipment.
- Low volatile organic compound (VOC) coatings will be utilized in accordance with SDAPCD Rule 67.0 requirements.
- A minimum of three applications of water will be applied during grading between dozer/scraper passes, as necessary. Additional watering or acceptable non-toxic SDAPCD dust control agents will be applied during dry weather or windy days until dust emissions are not visible.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Air Quality – Construction (cont.)

- Dirt storage piles will be enclosed, covered, watered three times daily, if necessary, or stabilized by chemical binders, tarps, fencing or other non-toxic erosion control according to manufacturers' specification.
- A 15-mile per hour (mph) speed limit will be enforced on unpaved surfaces.
- On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.
- Haul trucks hauling dirt, sand, soil, or other loose materials will be covered or two feet of freeboard will be maintained.
- When active construction ceases on the site, disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the County and/or SDAPCD to reduce dust generation.
- After completion of grading, internal roadways will be paved, chip sealed, or chemically stabilized.
- Sweepers or water trucks will be used to remove "track-out" at any point of public street access.
- Grading will be suspended if winds exceed 25 mph or if visible dust plumes emanate from a site; disturbed areas will be stabilized if construction is delayed.
- In accordance with the SDAPCD Rule 55 - Fugitive Dust Control, no dust and/or dirt will leave the property line. The following measures would be implemented to ensure the requirements of this rule are met:
  - Airborne Dust Beyond the Property Line: No person will engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
  - Track-out/Carry-out: Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out will be:
    (i) Minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the Project or operation:
      (a) Track-out grates or gravel beds at each egress point
      (b) Wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks
      (c) Secured tarps or cargo covering, watering, or treating of transported material
    (ii) Removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only particulate matter smaller than 10 microns in diameter (PM_{10})-efficient street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements will be used. The use of blowers for removal of track-out/carry-out will be prohibited under any circumstances.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Air Quality – Operation

- The Project has been designed with a balance of uses including residential, commercial, limited industrial, and open space within close proximity (0.25-mile) to encourage walking and other non-automobile modes of transport between uses and to minimize external (off-site) trips by including local opportunities for employment and shopping for goods and services.
- The Project site will maximize access to transit lines to accommodate bus travel, and to provide lighted shelters at transit access points.
- Streets have been designed to maximize pedestrian access to transit stops.
- The landscape plan includes trees that provide shading of buildings and parking lots, and includes native drought-resistant plants (ground covers, shrubs and trees).
- The Project will be designed to meet or exceed current Title 24 energy efficiency standards.
- Flat roofs on non-residential structures will include a white or silver cap sheet to reduce energy demand.
- Building design will include roof anchors and pre-wiring to allow for the installation of photovoltaic systems and/or participate in SDG&E incentive programs for energy efficient development where feasible.
- Preferential parking for carpools will be included to accommodate carpools and vanpools in employment areas (e.g. commercial, business-professional uses).
- Bike racks will be provided throughout the development.
- All truck loading and unloading docks will be equipped with one 110/208 volt power outlets for every two-dock doors. Signs will be posted stating "Diesel trucks are prohibited from idling more than five minutes and trucks requiring auxiliary power shall connect to the 110/208-volt outlets to run auxiliary equipment."
- Electrical outlets will be installed on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment. Installation of a gas outlet in the rear of residential buildings will be required for the use of outdoor cooking appliances, such as gas burning barbeques.
- Installation of low nitrogen oxide (NOx) hot water heaters will be required for residences.
- Notices will be provided to homebuyers of incentive and rebate programs available through SDG&E or other providers that encourage the purchase of electric landscape maintenance equipment.
- Only natural-gas fireplaces will be permitted in residential uses.
- Two conductive/inductive electric vehicle charging stations will be provided in a commercial land use space. Signage prohibiting parking for non-electric vehicles in the designated parking spaces will be installed.
- Chemical feed addition at the pump station will be included to minimize odors. A back-up chemical injection system will be included for redundancy.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Biological Resources – Construction

- Brushing, clearing, and grading activities will not be permitted during the avian breeding season (February 15 through August 31).
- Native topsoil (top three to five inches) will be salvaged and stockpiled within a disturbed on-site location. Stockpiles will not be greater than six feet high and will not be mixed with other excavated materials. Following completion of construction activities, stockpiled native topsoil will be re-spread as applicable.
- Dirt storage piles will be stabilized by chemical binders, tarps, fencing or other erosion control.
- Temporary protective fencing will be used to keep construction equipment and people out of sensitive habitats that are not proposed to be graded.
- Grading will be terminated if winds exceed 25 mph.
- The Project will comply with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions.
- Project landscaping will include native vegetation and drought tolerant plant materials.
- Storm water and non-storm water flows will be properly managed to minimize runoff.
- Erosion control/stabilizing measures, such as geotextiles, mats, plastic sheets/tarps, fiber rolls, soil binders, or temporary hydroseeding (or other plantings) established prior to October 1 in appropriate areas (e.g., disturbed areas and graded slopes), will be used.
- Sediment controls will be used to protect the construction site perimeter and prevent off-site sediment transport, including measures such as temporary inlet filters, silt fence, fiber rolls, gravel bags, temporary sediment basins, check dams, street sweeping/vacuuming, energy dissipators, stabilized construction access points/sediment stockpiles, and properly fitted covers for sediment transport vehicles.

Biological Resources – Operation

- The proposed storm drain system will accommodate peak 100-year storm flows and be designed so that off-site flows from the west do not comingle with on-site flows (except for drainage from the northernmost Caltrans storm drain tributary to the site).
- Appropriate energy dissipation facilities (e.g., riprap aprons) will be used at the proposed discharge locations.
- The Project will replace the North Pankey Bridge and realign/raise applicable portions of Pankey Road, as well as raise applicable graded pad elevations such that all proposed roadways, bridges, and graded pads will be located outside of the mapped Horse Ranch Creek and San Luis Rey River 100-year floodplains.
- Lighting will be shielded to minimize light impacts to adjacent riparian and other sensitive habitats and no buildings will be allowed within limited building zones.
- The Project will provide a 25- to 100-foot buffer between riparian areas and proposed development.
- Biological open space areas will be fenced off from the proposed development.
- Signage will be placed along the edge of the biological open space area to deter human incursion.
- Open space areas will be preserved within an easement and will be subject to a Resource Management Plan (RMP).
- The amount of hazardous materials used and stored on site will be minimized, and storage/use locations will be restricted to areas at least 50 feet from storm drains and surface waters.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Transportation/Traffic – Construction

- The Proposed Project will include the preparation and approval of a Traffic Control Plan (TCP), including measures to reduce traffic delays and minimize public safety impacts, such as the use of flagpersons, traffic cones, detours and advanced notification signage, pedestrian/equestrian detours, movement restrictions, and temporary lane closures. In addition, the construction contractor will provide a means for public liaison/contact information for public inquiries and concerns.
- Grading will be balanced on site, with no import, and potential export restricted to oversized rock transfer to Granite Construction, approximately 0.3 mile east of the Project.
- Pankey Road's intersections with Pala Mesa Drive, SR-76, and Shearer Crossing will be signalized under Existing Plus Project conditions.

Transportation/Traffic – Operation

- Bicycle spaces shall conform to the standards provided within the County Zoning Ordinance Sections 6758-6783, 6787, and 6792.

Climate Change – Operation

- The Proposed Project will be designed in accordance with the Building Industry Association's California Green Builder (CGB) program.
- The Project will exceed the current 2008 California Energy Code's residential and non-residential efficiency standards by 15 percent through improved HVAC systems and duct seals; enhanced ceiling, attic and wall insulation; Energy Star appliances; high-efficiency water heaters; energy-efficient three-coast stucco exteriors; energy-efficient lighting; and high efficiency window glazing.
- The Project will reduce the overall use of potable water within each home by 20 percent by including advanced plumbing systems, such as parallel hot water piping or hot water recirculation systems, and fixtures such as low flow toilets, water-saving showerheads and kitchen faucets, and buyer-optional high-efficiency clothes washers.
- The Project's outdoor landscaping plan will minimize turf, maximize drought-tolerant plants, and incorporate weather-based irrigation controllers, multi-programmable irrigation clocks, and high-efficiency drip irrigation systems. At the time of final inspection, a manual shall be placed in each building that includes, among other things, information about water conservation.
- In accordance with CalGreen criteria and state and local laws, at least 50 percent of on-site construction waste and ongoing operational waste will be diverted from landfills through reuse and recycling. To further minimize waste, the Project will incorporate recycled materials for flooring, and certified sustainable wood products and other recycled or rapidly renewable building materials where possible. Areas for storage and collection of recyclables and yard waste would be provided for each residence
- To maximize shade and reduce heat island effects, the landscape plan will include strategic location of deciduous trees and other vegetation. Impervious surfaces, including paved parking areas, will also be minimized and pervious pavers used instead where practical.
- No CFC-based refrigerants will be used, and interior finishes, adhesives, sealants, paints and coatings, and carpet systems will be low in VOCs, and meet the testing and product requirements of one or more nationally recognized green product labeling programs. Compliance with these requirements of the CGB program shall be verified through documentation.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Geologic Hazards – Construction

- Project grading, excavation and construction activities (including all on- and off-site areas) will be subject to on-the-ground geotechnical observations and testing by the Project Geotechnical Engineer to verify or (if applicable) modify the design measures and recommendations identified in the Project geotechnical investigations, based on site-specific conditions.
- The Project design will incorporate measures to accommodate projected seismic loading pursuant to recommendations in the Project geotechnical investigations and the on-the-ground observations/testing noted above, as well as applicable seismic elements of the International Buildings Code (IBC) and County Building Code. Specifically, such measures will include incorporating the recommended peak ground acceleration levels, as well as parameters related to subsurface profile types, acceleration and velocity coefficients, seismic zone, and seismic source (including type and distance).
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard measures will be implemented to reduce the potential for liquefaction and related effects in applicable areas, including efforts such as removal/replacement of unsaturated soils, vibro-compaction of saturated materials, deep soil mixing (i.e., introducing cement to consolidate loose soils), and the use of stone or sand columns and/or vibro-replacement/densification techniques.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, if expansive soils are determined to be present on the Project site or at the locations of off-site facilities in areas that could pose a risk to life or structures, standard measures will be implemented to address related potential impacts. Specifically, this may include efforts such as burial in deeper fills, use of stiffer slab/foundation design, presaturation, overexcavation, or other IBC-recommended measures.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard measures will be implemented to address potential impacts related to compression and settlement in potentially susceptible areas including fill, topsoil/colluvium, alluvium and weathered terrace deposits. Depending on site-specific conditions, this may include removal and recompaction or replacement of compressible deposits with engineered fill, and/or placement of settlement monuments and related monitoring in applicable areas after completion of Project grading and prior to construction of proposed improvements. Monitoring of the settlement monuments will be conducted to verify when settlement ceases or is no longer a hazard to Project facilities, with 13 preliminary settlement monument locations identified in areas of substantial alluvial deposits (Figure 3.1.2-1, Geologic Map). Associated monitoring is anticipated to extend over a period of approximately three to six months, and could potentially extend up to one year locally. Once it is determined that significant settlement is no longer occurring in the monitored areas, proposed construction of Project improvements will be allowed to commence.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, the proposed Pankey Road bridge foundation design (consisting of driven piles or cast-in-drilled-holes) would be verified or modified as necessary to ensure conformance with all applicable regulatory requirements and industry standards.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, applicable standard measures will be implemented to address the potential generation and use/disposal of oversize materials, including efforts such as selective disposal (e.g., burial in deeper fills), use in landscaping/decorative efforts or off-site disposal.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Geologic Hazards – Construction (cont.)

- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard industry measures will be implemented to address potential effects from corrosive soils, including efforts such as: (1) removal of unsuitable deposits and replacement with non-corrosive fill; (2) use of corrosion-resistant construction materials (e.g., coated or non-metallic facilities); and (3) installation of cathodic protection devices (e.g., use of a more easily corroded "sacrificial metal" to serve as an anode and draw current away from the structure to be protected).

Hazards and Hazardous Waste – Construction

- The RC Flyers Club is being notified to either repair the tractor so that it is not leaking oil or remove it from the premises as a matter of Project design.
- Upon removal of storage containers from the Project site, areas beneath the containers will be inspected for hydrocarbon stained or odorous soils. If such soils are discovered, they will be removed in accordance with standard procedures as part of Project design.
- If proposed grading at the residential site (corresponding to Boring B-4) requires a cut of two feet or more, the applicant or successors in assigns shall perform further testing to determine the contamination of Dieldrin. If soil removal is required based on the results of testing, it shall be completed in accordance with U.S. Environmental Protection Agency (USEPA) and/or California Department of Toxic Substances Control (DTSC) standards.

Hazards and Hazardous Waste – Operations

- A minimum of 100 feet of fuel treatment will be placed around all structures that abut flammable native vegetation located north and east of the Project. The first 50 feet from a structure will be landscaped and irrigated, with an additional 50 feet of fuel treatment (non-irrigated thinning zone). On the west and south sides of the project, 75 feet of fuel treatment will provide fire protection and reduce the fire threat to less than significant levels.
- A 6-foot high and approximately 2,300-foot long fire wall would be located on the southernmost developable portion of PA 2 and an approximately 450-foot long wall would be located on the northern boundary of PA 5. Both barriers would be of non-combustible solid wood and or tempered glass (also non-combustible and solid).
- All newly constructed structures will be built to "Enhanced" building requirements, as specified in the Fire Protection Plan (FPP). The installation of automatic interior sprinkler systems (National Fire Protection Association – NFPA Standard 13R – Standard for the Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height) will be required. Tempered glass will be used in at least one panel of all windows and openings in the outer walls.
- Per the Fire Code Amendments of January 28, 2008, all buildings and structures will be set back a minimum of 30 feet from the property line unless the County Zoning Ordinance requires a greater minimum. When the property line abuts a roadway, the setback will be measured from the centerline of the roadway. All buildings located along the western project boundary will be set back from the boundary a minimum of 75 feet to allow space for fuel treatment as discussed above. All buildings will be located outside of fuel treatment zones.
- Additional features include minimum street widths and turning radii for streets and cul-de-sacs, all-weather road paving capable of supporting fire apparatus, fire access roadways throughout the development free of speed control devices, clear street signs and marking, a lighted directory map at each driveway entrance, minimum setbacks if gates are proposed, and a continuous water supply.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hazards and Hazardous Waste – Operations (cont.)

- Buildings will be no more than 35 feet in height above grade, unless otherwise approved by NCFPD. Architectural projections may extend above 35 foot height requirement, subject to NCFPD review and approval. Unless NCFPD acquires upgraded facilities/equipment or otherwise determines greater heights may be safely allowed, residential structures with pitched roofs are limited to a top of fascia height of 24 feet and a topmost ridgeline of 35 feet and non-residential buildings with flat roofs over 24 feet will require an exterior ladder at that point in order to reach the roof.
- If fencing will be located within a brush management zone, the appearance may remain rustic, but materials will be non-combustible and require a minimum one-hour fire resistance rating, such as wood treated with a fire-retardant coating or Class A fire-rated composite or treated wood.
- Site furnishings in brush management zones will be fire resistant or fire proof.
- Only plant species listed in the County of San Diego PDS Approved Plant List will be used. Other recommended plant species meeting the criteria for fire resistive plant characteristic may be planted within any fuel treatment zone only after these plants have been certified by the Project Applicant's landscape architect and fire consultant in conjunction with the North County Fire Protection District (NCFPD) Fire Marshal
- Each lot owner will be individually responsible for fuel treatment on property lots, including all measures included in the FPP. Property owners will be members of a legally constituted HOA, which will support the maintenance of common areas (including roadsides) in perpetuity. Refer to the FPP (Appendix K) for specific requirements for the ongoing fuel modification maintenance

Hydrology/Water Quality – Construction

Erosion/Sedimentation

- The Project will comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) during all grading and land-disturbance activities. This includes preparation of a Construction Site Monitoring Plan (CSMP), a Risk Assessment to determine the Project's Risk Level (1, 2 or 3), and appropriate Risk Level Requirements as outlined in the Construction General Permit. Prior to land disturbance activities, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared by a qualified SWPPP preparer, with this plan to be located on site at all times.
- If the site is determined to be a Risk Level 2 or 3 site, a Rain Event Action Plan (REAP) will be prepared and implemented 48 hours prior to any likely precipitation event (50 percent or greater probability of producing precipitation in the Project area). The REAP shall be prepared for all phases of construction and implemented for construction activities to provide enhanced erosion and sediment control measures during predicted storm events.
- The Project will comply with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions.
- Existing vegetation will be preserved wherever feasible, and phased grading schedules will be used to limit the area subject to erosion at any given time.
- Storm water and non-storm water flows will be properly managed to minimize runoff.
- Erosion control/stabilizing measures, such as geotextiles, mulching, mats, plastic sheets/tarps, fiber rolls, soil binders, compost blankets, soil roughening, and/or temporary hydroseeding (or other plantings) in appropriate areas (e.g., disturbed areas and graded slopes), will be used.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hydrology/Water Quality – Construction (cont.)

Erosion/Sedimentation (cont.)

- Sediment controls will be used to protect the construction site perimeter and prevent off-site sediment transport, including measures such as temporary inlet filters, silt fence, fiber rolls, silt dikes, biofilter bags, gravel bag berms, compost bags/berms, temporary sediment basins, check dams, street sweeping/vacuuming, ATS (if applicable based on risk assessment), energy dissipators, stabilized construction access points/sediment stockpiles, and properly fitted covers for sediment transport vehicles.
- BMP materials will be stored in applicable on-site areas to provide "standby" capacity adequate to provide complete protection of exposed areas and prevent off-site sediment transport.
- Full erosion control will be provided in disturbed areas not scheduled for additional activity for 14 or more consecutive calendar days.
- Appropriate training will be provided for the personnel responsible for BMP installation and maintenance.
- Solid waste management efforts, such as proper containment and disposal of construction debris, will be used.
- The Project will comply with local dust control requirements.
- Permanent landscaping, with emphasis on native and/or drought-tolerant varieties, will be installed as soon as feasible after construction.
- Appropriate monitoring and maintenance efforts (e.g., prior to and after storm events) will be implemented to ensure proper BMP function and efficiency.
- Monitoring/reporting and post-construction management programs will be implemented per NPDES and/or County requirements.
- Additional BMPs as necessary will be implemented to ensure adequate erosion and sediment control (e.g., enhanced treatment and more detailed monitoring/reporting).
- The Project will implement sampling/analysis, monitoring/reporting and post-construction management programs per NPDES and/or County requirements.
- The Project will implement additional BMPs as necessary to ensure adequate erosion and sediment control (e.g., enhanced treatment and more detailed monitoring/reporting.)

Hazardous Materials

- The amount of hazardous materials used and stored on site will be minimized, and use/storage locations will be restricted to areas at least 50 feet from storm drains and surface waters.
- Raised (e.g., on pallets), covered, and/or enclosed storage facilities will be used for all hazardous materials.
- Accurate and up-to-date written inventories and labels will be maintained for all stored hazardous materials.
- Berms, ditches, and/or impervious liners (or other applicable methods) will be used in material storage and vehicle/equipment maintenance and fueling areas to provide a containment volume of 1.5 times the volume of stored/used materials and prevent discharge in the event of a spill.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hydrology/Water Quality – Construction (cont.)

Hazardous Materials (cont.)

- Warning signs will be placed in areas of hazardous material use or storage and along drainages and storm drains (or other appropriate locations) to avoid inadvertent hazardous material disposal.
- All construction equipment and vehicles will be properly maintained.
- Paving operations will be restricted during wet weather, appropriate sediment control devices/methods will be used downstream of paving activities, and wastes and/or slurry from sources including concrete, dry wall and paint will be contained or disposed of by using properly designed and contained washout areas.
- Training for applicable employees will be provided in the proper use, handling and disposal of hazardous materials, as well as appropriate action to take in the event of a spill.
- Absorbent and clean-up materials will be stored in readily accessible on-site locations.
- Portable wastewater facilities will be properly located, maintained, and contained.
- Solid waste management efforts such as proper containment and disposal of construction debris, and restricting construction debris storage areas to appropriate locations at least 50 feet from storm drain inlets and water courses will be implemented.
- A licensed waste disposal operator will be employed to regularly (at least weekly) remove and dispose of construction debris at an authorized off-site location.
- Recycled or less hazardous materials will be used, wherever feasible.
- Regulatory agency telephone numbers and a summary guide of clean-up procedures will be posted in a conspicuous on-site location.
- Hazardous material use/storage facilities and operations will be regularly (at least weekly) monitored and maintained to ensure proper working order.
- Additional BMPs will be implemented as necessary (and in conformance with applicable requirements) to ensure adequate hazardous material control

Demolition-related Debris Generation

- Appropriate (i.e., non-hazardous) construction debris will be recycled for on- or off-site use whenever feasible.
- Dust-control measures such as watering to reduce particulate generation will be used for pertinent locations/activities (e.g., concrete removal).
- Appropriate erosion prevention and sediment control measures will be used downstream of all demolition activities.
- The Project will conform with applicable requirements related to the removal, handling, transport and disposal of hazardous materials generated during demolition, including efforts such as implementing appropriate sampling and monitoring procedures; proper containment of contaminated materials during construction; providing protective gear for workers handling contaminated materials; ensuring acceptable exposure levels; and ensuring safe and appropriate handling, transport and disposal of hazardous materials generated during Project construction.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hydrology/Water Quality – Construction (cont.)

Disposal of Extracted Groundwater

- Dewatering operations conducted during Project construction, if required, will conform with all applicable treatment and disposal requirements under the NPDES General Permit for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region Except for San Diego Bay (Groundwater Permit). This may include standard measures such as: (1) using appropriate erosion and sediment controls in applicable areas/conditions (e.g., disposal of extracted groundwater on slopes or graded areas); (2) testing extracted groundwater for appropriate contaminants prior to discharge; and (3) treating extracted groundwater prior to discharge, if required, to provide conformance with applicable Groundwater Permit discharge criteria, through methods such as filtration, aeration, adsorption, disinfection, and/or conveyance to a municipal wastewater treatment plant.

Hydrology/Water Quality – Operation

Runoff Rates/Amounts

- The proposed storm drain system will accommodate peak 100-year storm flows and be designed so that off-site flows from the west do not comingle with on-site flows (except for minor drainage from the northernmost Caltrans storm drain tributary to the site).
- Appropriate energy dissipation facilities (e.g., riprap aprons) will be used at the proposed discharge locations.

Hydromodification

- The Project design will include four appropriately located and sized detention basins to address post-development flows and provide conformance with County of San Diego Final Hydromodification management Plan, pursuant to recommendations in the Project Preliminary Hydromodification Management Study.

Floodplains/Flooding

- The Project will replace the North Pankey Bridge and realign/raise applicable portions of Pankey Road, as well as raise applicable graded pad elevations such that all proposed roadways, bridges, and graded pads will be located outside of the mapped Horse Ranch Creek and San Luis Rey River 100-year floodplains.

Water Quality

- Low Impact Development (LID) Site Design BMPs
  - Well-draining (Type A and B) soils, significant trees, critical areas (e.g., floodplains and steeper slopes), and areas near drainages will be preserved wherever feasible to provide natural buffer zones.
  - Appropriate set-backs from drainages will be provided for development envelopes, and construction equipment access will be restricted in planned green/open space areas.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hydrology/Water Quality – Operation (cont.)

Water Quality (cont.)

- Clustered lot designs will be used and landscaping will be provided in applicable paved areas such as parking lots.
- Curb cuts will be provided to drain applicable areas to landscaping.
- Pitched and/or permeable pavement will be used in appropriate areas to drain impervious surfaces to landscaping.
- Downspouts and cisterns/rain barrels will be provided to direct drainage into vegetated areas where deemed appropriate.
- Appropriate soil amendments will be used, native soils will be reused, 'smart' irrigation systems (e.g., appropriate water schedules and rain/pressure-sensitive shutoff devices) and appropriate landscaping, including street trees, will be installed.

- Source Control BMPs
  - "No dumping" stencils/tiles and/or signs with prohibitive language (per current County guidelines) will be installed at applicable locations such as drainages, storm drain inlets, catch basins and public access points to discourage illegal dumping.
  - Outdoor material storage areas, food service facilities, water features, loading docks, maintenance bays, vehicle/equipment wash areas, outdoor processing areas, and non-retail fueling areas (if proposed) will be designed to reduce pollutant discharge through methods such as: (1) providing appropriate storage facilities for hazardous materials (e.g., cabinets, sheds or similar structures that prevent runoff contact and discharge to storm drains); (2) providing appropriate on-site pre-treatment and/or directing flows to the sanitary sewer; (3) installing impermeable floors, covers and secondary containment structures such as berms, dikes, or curbs; and (4) using pavement grades, containment or other appropriate measures to prevent run-on.
  - Trash storage areas will be designed to reduce pollutant discharge through methods such as paving with impervious surfaces, precluding run-on, installing screens or walls to prevent trash dispersal, providing attached lids and/or roofs for trash containers to prevent direct precipitation contact, and providing pre-treatment prior to discharge of associated runoff to the sanitary sewer.
  - Regular street sweeping will be implemented in areas such as plazas, sidewalks and parking lots; and associated debris and washwater will be precluded from entering the storm drain system.
  - Site landscaping will be designed to maximize the use of appropriate native and/or drought-tolerant varieties, and use efficient irrigation systems as described above for Site Design and LID BMPs.
  - Drainage from private roadways will be directed into water quality basins or other appropriate treatment control BMP.
  - Whenever feasible, driveways will be designed to include shared access, flared lanes (i.e., a single lane at the street), wheelstrips (i.e., pavement only under tires), and/or drainage to landscaped areas prior to entering the storm drain system.
  - Landscaping will be incorporated into parking area drainage systems, wherever applicable.
  - Manufactured or disturbed slopes will be revegetated/stabilized as soon as is feasible, and appropriate drainage structures will be used to preclude concentrated flows on slopes.

Table 1-3 (cont.)
ADDITIONAL ENVIRONMENTAL DESIGN CONSIDERATIONS

Hydrology/Water Quality – Operation (cont.)

Water Quality (cont.)

- Source Control BMPs (cont.)
  - Pet waste disposal bags and related educational materials will be provided at trail heads, open space corridors, or other applicable locations to encourage clean-up efforts.
  - Applications of chemical pesticides, herbicides and fertilizers will be minimized; licensed professionals will be used for application of such chemicals in common landscaped areas; the rates and times of fertilizer applications will be restricted to minimize potential discharge in irrigation or precipitation runoff; and native landscaping will be used to reduce fertilizer use
  - An educational program will be implemented for home and business owners/tenants to prevent illegal or inadvertent pollutant discharge, including the distribution of materials regarding dry-clean methods, protection of storm drain inlets, prevention/proper disposal of pet wastes, proper handling/disposal of hazardous wastes, water conservation, swimming pool chemical use/maintenance, integrated pest management (IPM) methods, employee training, secondary containment, minimizing hazardous material use, proper clean-up procedures, street and parking lot sweeping, and proper collection/disposal of wash water.

- LID and Treatment Control BMPs
  - Water quality basins or BMPs of equivalent effectiveness (e.g., underground storage devices, mechanical control devices, etc.), will be used to treat runoff from most of the site prior to discharge, Attachment C of the Project Storm Water Management Plan [SWMP] in Appendix M).
  - Media filters will be used to treat Project runoff from applicable areas not covered by the described water quality basins. Specifically, this includes areas around the proposed intersection of SR-76/Pankey Road, with a series of curb inlets proposed to direct associated flows to the filters prior to discharge into the Project storm drain system (refer to Attachment C of the Project SWMP In Appendix M).
  - A baffle separator (or equivalent device) will be used to treat runoff from Shearer Crossing and the proposed commercial development south of SR-76. In addition, one or more supplemental treatment devices will also be required in the commercial areas to ensure regulatory conformance, potentially including media filters, biofilters, vegetated swales, bioretention facilities, and/or infiltration devices as outlined in the Project SWMP. The specific types and locations of these additional BMPs will be determined after completion of preliminary site design for the noted commercial areas.
  - Monitoring and maintenance efforts for the water quality basins will be implemented by the Project owner(s) through entering into a written BMP Maintenance Agreement with the County. Specific monitoring and maintenance efforts associated with proposed BMP facilities and programs include monitoring and reporting to document that programs/activities are being implemented as designed, inspection and maintenance of physical facilities, and making necessary modifications to ensure that intended BMP functions and regulatory requirements are being met.

Table 1-4
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
1	TM 5354 SP 0401 GPA 04-02 R 04-04 S 04-007	Meadowood Specific Plan	Just north of SR-76, 0.25 mile east of I-15, adjacent to Campus Park Project	390	Residential development, including: 355 SFR and 489 MFR with densities from 3.5 to 19.9 du/ac with designation of a site for a future elementary school (or up to 886 DUs without a school), 6 private parks, 4 miles of trails, community facilities and infrastructure, 125.3 acres of open space, and 56.8 acres of active agriculture (citrus groves, using groundwater).
2	SPA 03-008 GPA 03-004 R 03-014 VTM 5338 RPL[6] S 07-030 S 07-031	Campus Park	Northeast quadrant of I-15 and SR-76, adjacent to Campus Park West Project	416.1	Mixed-use development including 521 SFR, 230 MFR, 61,200 s.f. commercial, 157,000 s.f. office professional, active sports park, 6 neighborhood parks, and up to 197 acres of biological open space.
3	TM 5187 RPL[11] SPA 99-005 MUP 99-020 REZ 99-020 MUP/REZ 04-024	Pala Mesa Highlands	West of Old Highway 395 between Pala Mesa Drive and Via Belamonte	84.6	Maximum of 130 SFR. Density 1.6 du/ac. Lot sizes vary from 5,500 to 23,500 s.f., two parks totaling 4.3 acres, trails, 36.5 acres of open space. SPA to allow clustering.
4	TM 4729	Tedder TM	South side of Pala Mesa Drive, west of I-15, and east of Daisy Lane	29.5	Split lot into 13 SFR lots, ranging in size from 1.0 to 6.43 net acres.
5	TPM 20830	Hukari Subdivision	Northern terminus of Mountain View Road and West Lilac Road on west side of Bonsall	30	Minor residential subdivision with road improvements. 4 SFR lots plus 1 remainder lot (3.4 to 7.7 net acres each).
6	TM 5532 S 07-012	Frulla-Fallbrook Ranch	East of Old Highway 395 and Sterling View Drive (at Mission Road), Fallbrook	NA	11 SFR lots.
7	MUP 03-127	Los Willows Inn and Spa	532 Stewart Canyon Road	NA	Add additional units to a bed and breakfast.
8	TPM 20411	Reeve TPM	2987 Sumac Road, Fallbrook	8.8	Minor residential subdivision. 3 SFR lots (2-acre minimum).

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
9	TPM 20491	Evans TPM	West side of Sage Road between Sumac Road and Pala Road, Fallbrook	4.10	Minor subdivision into 2 residential/ agricultural parcels (2.00 and 2.10 acres). Private septic system.
10	TPM 20841	Bridge Pac West I TPM	3321 Sage Road, Fallbrook	15.90	Minor residential subdivision. 4 SFR lots plus 1 remainder lot (2.04, 2.08, 2.12, 2.14 and remainder 7.08 net acres).
11	SPA 03-005 MUP 00-000 P 74-120W1 P 74-121M10 MUP 03-006 MUP 04-005	Pala Mesa Resort	2001 Old Highway 395 at Tecalote Lane, north of SR-76 and immediately west of I-15, Fallbrook	181.2	Specific Plan Amendment for modification and construction of new recreation and resort-related facilities. Addition of 186 resort rooms and wedding facility. Expansion of resort by 6 acres.
12	TPM 20431 S 98-006	Lung TPM	Citrus Drive and Calle Canonero, Fallbrook	10.7	Minor residential subdivision. 2 SFR lots (6.7 and 4.0 acres).
13	TPM 20440	Chipman TPM	East side of Citrus Lane between Peony Drive and Dos Niños, Fallbrook	13.54	Minor residential subdivision. 4 SFR lots plus one remainder lot, ranging from 2.13 to 2.85 net acres and remainder 4.00 net acres. Septic system.
14	TPM 20484	Bierman TPM	4065 Calle Canonero, Fallbrook, south of Vern Drive and west of Lorita Lane	9.91	Minor residential subdivision. 4 SFR lots, ranging from 2.01 to 2.19 net acres. Septic system.
15	S 04-026	Cooke Residence	3974 Citrus Drive between Wilt Road and Vern Drive	N/A	4,723 s.f. SFR.
16	TPM 20581	Treister TPM	Donut-shaped parcel surrounding 401 Ranger Road, Fallbrook	21.81	Minor residential subdivision. 4 SFR lots plus 1 remainder lot.
17	TPM 20793 03-02-068	Mission Ridge Road TPM	235 Mission Ridge Road, east of I-15 off Mission Road, Fallbrook	19.55	Minor residential subdivision. 4 SFR lots.
18	TM 5413	Rancho Alegre TPM	West side of Ranger Road approximately 0.4 mile north of Reche Road	70	Part of 116-acre subdivision (33 lots). This project consists of 20 lots in the eastern portion of property and proposes a different street alignment, grading, and lot arrangement.
19	TPM 20853	Rarick TPM	3261 Reche Road, Fallbrook	8.77	Minor residential subdivision. 4 SFR lots ranging from 2.02 to 2.25 acres. Septic system.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
20	TPM 20936	Fernandez TPM	3838 Foxglove Lane, Fallbrook	10.4	Minor residential subdivision. 4 SFR lots. Minimum lot size 2 acres. 2 existing SFR on site.
21	TPM 20944	Rabuchin TPM	4065 Calle Canonero, Fallbrook	9.91	Subdivision of 2 lots into 4 SFR lots. 1 existing SFR on site.
22	NA	Pala Casino	Pala Road and Pala Mission Road	TBD	187,300 s.f. casino, hotel, theater.
23	MUP 87-021 RPL2 REZ P87-001 RPL2	Rosemary's Mountain/ Palomar Aggregates Quarry	North side of SR-76, 1.25 miles east of I-15	96.4	Aggregate rock quarry and processing plants for concrete and asphalt. Approximately 22 million tons of rock would be mined over 20 years. Realignment of SR-76 from Project site west to I-15. Reclamation Plan to designate lower portion of site as water storage reservoir after completion of mining activities.
24	TPM 20542	Patapoff Minor Residential Subdivision	Southern end of Rainbow Hills Road	59.1	Subdivide property into 4 parcels (4.3, 4.2, 9.6, and 8 acres) plus remainder (33 acres).
25	TM 5321	Prominence at Pala	Pala Del Norte Road. 1/3 mile north of SR-76 and approximately two miles west of the Pala Indian Reservation	346.6	Subdivide the property into 30 SFR and 2 open space lots ranging in size from 4 to 96 acres.
26	NA	Palomar College North Education Center District Master Plan	East side of I-15 between Pankey Road and Pala Mesa Heights Drive	85	New community college campus to serve approximately 12,000 students, to include classroom and administration buildings, parking, open space, athletic fields, and off-site road, water, and sewer improvements.
27	NA	Caltrans Realignment of SR-76 and improvements to the I-15/SR-76 Interchange	From Melrose Drive to South Mission Road and from South Mission Road to I-15	NA	Realignment and widening of roadway, improvements to northbound I-15 on- and off-ramps.
28	NA	San Luis Rey Municipal Water District (SLRMWD) Water, Wastewater, and Recycled Water Master Plan	SLRMWD service area and vicinity, north and south of SR-76 between I-15 and Pala Temecula Road	Over 3,000	Exploration of pipeline and water storage options.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
29	TM 5231 RPL4 MUP 00-034	Pala Mesa Subdivision	Canonita Drive and Old Hwy 395, Fallbrook	30.48	39 condominium units.
30	TM 5276	West Lilac Farms	32542 Aqueduct Road and Via Urner, Bonsall	12.8	8 SFR lots.
31	TM 5346	Dabbs TM	32006 Aqueduct Road, Bonsall	38.4	9 SFR lots.
32	TM 5410	Marquart Ranch	West Lilac Road and Mesa Lilac Road, Bonsall	44.2	9 SFR lots. Includes improvements to West Lilac Road and Mesa Lilac Road, and drainage improvements.
33	TM 5449	Fallbrook Oaks	Reche Road and Ranger Road, Fallbrook	26	19 SFR lots.
34	TM 5469	Ridge Creek Drive	Ridge Creek east of Live Oak Park Road and Ridge Drive, Fallbrook	30.4	14 SFR lots.
35	TM 5499	Club Estates	SR-76 east of Cole Grade Road at Pauma Valley Drive	48.3	31 SFR lots.
36	TM 5540 MUP 07-007	Oak Tree Ranch TM	15560 Spring Valley Road	9.95	24 SFR.
37	TM 5545	Turnbull TM	32979 Temet Drive	22.9	17 lots.
38	TPM 20913	Wexler TPM	Luiseno Circle and Wasa Court, Valley Center	2.54	4 lots.
39	TM 5223	Shadow Run Ranch	15040 Adams Drive	263	54 SFR lots and 2 open space lots. MUP filed concurrently for Planned Residential Development that would cluster residential development on minimum 2-acre lots.
40	TPM 20896	Diana Acres	Adams Drive off SR-76, Pauma Valley		3 lots.
41	TPM 20804	Hunter Subdivision	15550 Adams Drive	7.5	3 lots.
42	TPM 20538	Burge TPM	34487 Citracado Drive, Pala	12.58	4 lots plus remainder.
43	MUP 99-001	Pauma Valley Packing Company	34188 Hampton Road	4.14	Packing and processing plant.
44	MUP 00-030	Shadow Run Ranch/Schoepe-Pauma	14504 SR-76	263.17	13 lots.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
45	TM 5508	Warner Ranch	Pala-Pauma	513	732 SFR lots, 168 condo units, community park, and fire station lot.
47	TPM 20451	De Jong/Pala Minor Subdivision	Canonita Drive between I-15 and Tecalote Drive	5.62	Minor residential subdivision. 3 SFR lots (1.03, 2.06 and 2.31 net acres).
48	TPM 20800	Crossroads Investors Minor Subdivision	Ranger Road, Fallbrook	15.5	Minor residential subdivision. 4 SFR lots plus 1 remainder lot. Existing SFR and grove on site.
49	TM 5217/ 5225/5227/ 5228 MUP 00-027	Chaffin/Red Mountain Ranch Subdivisions	Rainbow Glen Road and Red Mountain Dam Road, Fallbrook	455.9	TM 5217: Residential development with 29 SFR lots (2.28 to 18.33 acres) and 2 biological open space zones; TM 5225: 55 acres divided into 6 SFR lots (8.1 to 13.9 acres); TM 5227: 44.5 acres divided into 4 SFR lots (8.08 to 13.71 acres). TM 5228: 19.1 acres divided into 2 lots (8.4 and 10.7 acres).
50	TPM 20505	John Collins TPM	Margarita in Fallbrook	8.29	2 lots.
51	TPM 21085	Brannon Trust TPM Remai	411 Yucca Road, Fallbrook		4+ lots.
52	TPM 20976	Dien N Do TPM	405 Ranger Road		4 SFR lots plus remainder.
53	TPM 20373	Tim Rosa TPM	2973 Los Alisos Drive	13	4 lots plus remainder.
54	TPM 20427	Leising TPM	1246 Via Vista	10.83	4 lots.
55	TPM 20434	Atteberry TPM	1166 Sierra Bonita	9	3 lots.
56	TPM 20980	Johnson TPM	3035 Trelawney Lane		2 lots.
57	TPM 20381	Chipman TPM	Camino Zasa, Fallbrook	24.5	4 lots plus remainder.
58	TPM 21047	American Lotus Buddhist Association TPM	Reche Road at Rabbit Hill, Fallbrook	5.63	4 lots plus remainder.
59	TM 5547	Reche Road TM	3129 Reche Road, Bonsall	33.5	12 SFR lots.
60	TM 5158 RPL3	Palisades Estates	3880 Dos Niños Road/Elevado Road	408.4	51 lots.
61	TPM 19742	Dion TPM and time extension	3562 Canonita Drive	7.5	2 lots.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
62	TPM 20476	Patricia Daniels TPM	3609 Canonita Road, Fallbrook	13.2	4 lots plus remainder.
63	TPM 20443	Cameron Subdivision	2644 Vista de Palomar, Fallbrook; North side of Vista de Palomar between Post Hill and Via Rancheros	11.31	Minor residential subdivision. 3 SFR lots (2.22, 2.44 and 6.37 acres). Septic system.
64	TPM 20473	Tesla Gray TPM	East end of Vista de Palomar, and north end of Old Post Road, Fallbrook	28.91	Minor residential subdivision. 4 SFR lots plus 1remainder. Future development of 5 SFR.
65	TPM 20592	Aspel TPM	3107 Old Post Road, Fallbrook	7.32	Minor residential subdivision. 2 SFR lots (2.09 and 5.20 acres).
66	TPM 20317	James Patapoff TPM	2639 Via Alicia, Fallbrook	16.8	Subdivision of 16.8 acres into 4 lots plus remainder.
67	TPM 20503	Yew Tree Spring Water Corporation	3573 Diego Estates Drive, Fallbrook	7.48	3 residential lots.
68	TPM 20610	Haugh, Granger TPM	Live Oak Creek Circle and Gird Road, Fallbrook	12.94	4 lots.
69	TPM 20614 RPL1	Brown, Lee & Karen TPM	3850 Gird Road	6.46	3 lots.
70	TPM 20648	Pepper Drive TPM	3926 Flowerwood Lane	1.39	4 residential lots.
71	TM 4971	Surf Properties TM	3545 Vista Corona	46.89	15 lots.
72	TM 4908	Brook Hills TM	4061 La Cañada Road, Fallbrook	96.71	35 lots.
73	MUP 02-011	Latter-Day Saints/Via Monserate	Fallbrook	7.96	17,000 s.f. church and meeting rooms.
74	TM 4976 RPL4	Leeds and Strausss TM	North side of Olive Hill Road, near intersection with SR-76, Bonsall	45.76	17 SFR lots. TM time extension until September 13, 2009.
75	TM 5398	Murray Davidson	3956 Pala Mesa Road, Bonsall	4.28	7 lots.
76	TPM 20173	Shamrock Partners TPM	Shamrock Road, Bonsall	10	3 lots.
77	TPM 20851	Crook TPM	32179 Shamrock Road		5 lots.
78	TM 5275	Tabata TM	1061 McDonald Road	4.96	8 lots.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
80*	TPM 20932	Murray Davidson TPM	3956 Pala Mesa Road, Fallbrook		Subdivision of 1 lot into 4 SFR lots plus remainder.
81	TPM 21076	Sumac TPM	3111 Sumac Road		4 lots.
82	S 03-024	Janikowski SFR	9686 Pala Road (SR-76), Fallbrook; on north side of SR-76	5.12	3,200 s.f. SFR.
83	TPM 19827	Kratochvid TPM; expired map	Old Highway 395	12.3	4 lots.
84	TPM 20319	Kohl TPM	7641 Mount Ararat Way, Bonsall	9.71	4 lots plus remainder.
85	TPM 20541	Woodhead TPM	Mt. Ararat Way, Bonsall	12.54	4 lots plus remainder
86	TPM 20596	Rockefeller TPM	9590 Lilac Way, Valley Center	5	2 lots.
87	TPM 20763	McNulty TPM	32171 Dos Niñas	5.19	2 lots.
88	TPM 20689	Stehly TPM	Corner of Viking Grove Lane/Man Tan Road, Valley Center (adjacent to TPM 20690)	12.7	4 SFR lots and remainder.
89	TPM 20845	Sanders TPM	West Lilac Road, 1.25 miles west of Old Highway 395		4 lots plus remainder lot.
90	S 02-061	Pala Shopping Center	On Old Highway 395 just northwest of the intersection of I-15 and SR-76	3.88	Addition of 5 commercial buildings to an existing commercial site with grocery store.
91	TPM 21156	Monserate TPM	3624 Monserate Hill Road	24.6	4 SFR.
92	TPM 21075	Dimitri, Diffendale, and Kirk TPM	Monserate Hill Road and Monserate Place		4 lots.
93	TPM 20994	Madrigal TPM	1055 Rainbow Valley Boulevard near Old Hwy 395		3 lots.
94	MUP 07-009	Orange Grove Power Plant	4 miles northeast of I-15 on Pala del Norte Road, north of SR-76	8.5	96-megawatt power generation facility.

Table 1-4 (cont.)
CUMULATIVE PROJECTS

Map Key	Identifying Project No.	Project Name	Location	Area (acres)	Proposed Improvements
95	37-AA-0032	Gregory Landfill	Approximately 3.5 miles east of I-15 on SR-76	1,770	Landfill site for solid waste.
96	S 99-057 S 99-029 S 89-081 P 81-023 SPA 84-02 P 81-023	Meadowcreek Lake Rancho Viejo	Just east of I-15 and southeast of the San Luis Rey River and Pala Mesa Drive	NA	16 SFR as part of previously approved SFR development.
97	GPA 3800-12-001 SP 3810-12-001 TM 5571 RPL3 and 5572 RPL3 REZ 3600-12-003 MUP 3300-12-005, 3500 12-017 (STP); 3500 12-018 (STP)	Lilac Hills Ranch	Approximately two miles east of I-15 and Old Highway 395, abutting and south of Lilac Road	608	Mixed use development with overall residential density less than 2.9 du/ac. 90,000 s.f. of commercial, office, and retail, including a 50-room country inn. 1,746 units including 903 SFR, 164 SF attached, 211 units in commercial mixed-use areas, and 468 SFR age-restricted units; with a senior community center, a group residential and group care facility, and dementia care facility. Civic facilities may include a fire station, school (K-8), parks and other amenities; recycling facility, and water reclamation facility. 103.6 acres of open space (groves and biological/wetland habitat).
CUMULATIVE DWELLING UNITS TOTAL					**5,125**

* Project No. 79 (Berezousky TPM) has been withdrawn.
MFR = multi-family residential
MUP = Major Use Permit
NA = not available
REZ = Rezone
RPL = Replacement Map
S = Site Plan
s.f. = square feet
SFR = single-family residential
TM = Tentative Map
TPM = Tentative Parcel Map
ZAP = Minor Use Permit

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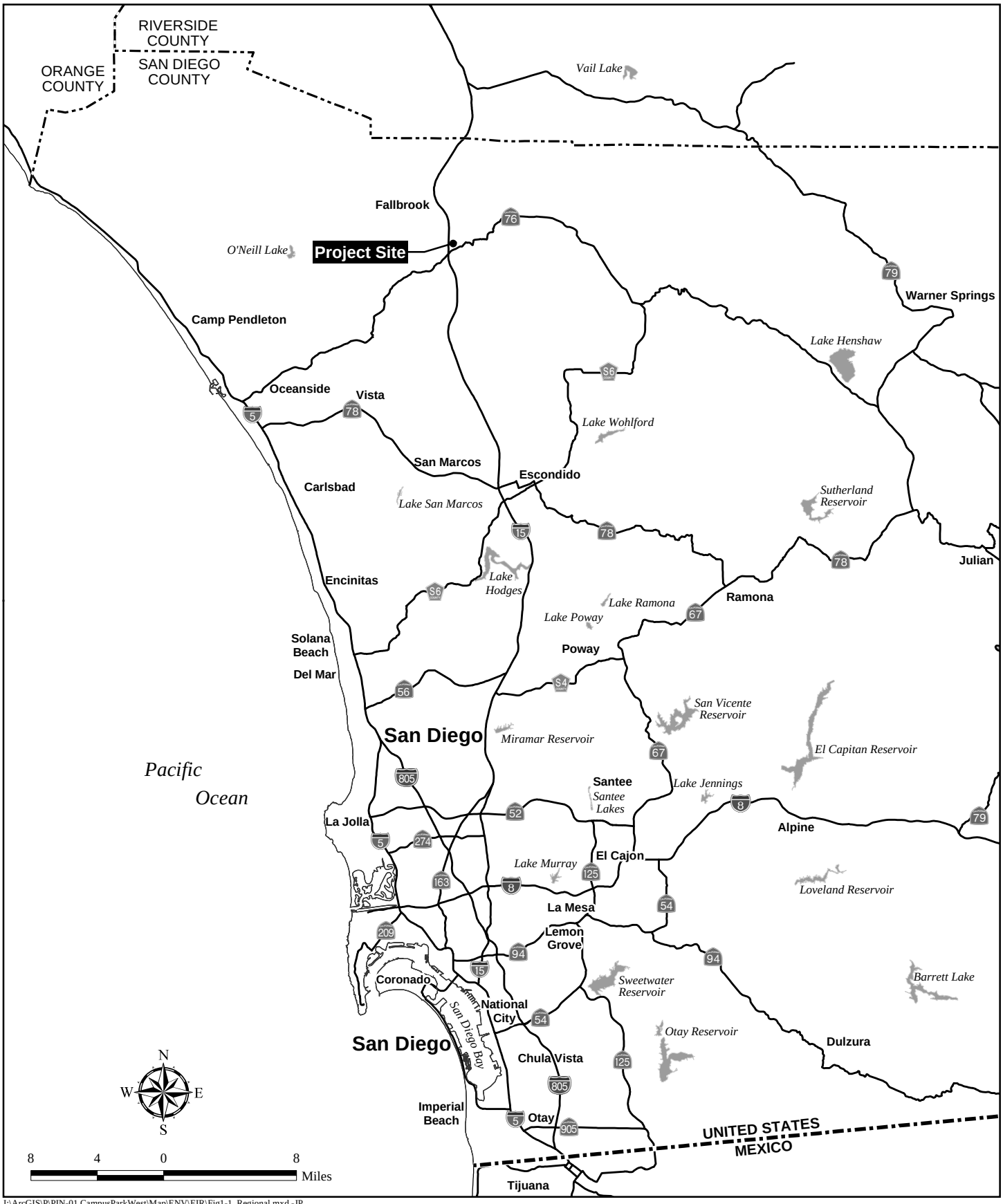

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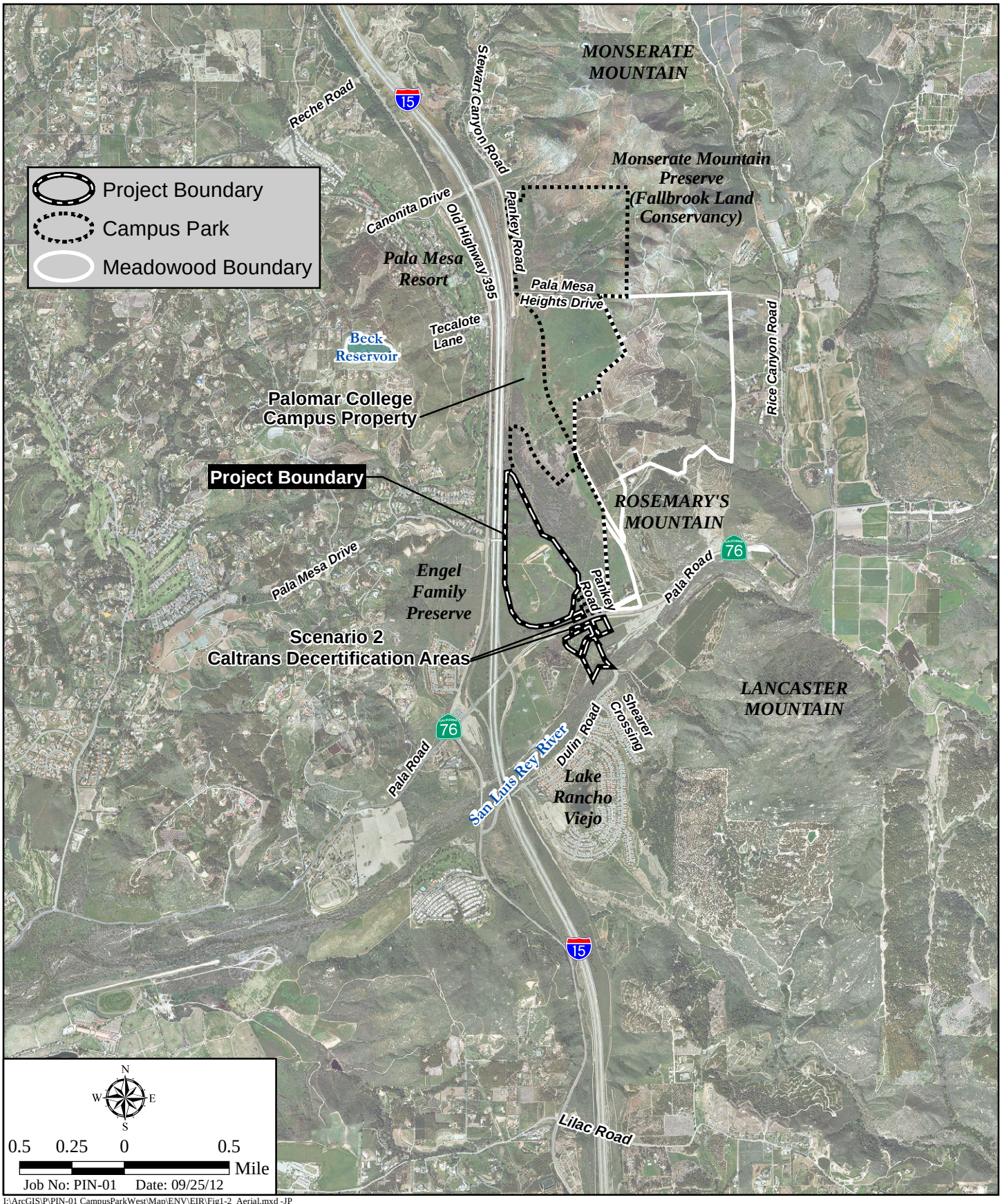
Regional Location Map

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-1



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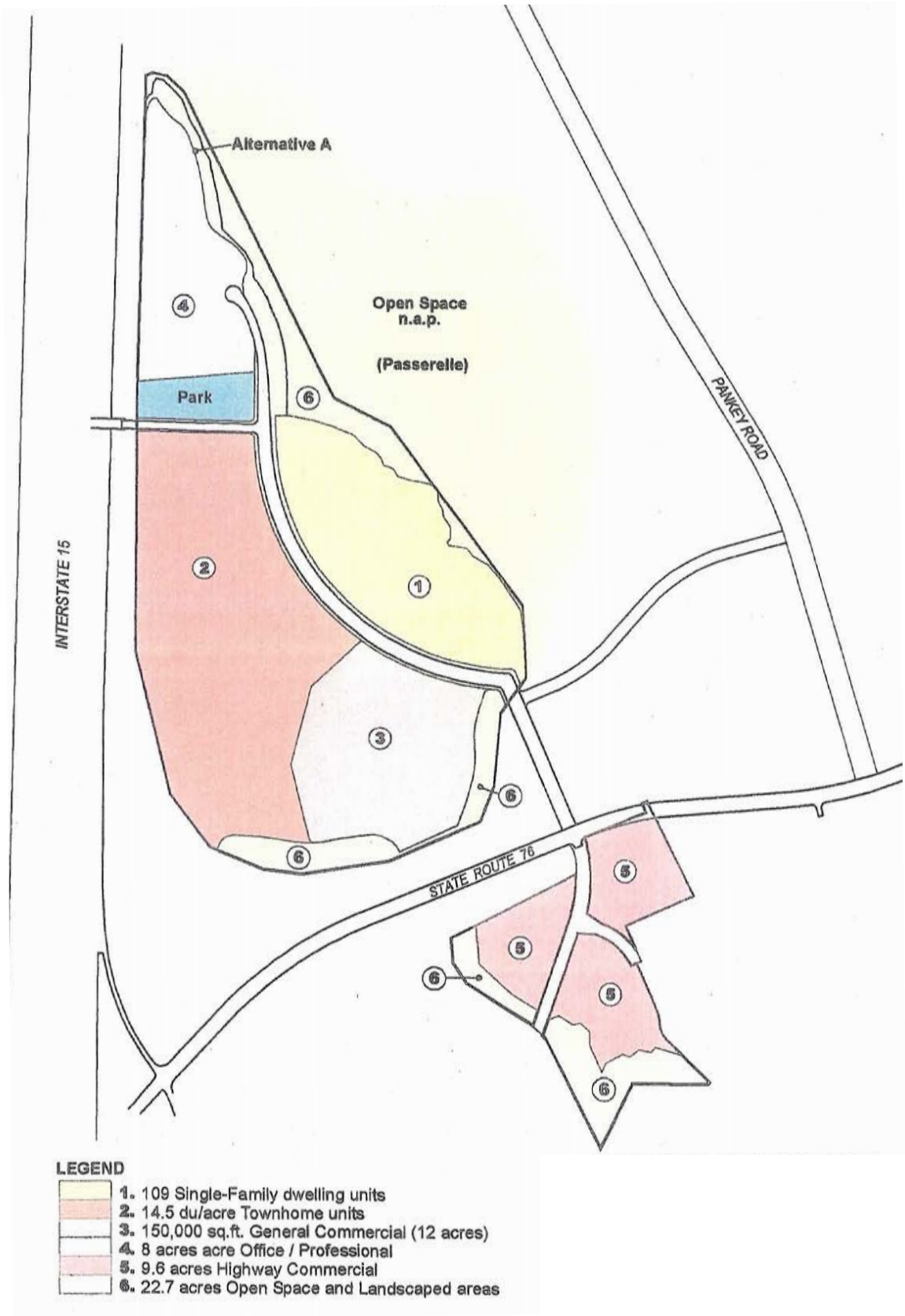
Aerial Photograph

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-2



Source: Latitude 33 2012

I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-3a_ProposedLandUsePlan.indd

L and Use Plan

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-3a

Source: PDC 2012

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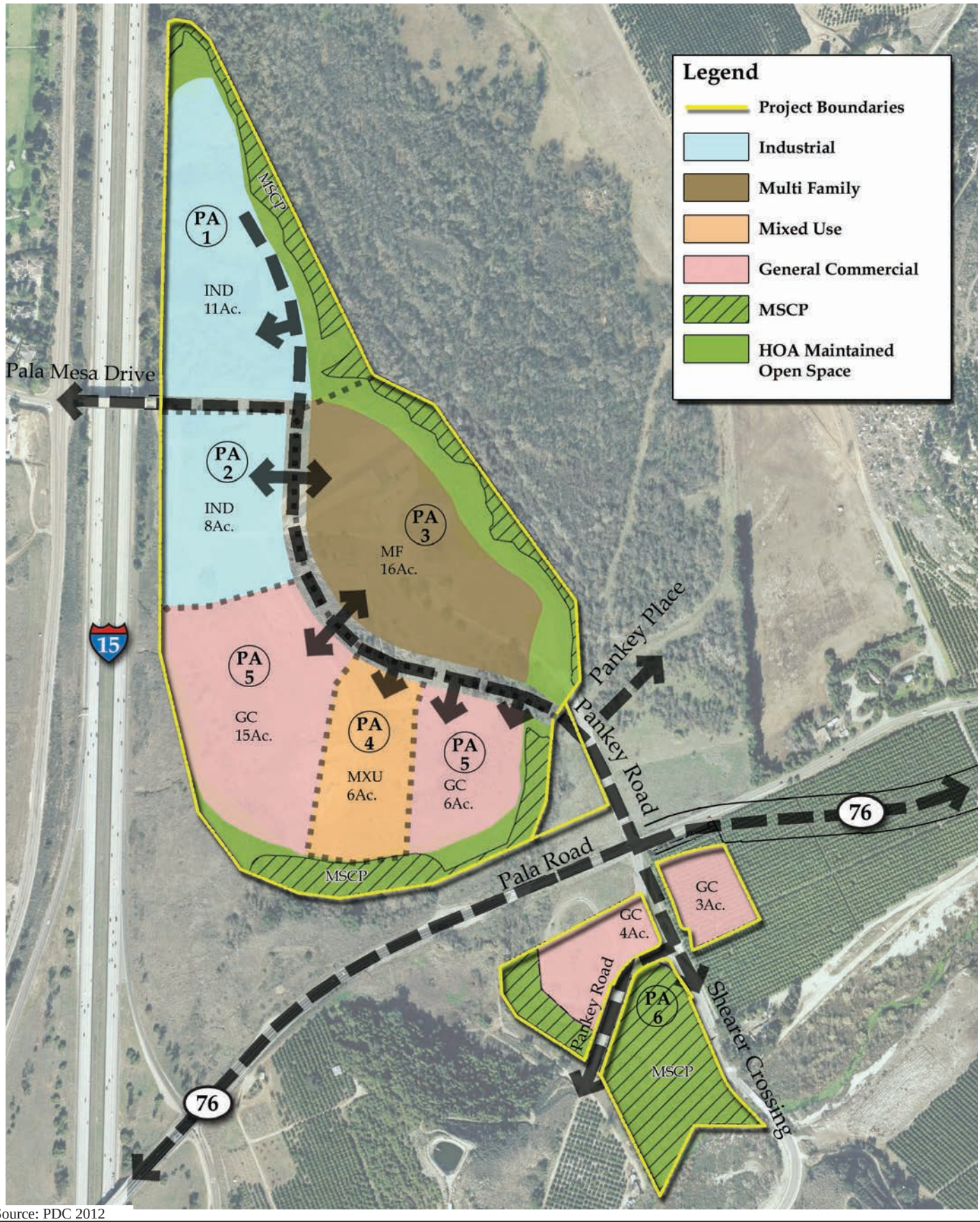
Land Use Plan

CAMPUS PARK WEST

Figure 1-3b

HELIX Environmental Planning



Source: PDC 2012

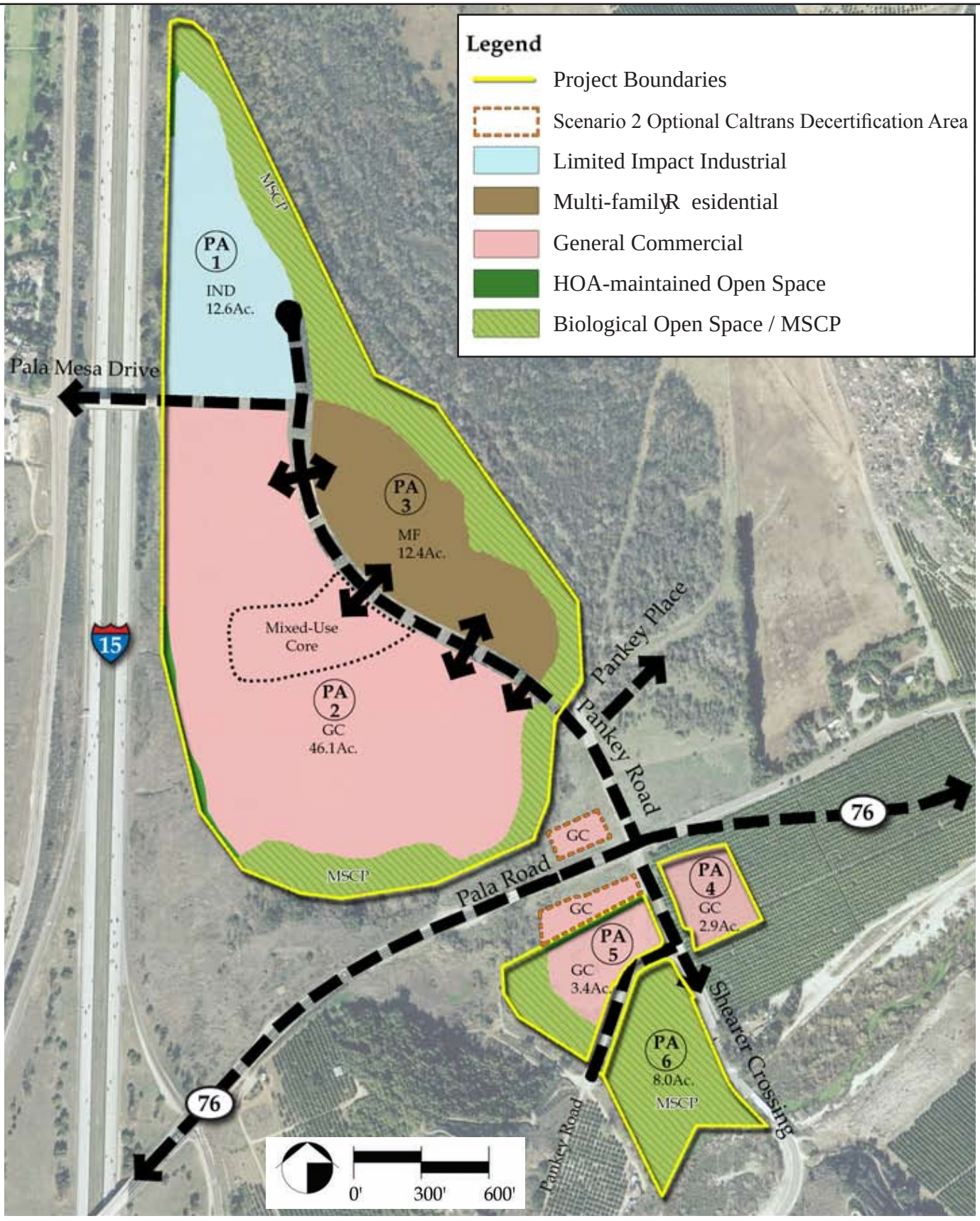
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-3c_LandUsePlan.indd -RK

L and Use Plan

CAMPUS PARK WEST

Figure 1-3c

HELIX Environmental Planning



Source: PDC 2012

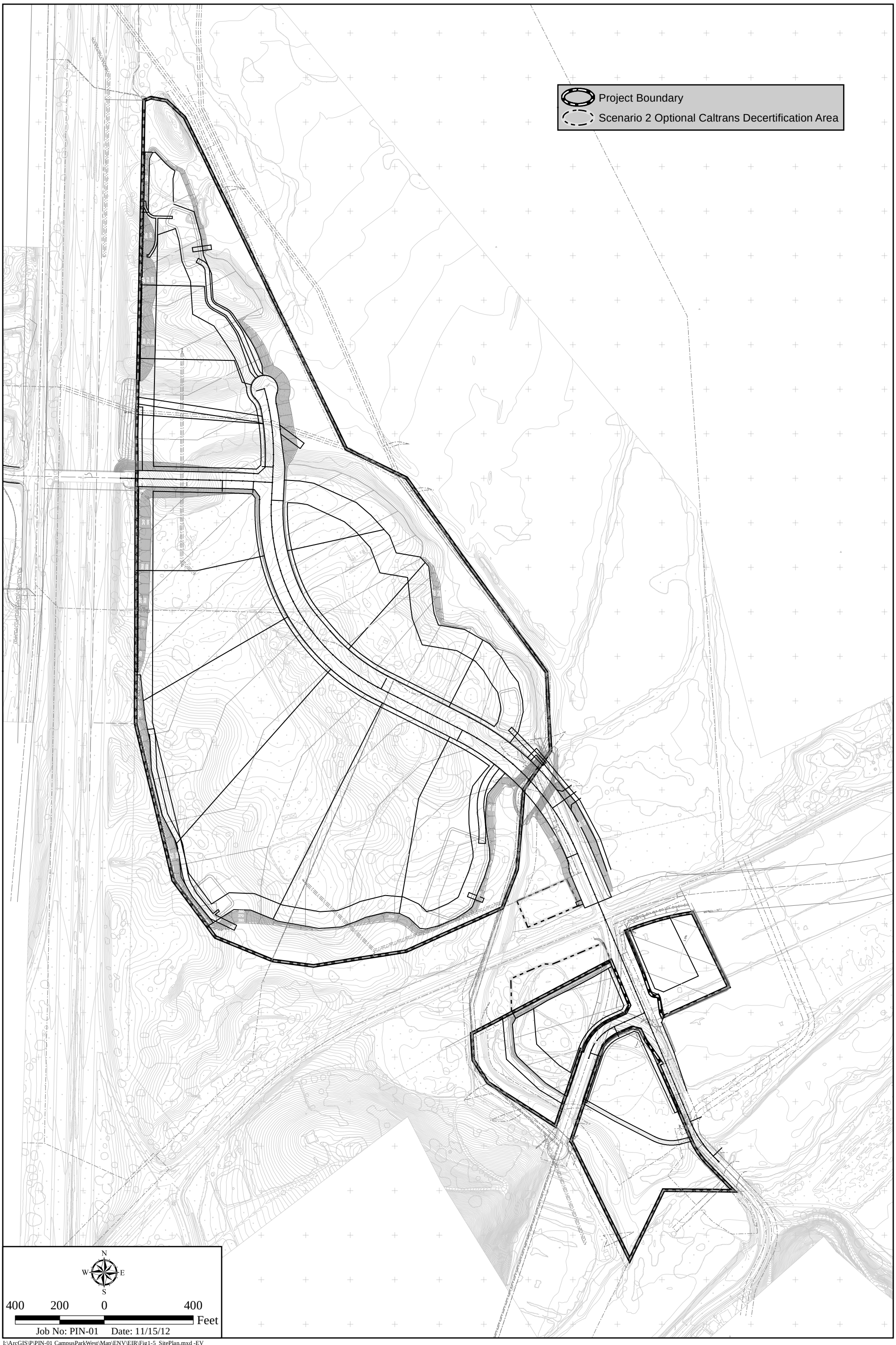
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\Noise\Fig1-4_LandUsePlan.indd -EV

Land Use Plan

CAMPUS PARK WEST

Figure 1-4

HELIX Environmental Planning



I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-5_SitePlan.mxd -EV

Site Plan

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-5

Examples of Rural Ranch Architectural Characteristics

Examples of Urban Victorian Architectural Characteristics

Examples of Mediterranean Architectural Characteristics

Examples of Cottage Architectural Characteristics

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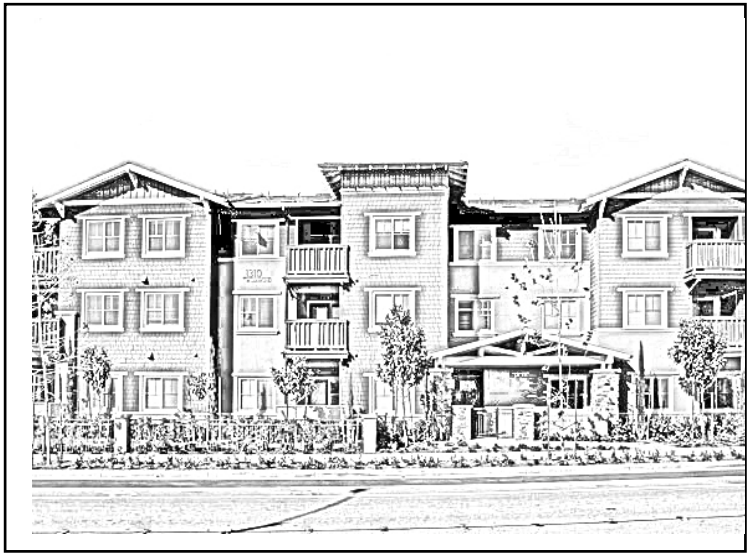
Architectural Characteristics

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-6



Source: PDC 2012

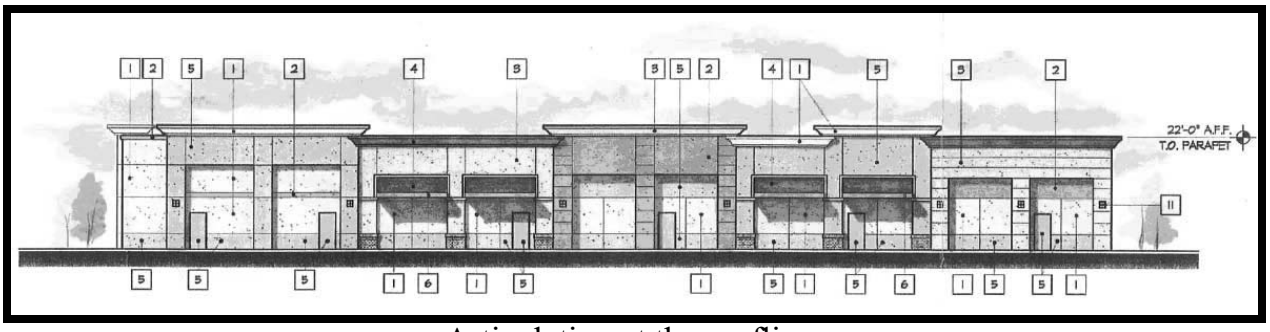
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-7_ArchCharacter_Residential -RK

Examples of Acceptable Architecture Character for the Proposed Multi-family Residential Area

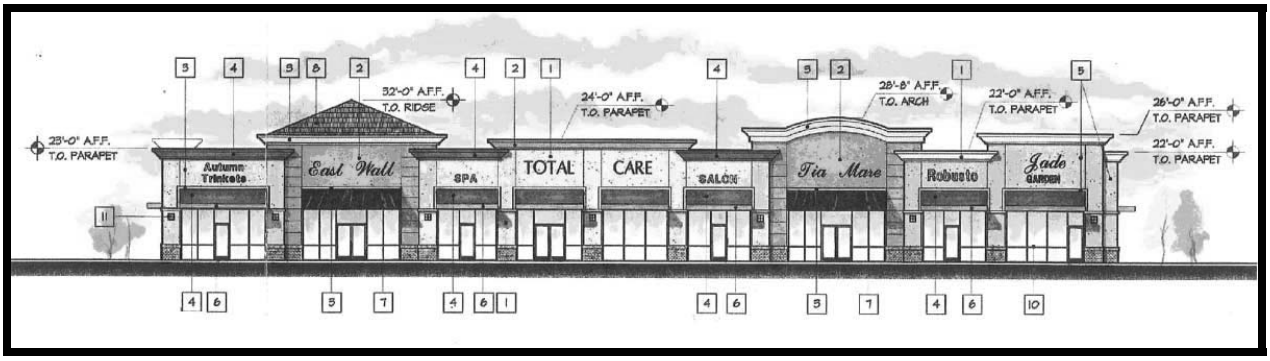
CAMPUS PARK WEST

Figure 1-7

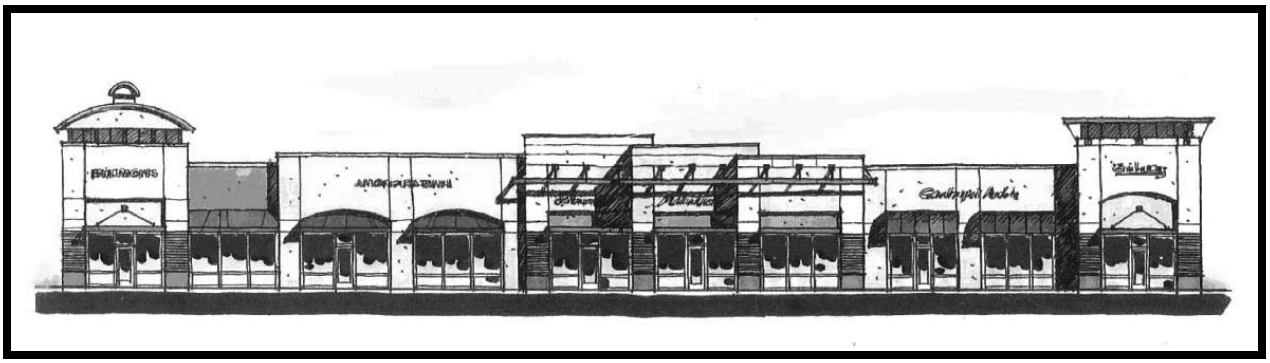
HELIX Environmental Planning



Articulation at the roofline



Variation in building height



Corner/end treatments

Articulation for general commercial development

Source: PDC 2012

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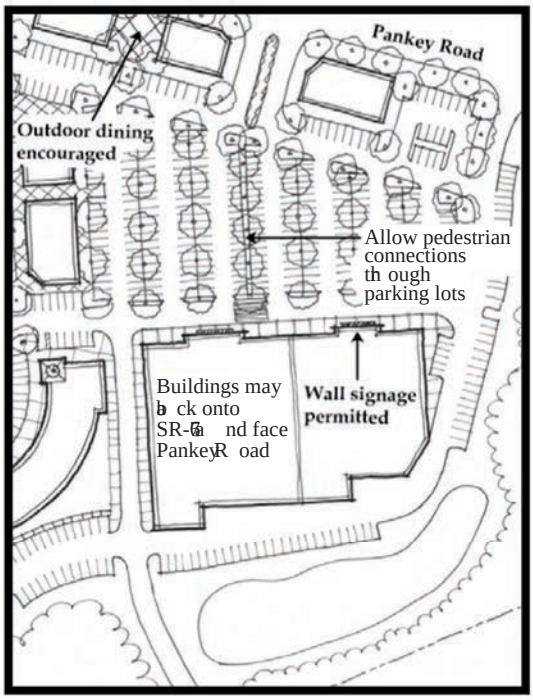
Fig1-8_ArchCharacter_Commercial.indd -JP

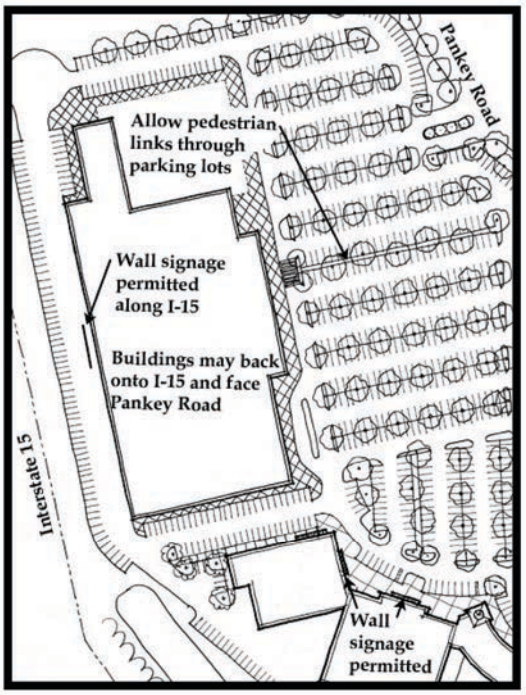
Examples of Acceptable Architecture Character for the Proposed Mixed-use Core and General Commercial Areas

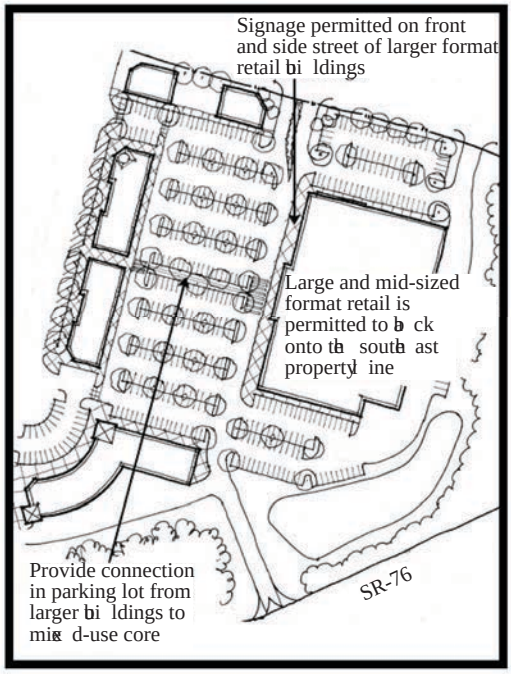
CAMPUS PARK WEST

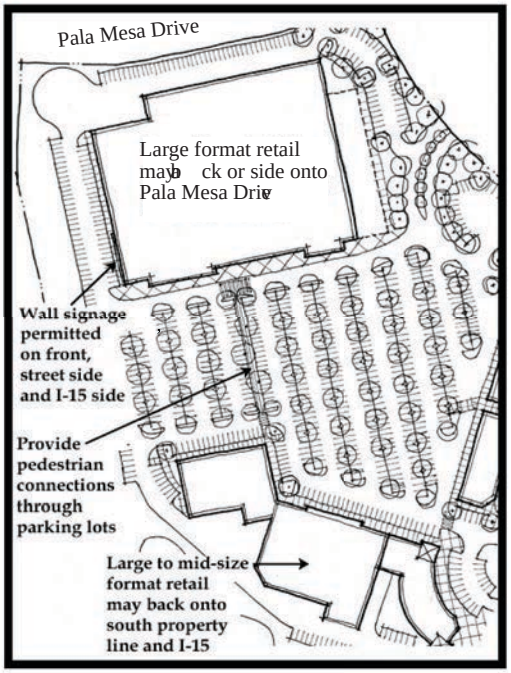
Figure 1-8

HELIX Environmental Planning









Source: PDC 2012

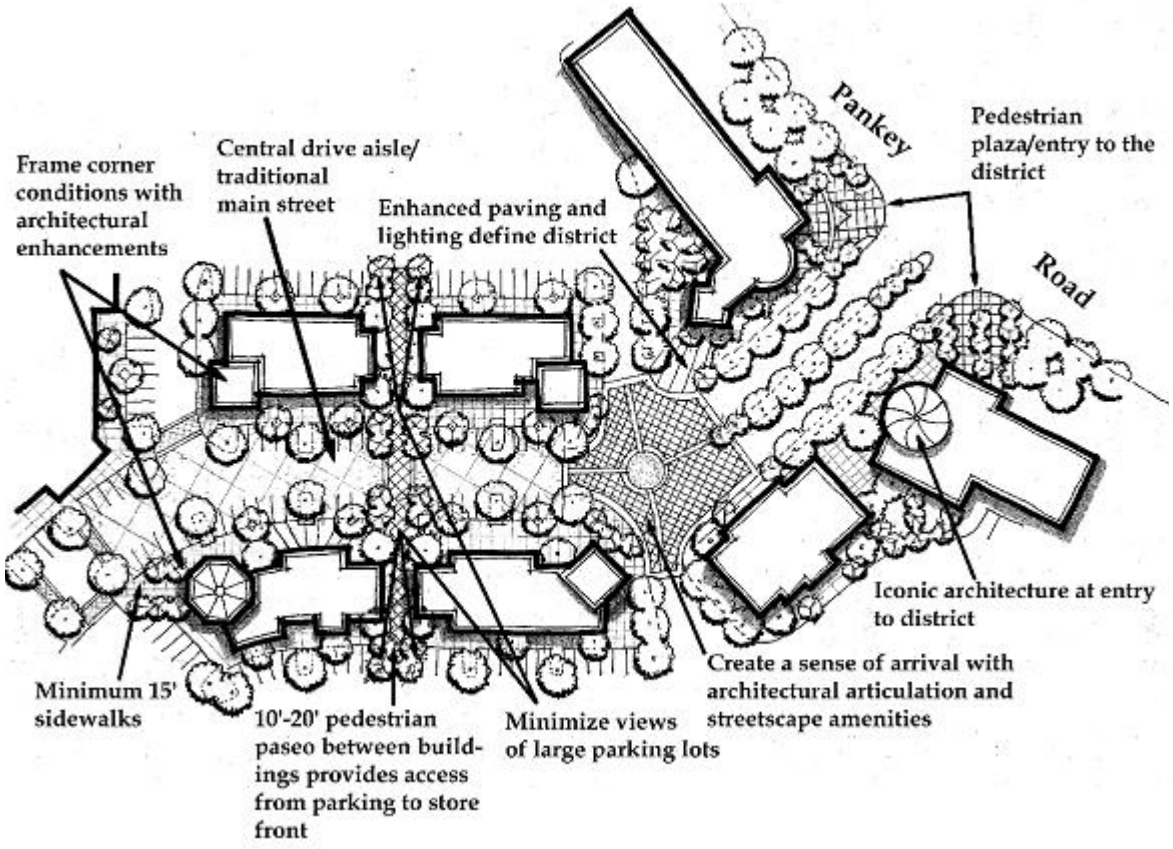
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-9C ommercialPlan.indd -JP

General Commercial Typical Site Design Characteristics

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-9



Source: PDC 2012

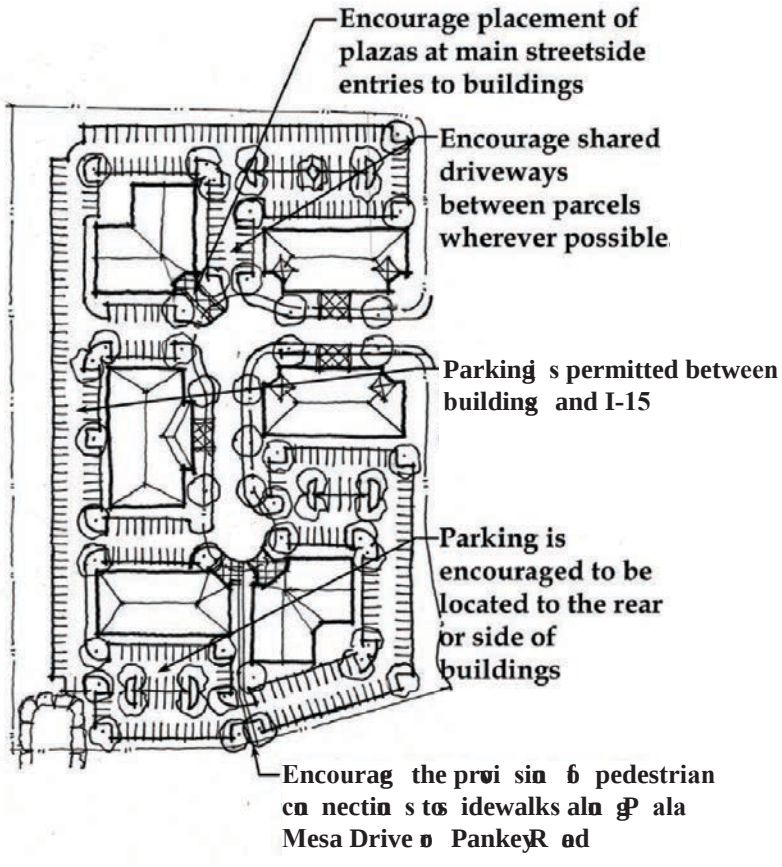
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-10_MixedUsePlan.indd -JP

Mixed-use Code Typical Site Design Characteristics

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-10



Source: PDC 2012

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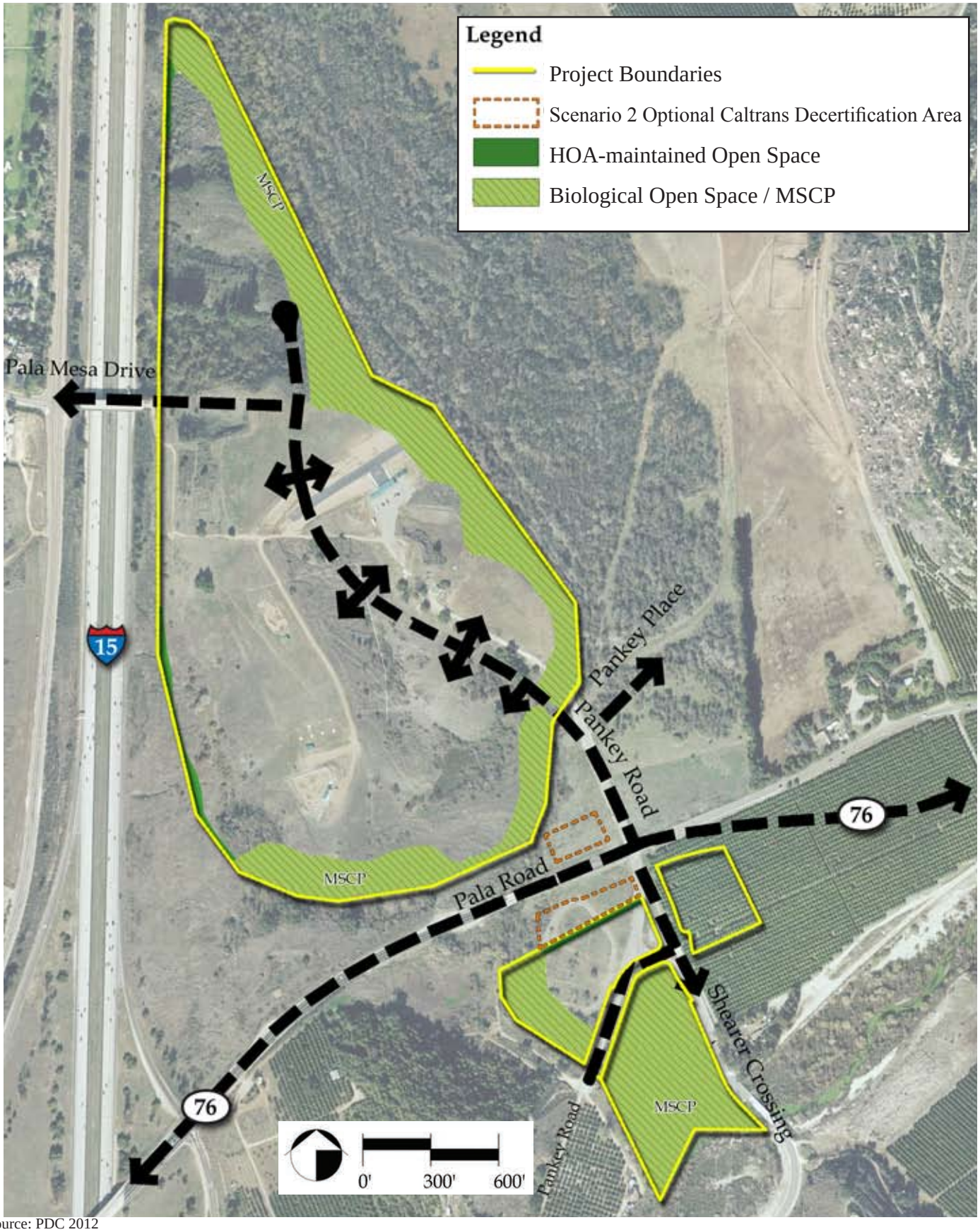
Limited Impact Industrial Typical Site Design Characteristics

CAMPUS PARK WEST

Figure 1-11

HELIX Environmental Planning



Source: PDC 2012

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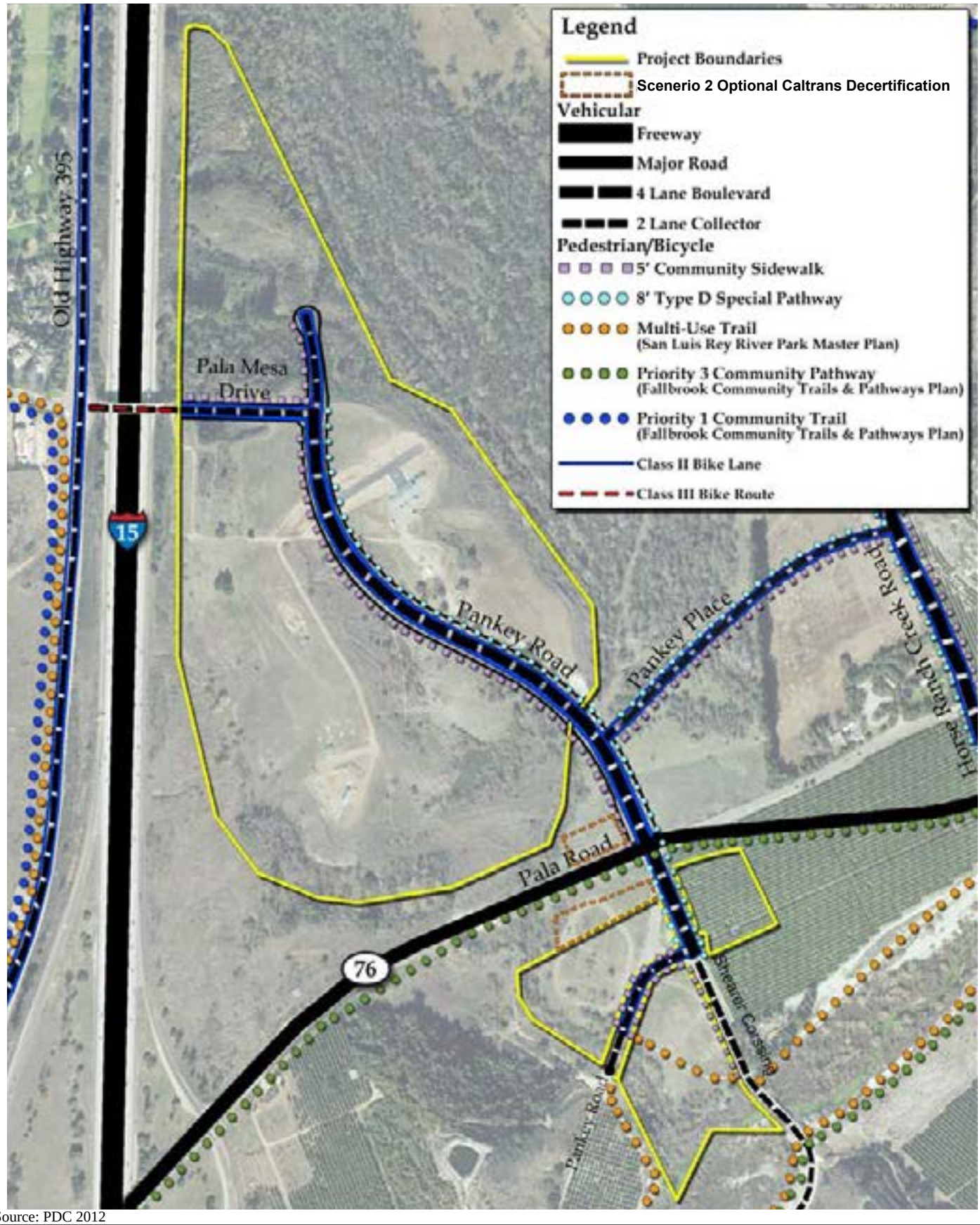
Open Space/Conservation Plan

CAMPUS PARK WEST

Figure 1-12

HELIX Environmental Planning



Source: PDC 2012

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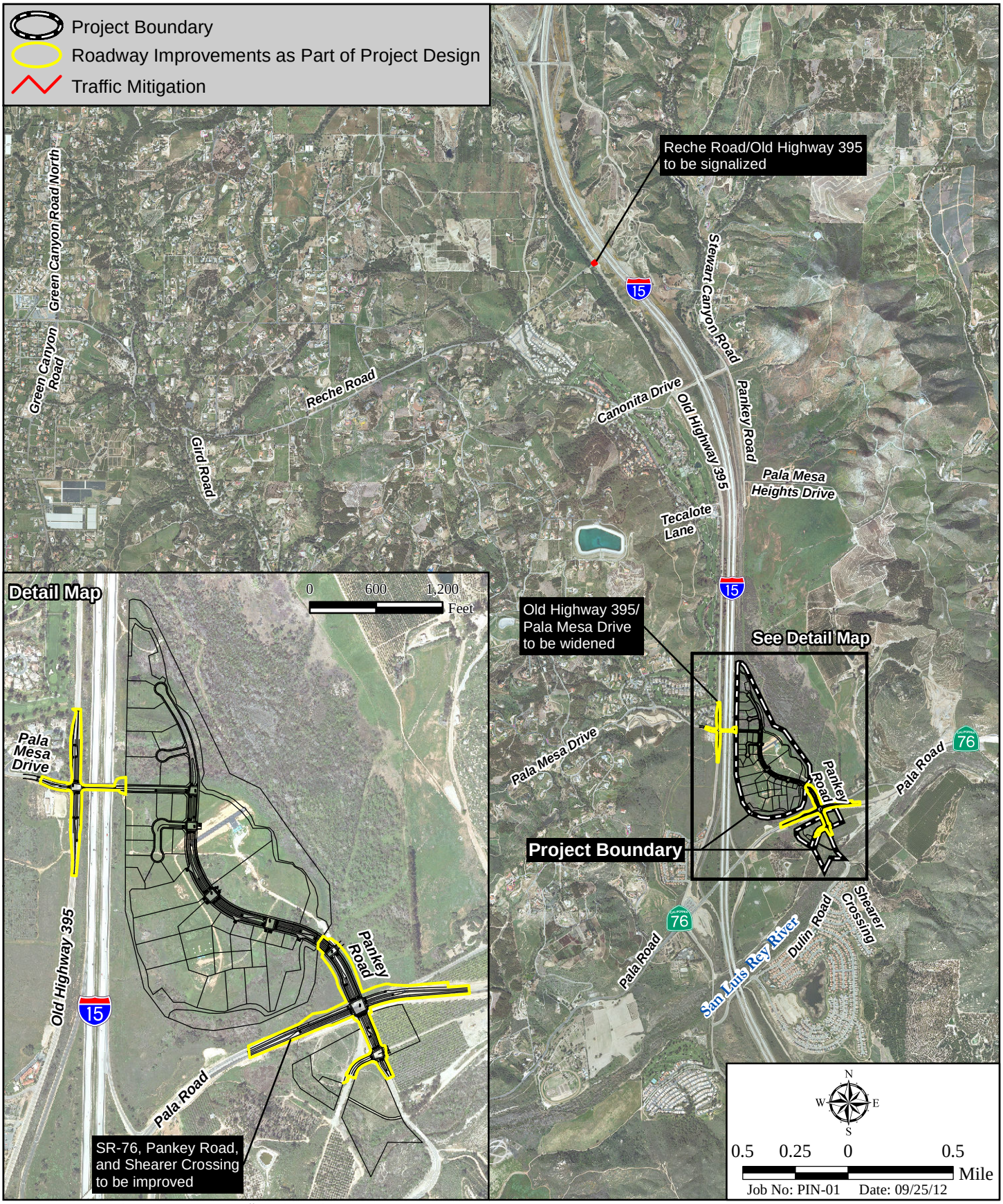
Circulation Plan

CAMPUS PARK WEST

Figure 1-13

HELIX Environmental Planning



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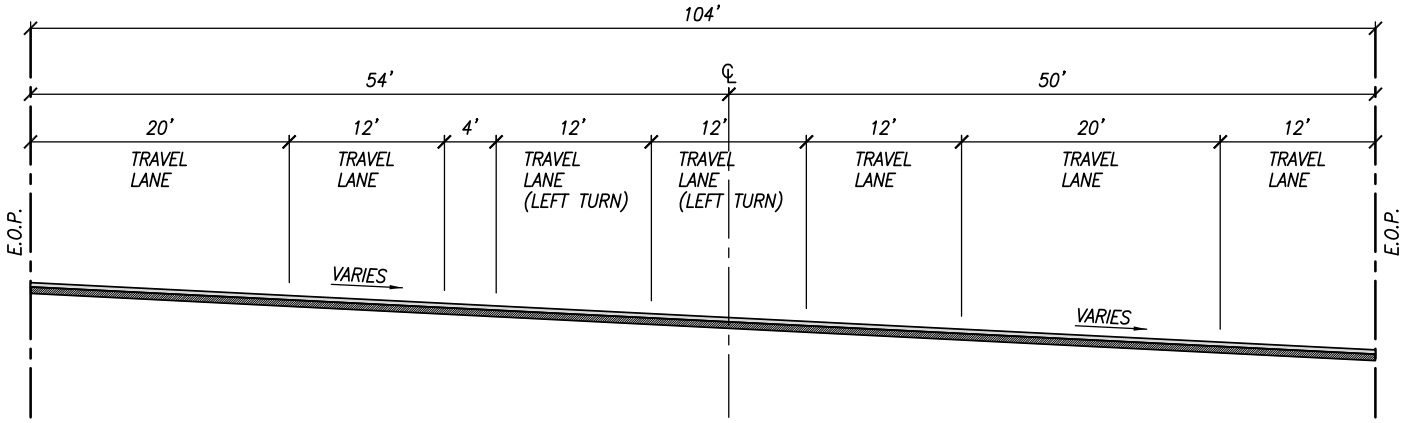
Proposed Off-site Roadway Improvements

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-14



Source: PDC 2012

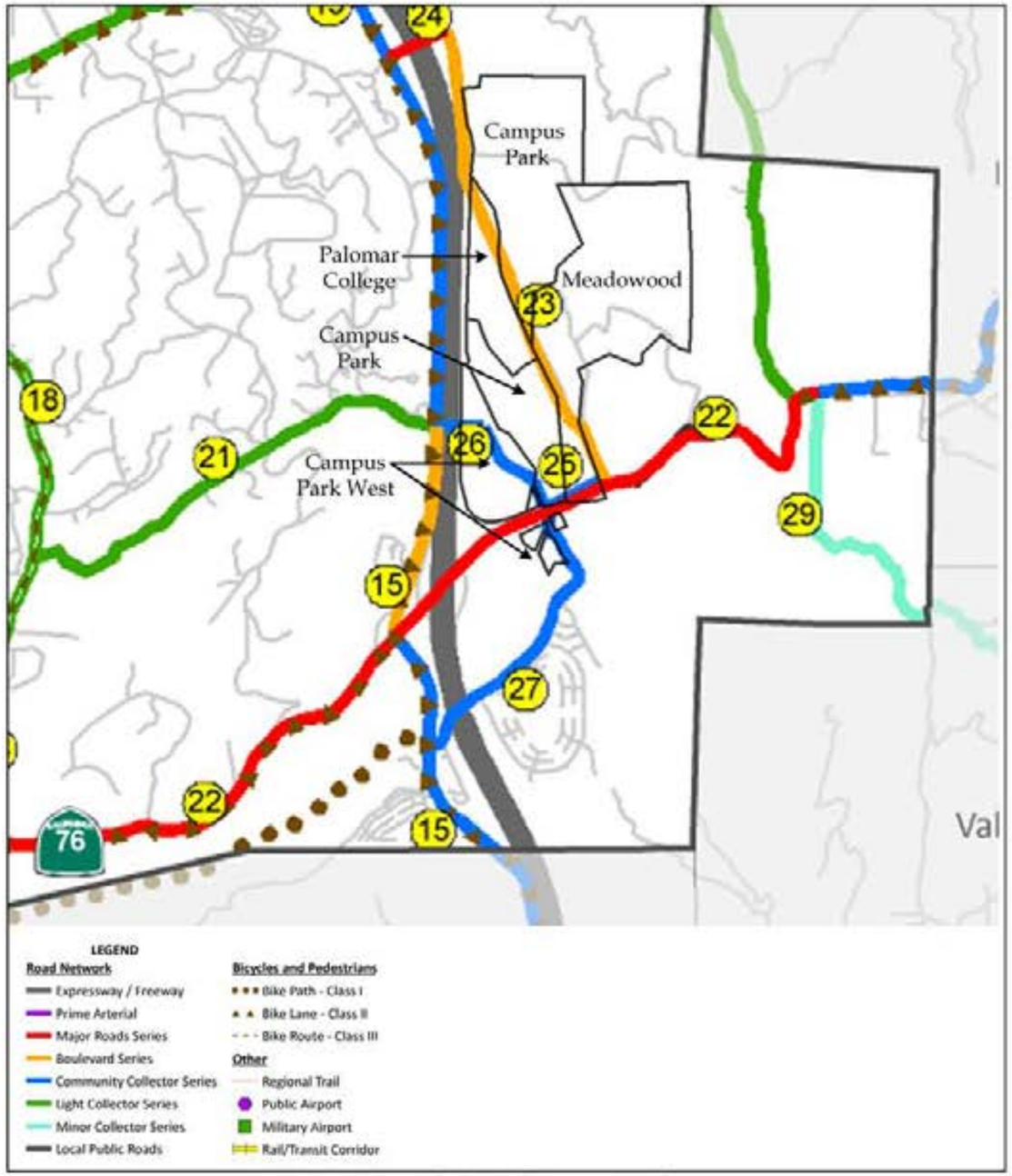
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-15_CrossSection_SR67_ndd -JP

SR-67 Cross-section Near the Intersection with Pankey Road

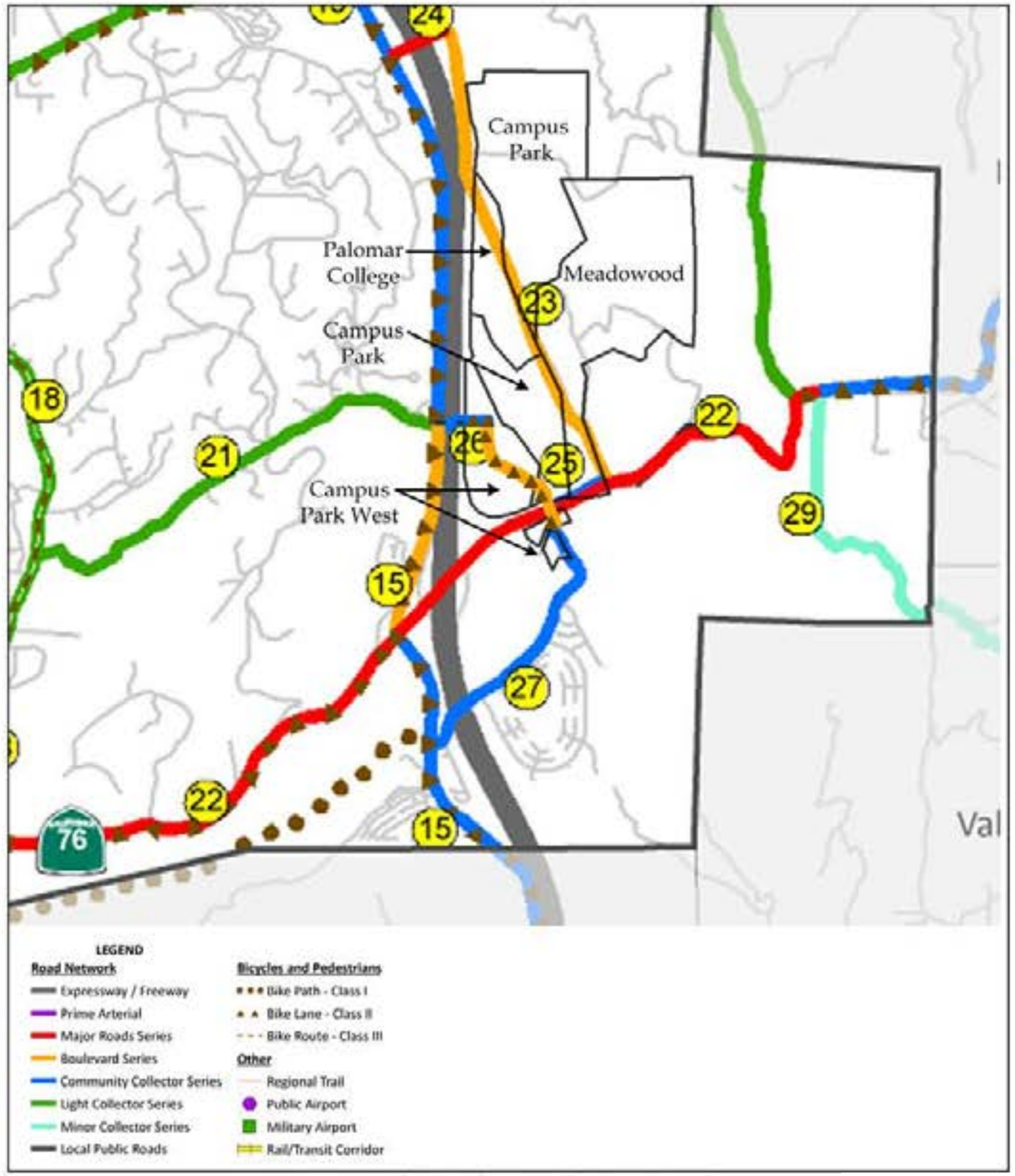
CAMPUS PARK WEST

Figure 1-15

HELIX Environmental Planning



Existing Circulation Element Roads



Proposed Circulation Element Roads

Source: PDC 2013

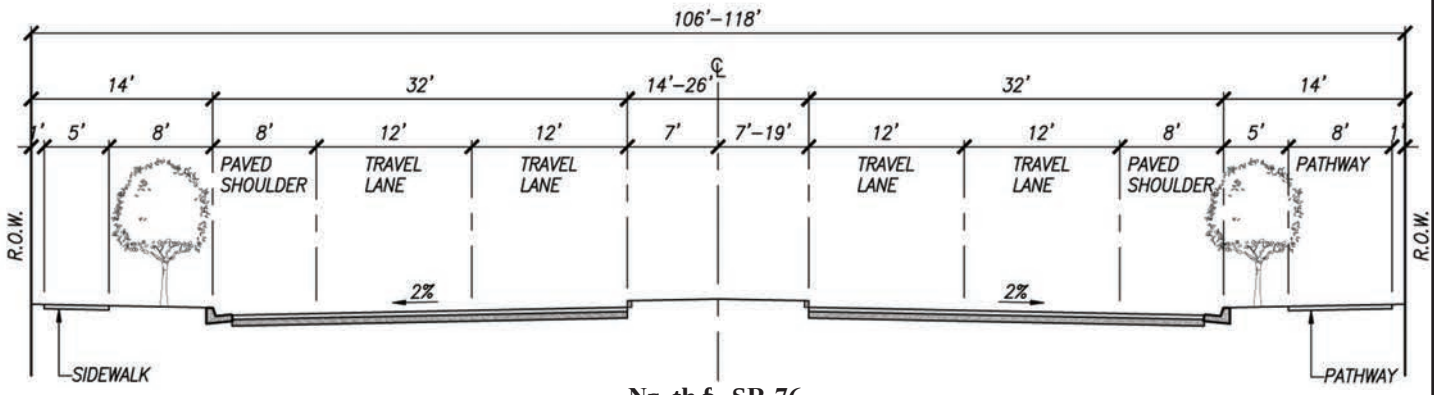
I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-16C irculationElement.indd -KF

Existing and Proposed Mobility Element Plan

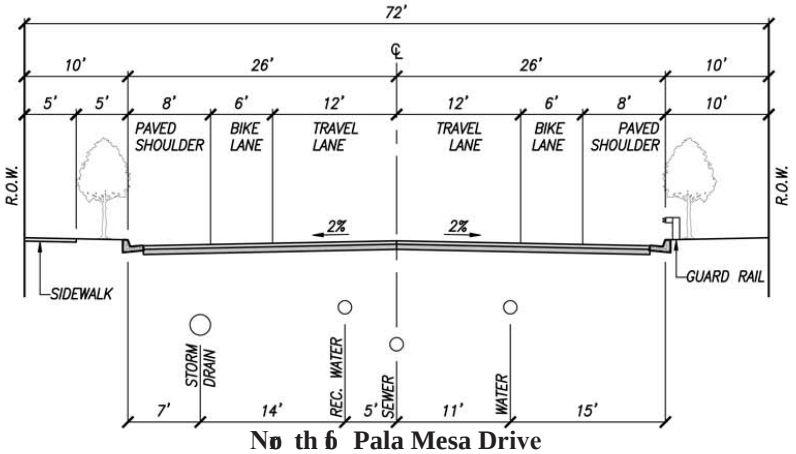
CAMPUS PARK WEST

HELIX Environmental Planning

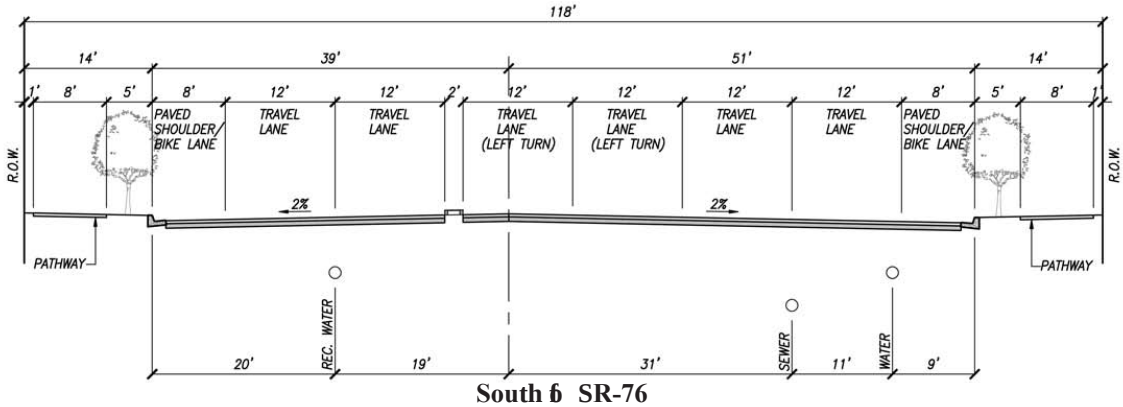
Figure 1-16



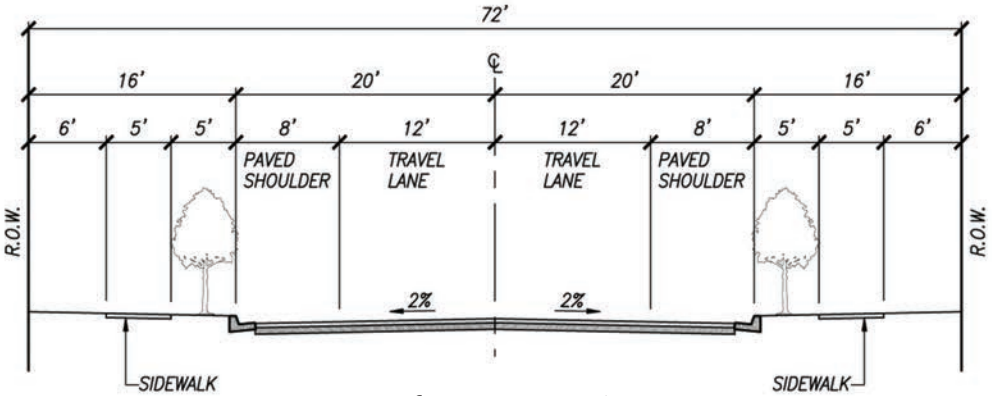
North of SR-76



North of Pala Mesa Drive



South of SR-76



West of Shearer Crossing

Source: PDC 2012

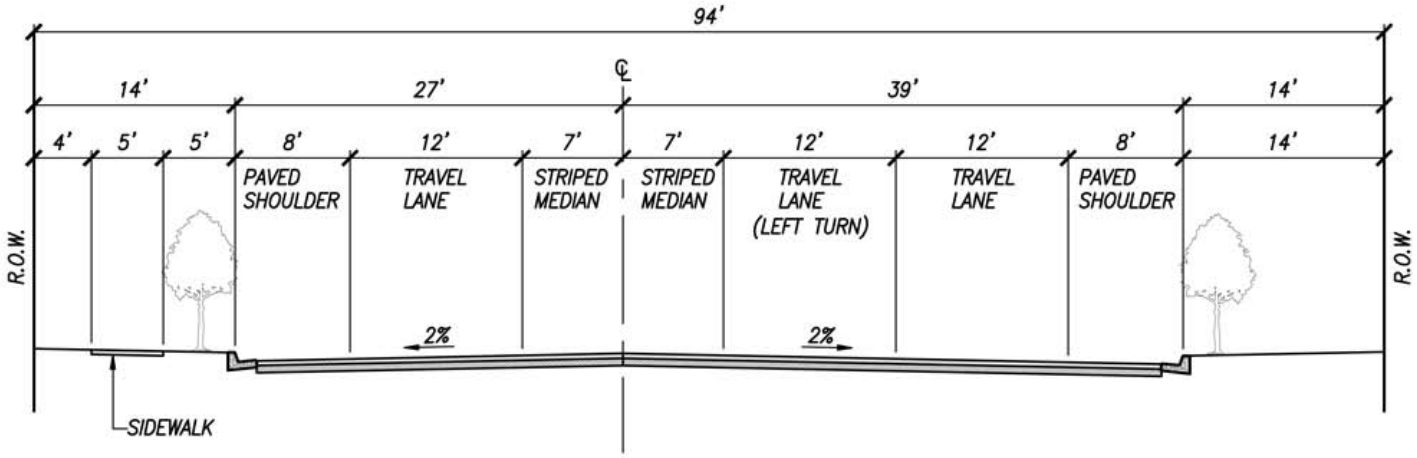
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-17_CrossSection_PankeyRoad.indd -JP

Pankey Road Cross-sections

CAMPUS PARK WEST

Figure 1-17

HELIX Environmental Planning



Source: PDC 2012

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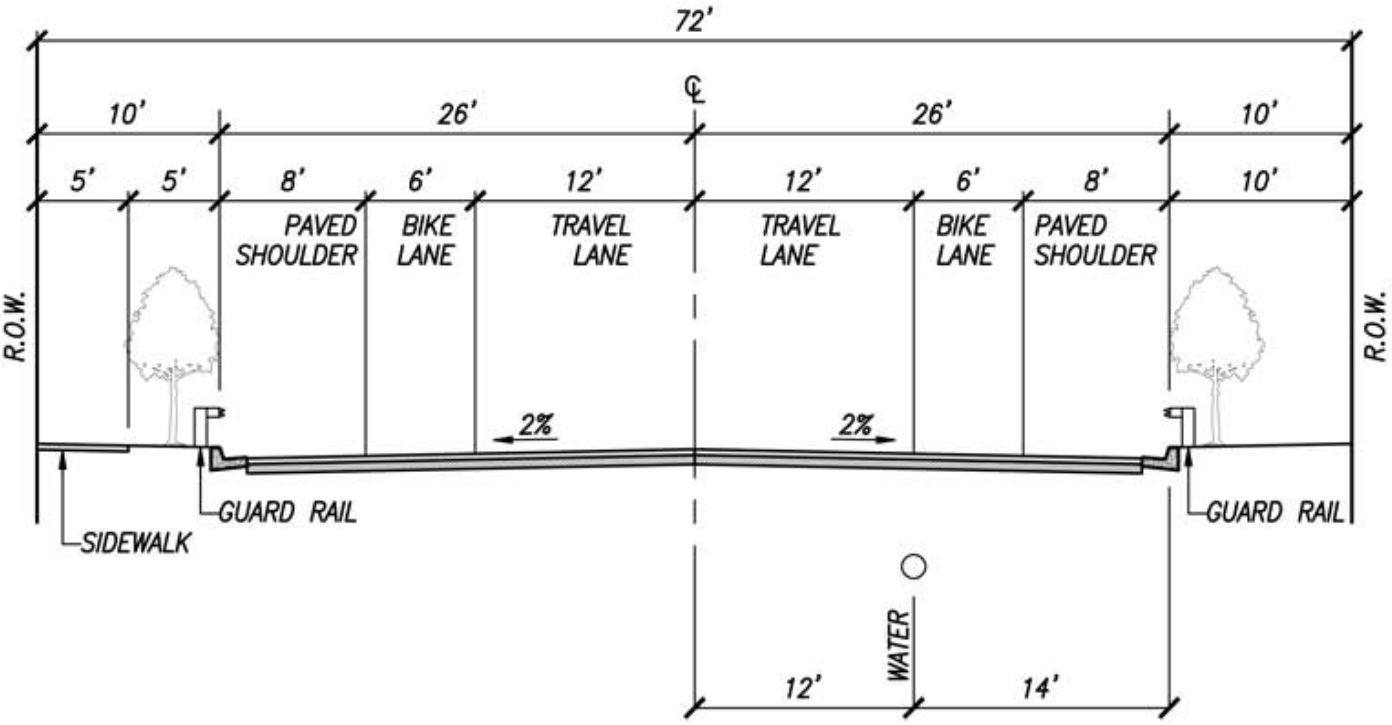
Shearer Crossing Cross-section

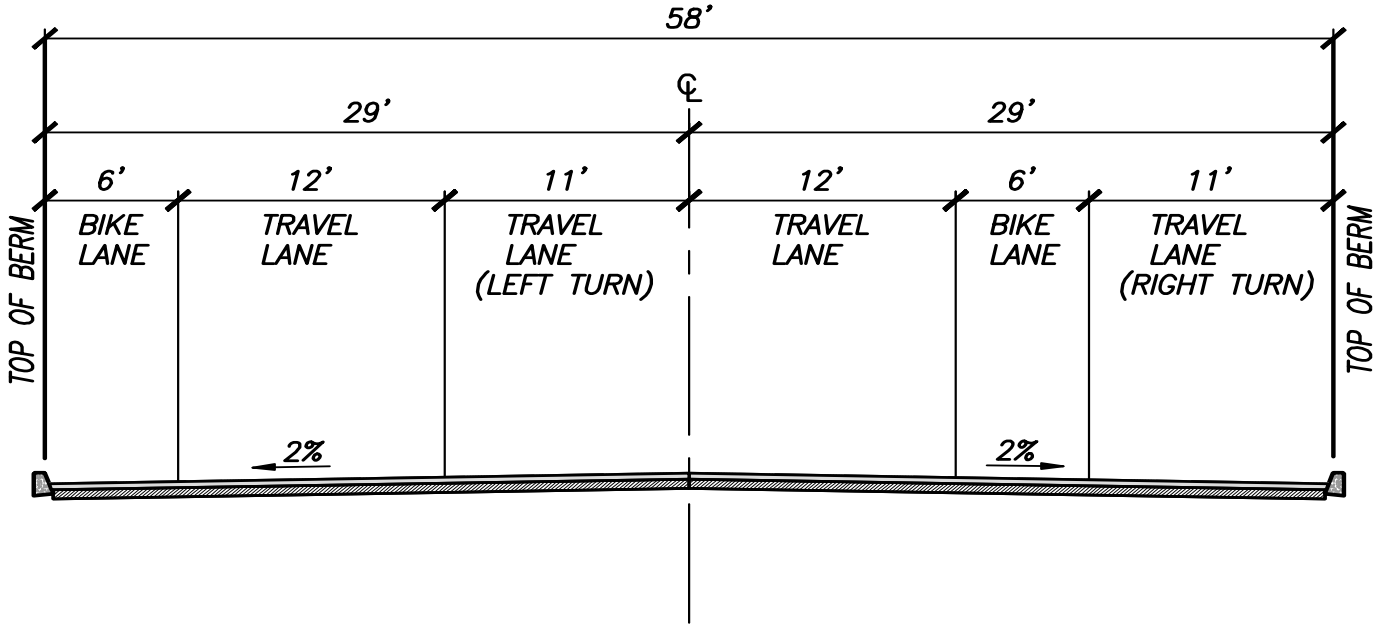
CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-18



Pala Mesa Drive



Old Hig hway 9

Source: PDC 2013

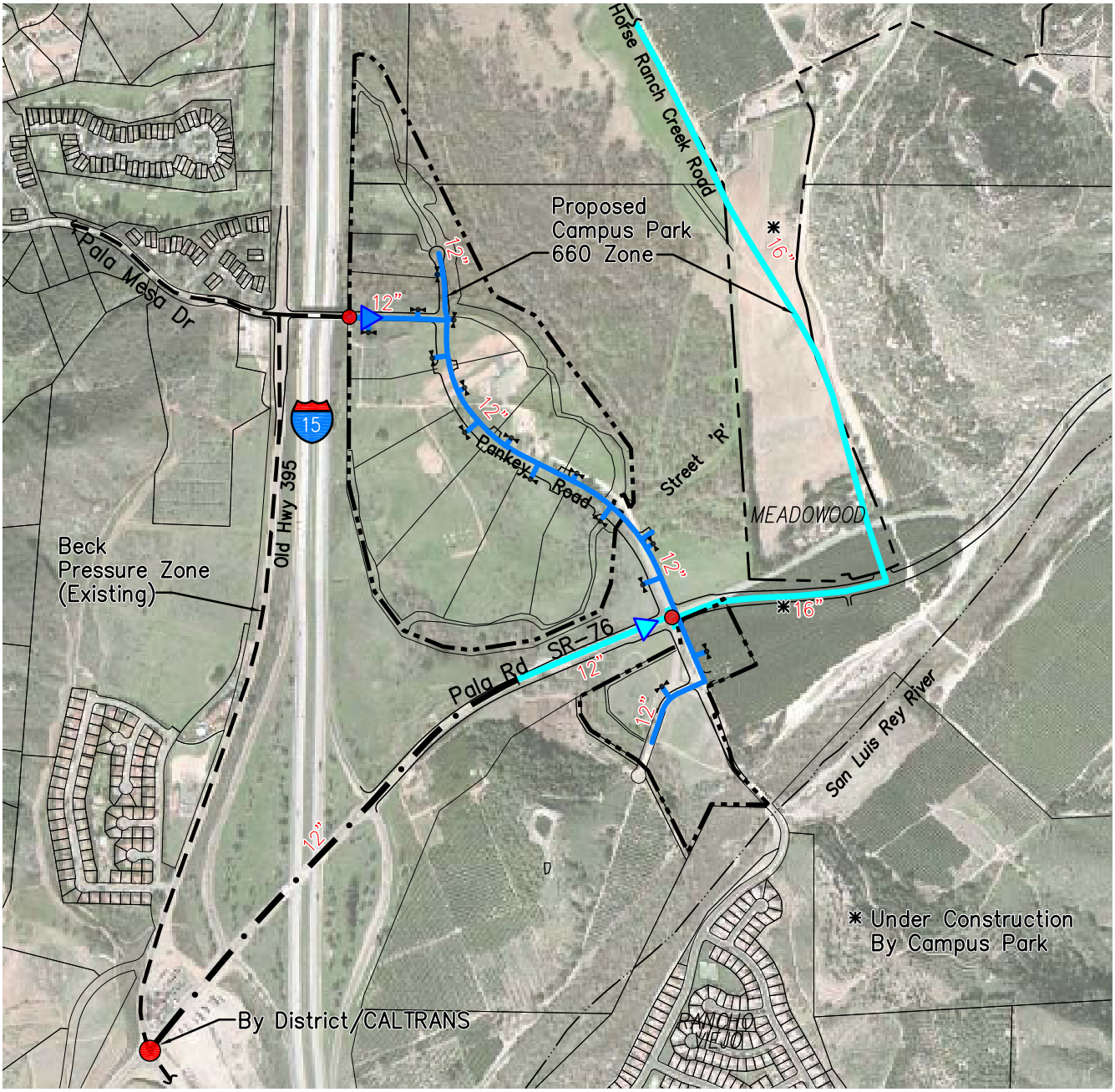
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-19C rossSection_PalaMesaDriv e_39 ndd -JP

Pala Mesa Drive and Old Hig hway 9 C ro s-sectio n s

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-19



Source: ATKINS 2012

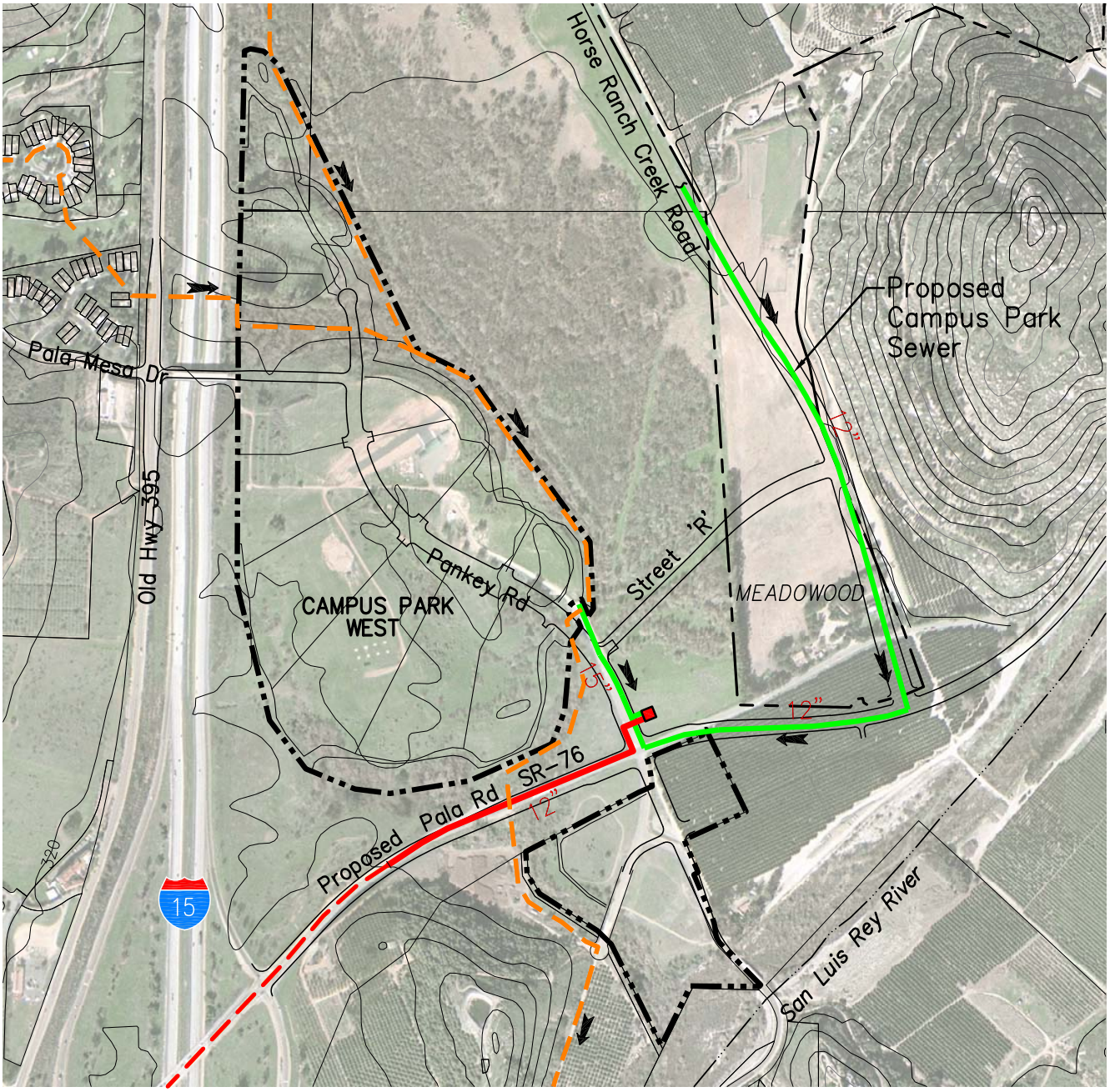
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-20_SewerPlan.indd -RK

Conceptual Potable Water Plan: On-site and Approved Off-site Facilities

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-20



Source: ATKINS 2012

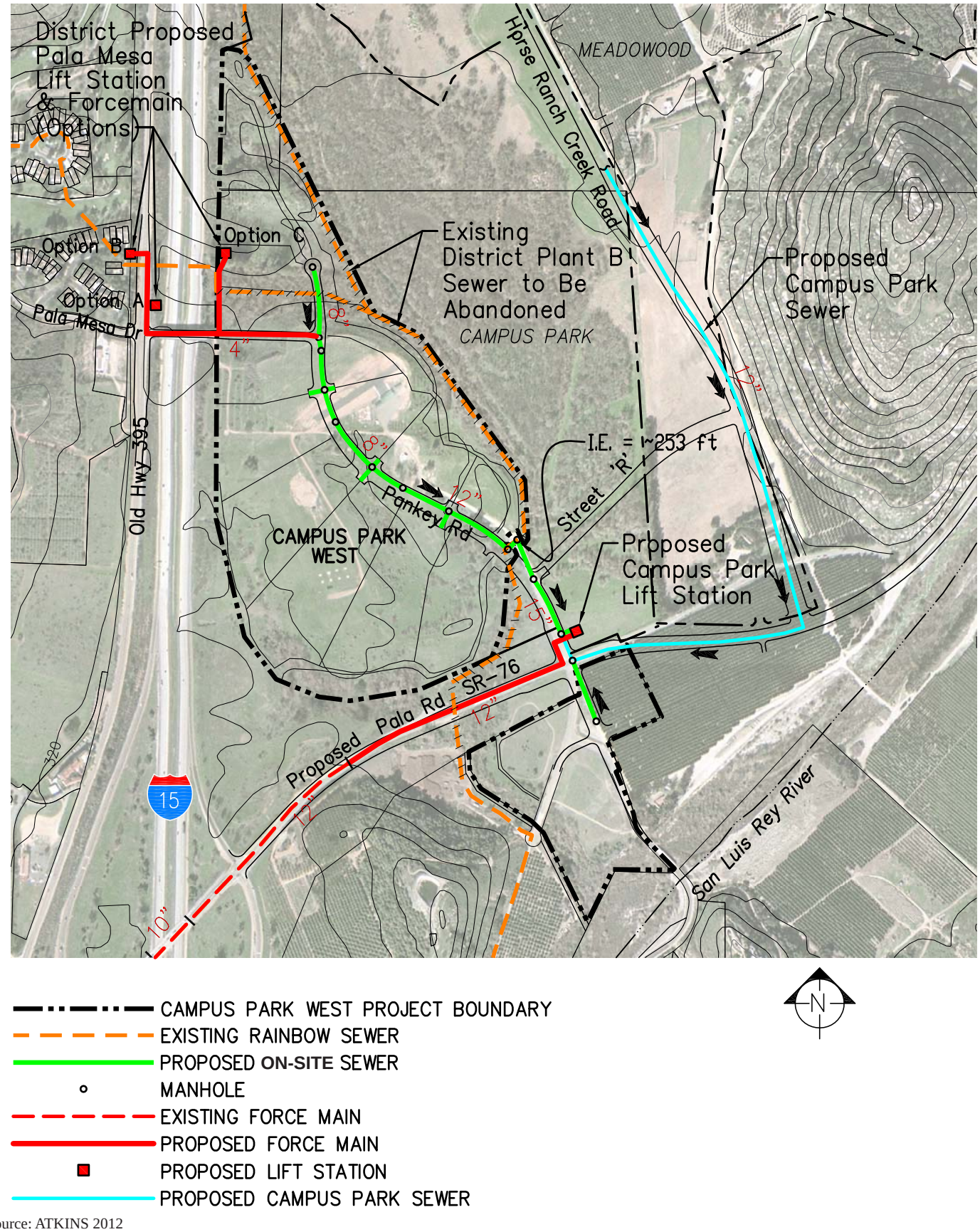
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-21_SewerPlan.indd -RK

Conceptual Sewer Plan: On-site and Approved Off-site Facilities

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-21



Source: ATKINS 2012

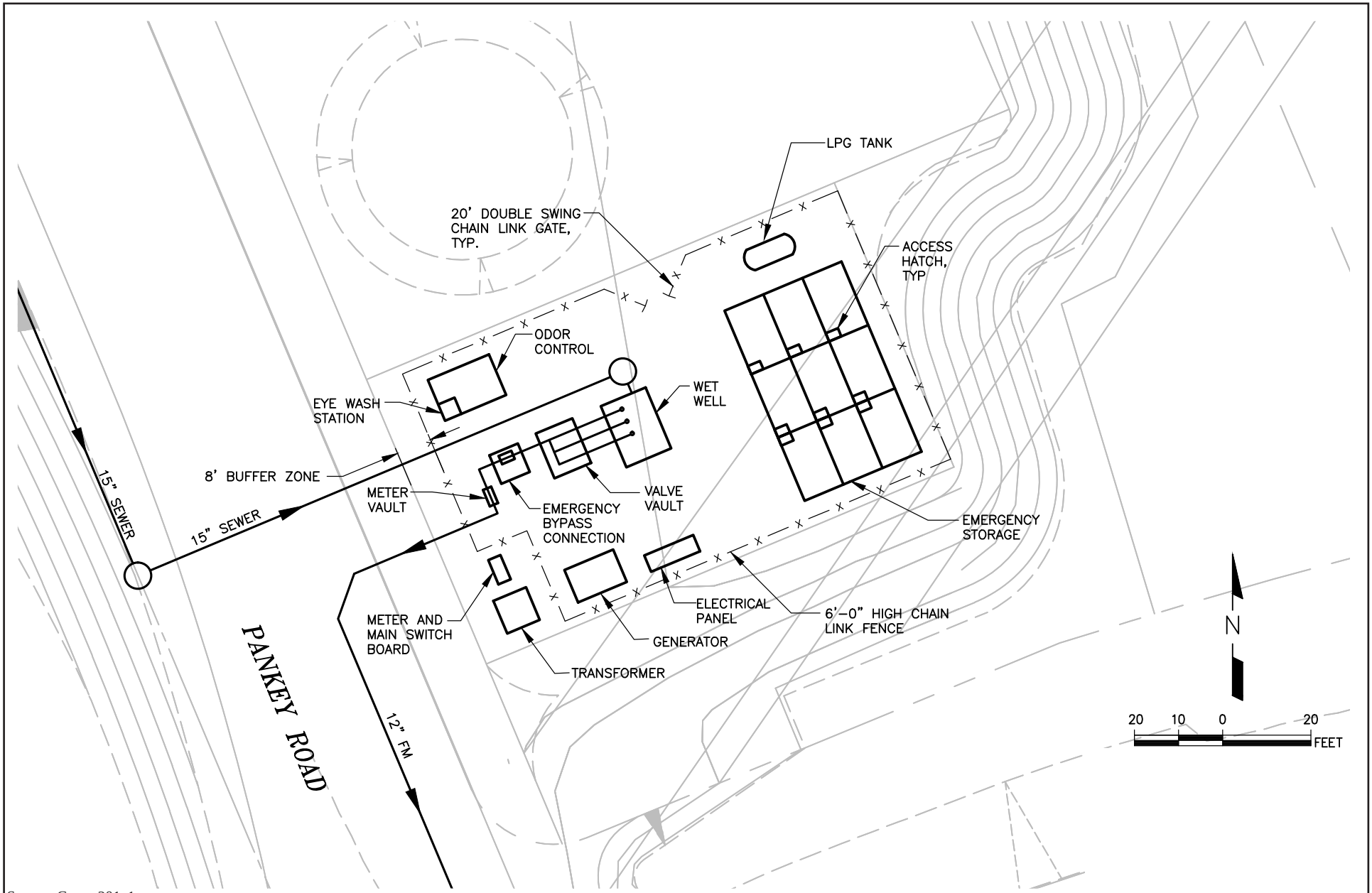
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-22_SewerPlan.indd -RK

Project Vicinity Sewer Facilities

CAMPUS PARK WEST

Figure 1-22

HELIX Environmental Planning



Source: County 2011a

I:\ArcGIS\P\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-23_SewerLift.pmd -EV

Preliminary Design for the Campus Park Sewer Lift Station

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-23

Source: Elliott 2012

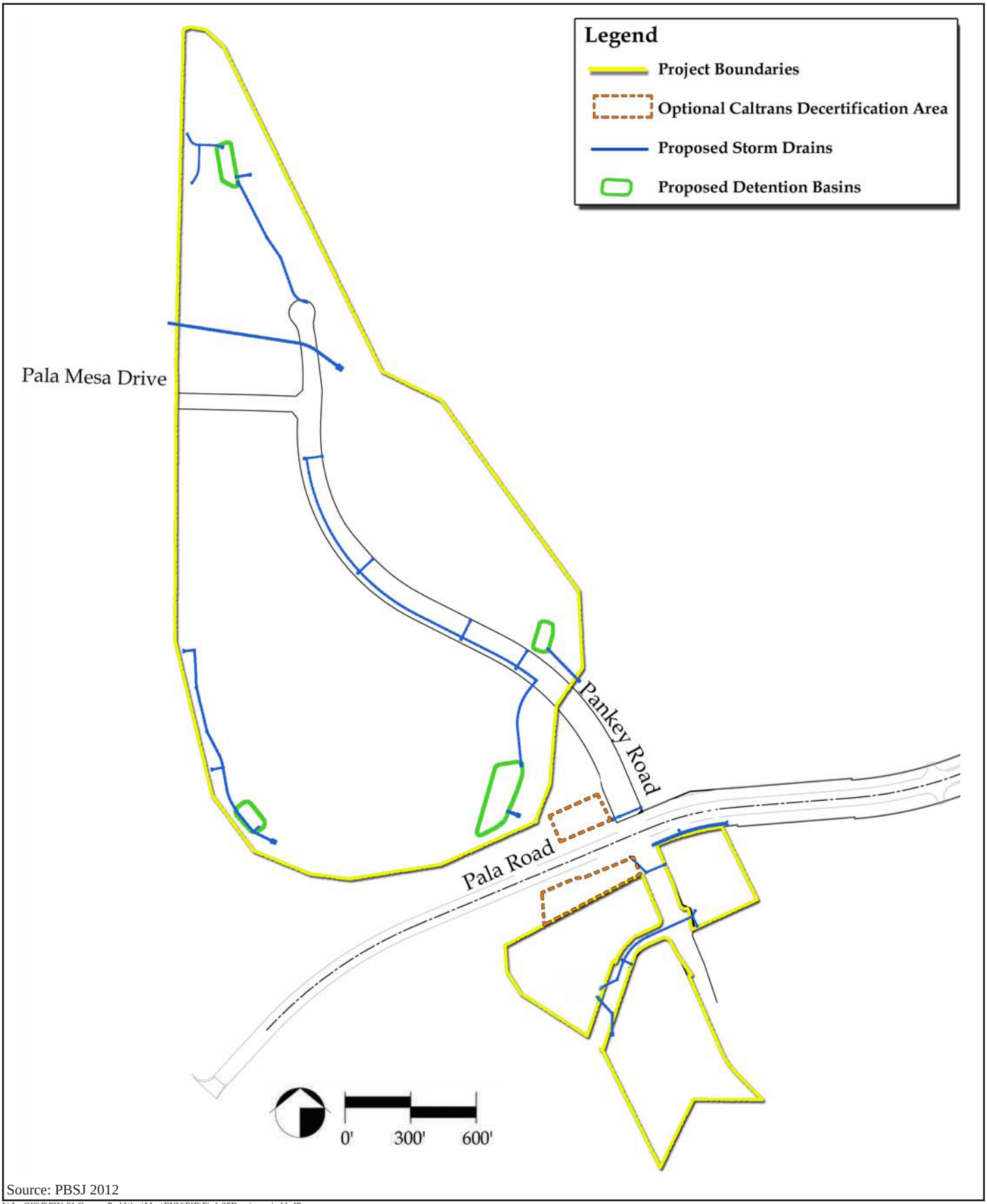
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-24_RMWDSewerPumpStation.indd -EV

Typical of the RMWD Sewer Pump Station

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-24



Source: PBSJ 2012

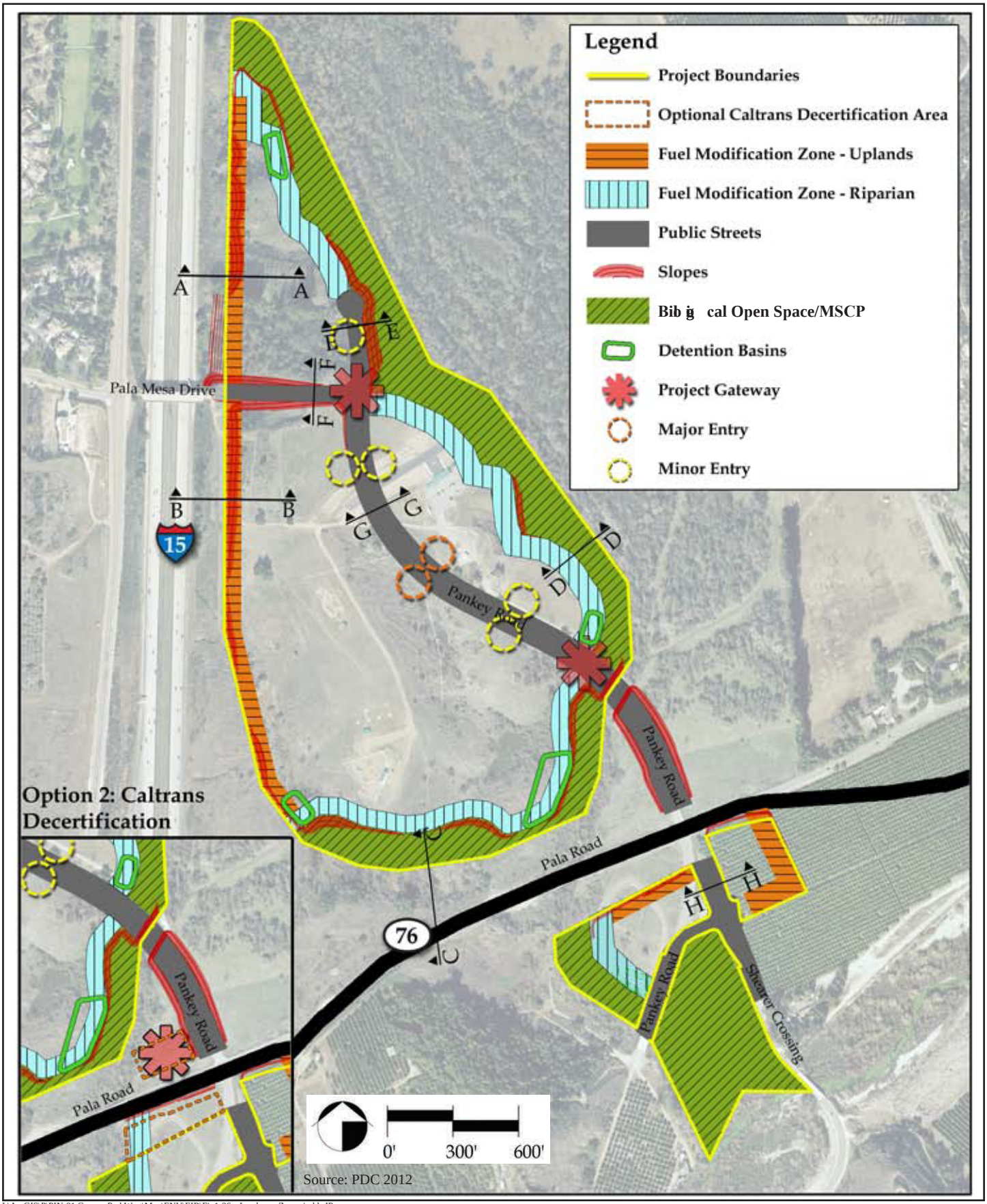
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-25D rainage.indd -JP

Conceptual Drainage Plan

CAMPUS PARK WEST

Figure 1-25

HELIX Environmental Planning



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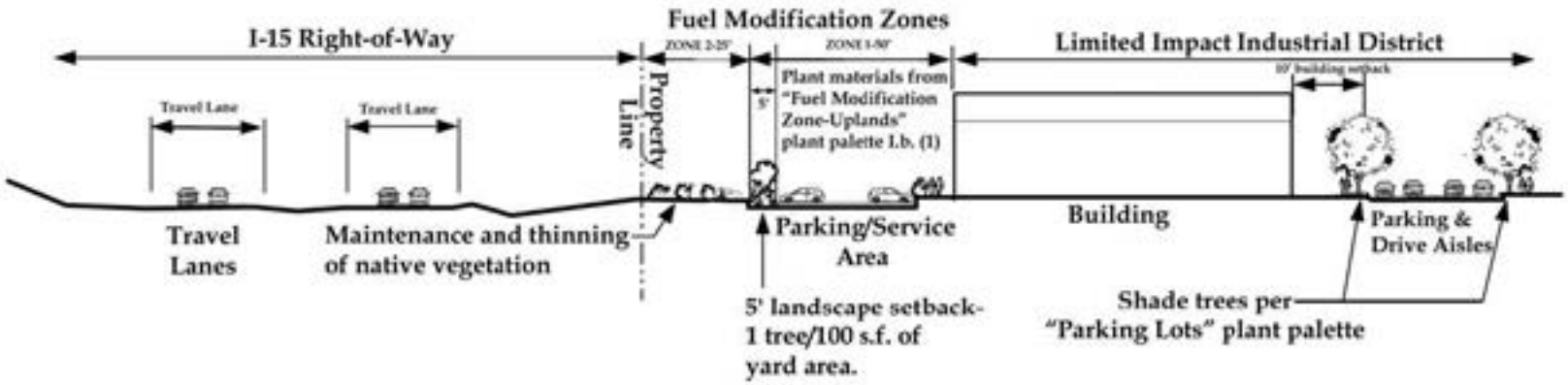
Landscape Zones

CAMPUS PARK WEST

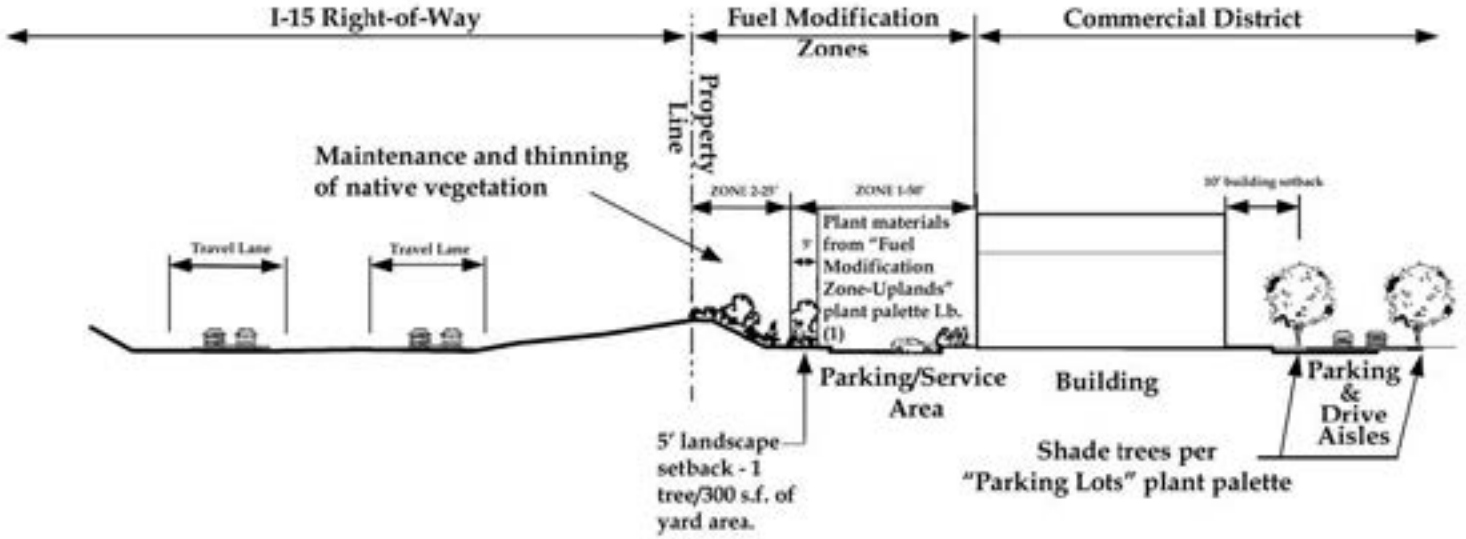
HELIX Environmental Planning

Figure 1-26



(1) Zone 1 plant palette per Campus Park West approved plant list - permanent irrigation, no combustible structures, Association or Maintenance District maintained.

SECTION A-A
LIMITED IMPACT INDUSTRIAL LAND USE



SECTION B-B
COMMERCIAL LAND USE

Source: PDC 2013

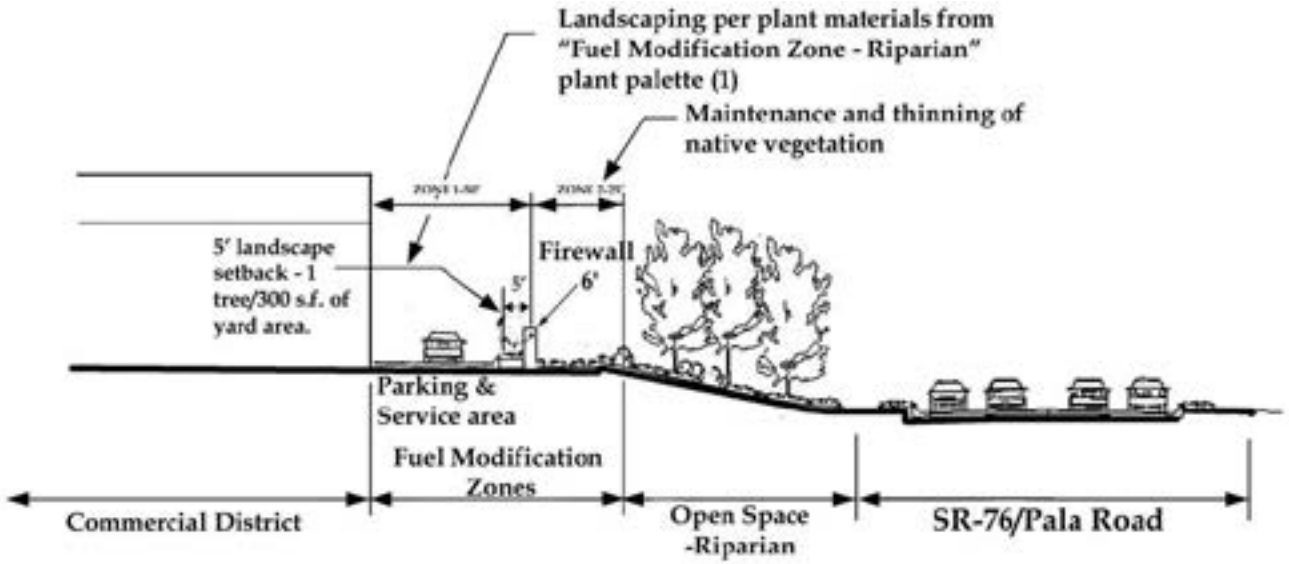
I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-26_LandscapeSections_AB.indd -KF

Landscape Sections - A-A & B-B

CAMPUS PARK WEST

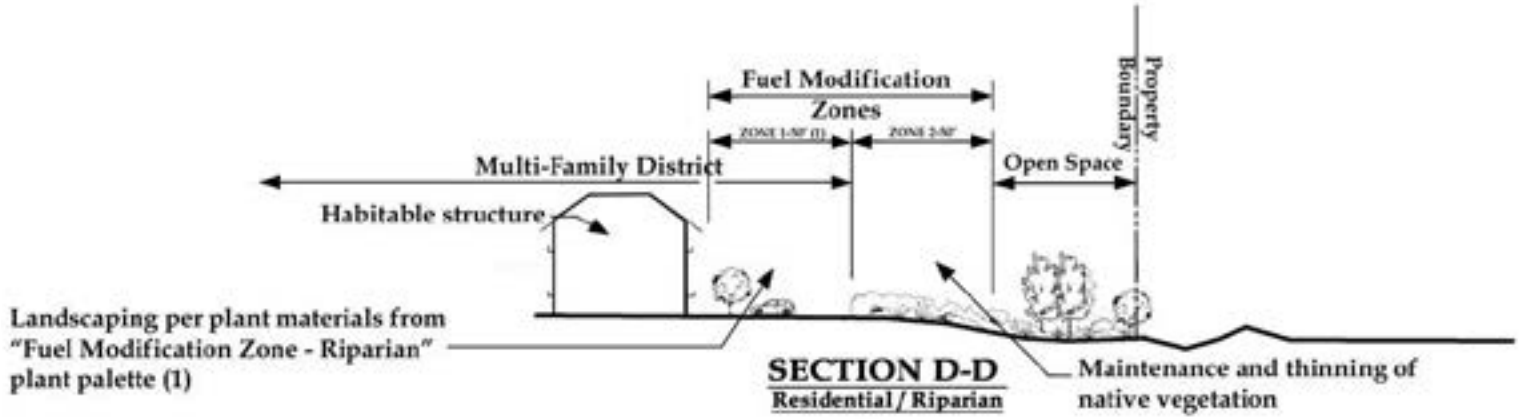
HELIX Environmental Planning

Figure 1-26



Section C - C
Commercial/Riparian

(1) Zone 1 plant palette per Campus Park West approved plant list - permanent irrigation, no combustible structures, Association or Maintenance District maintained.



SECTION D-D
Residential / Riparian

Note: Refer to section locations on Figure 1-26

Source: PDC 2013

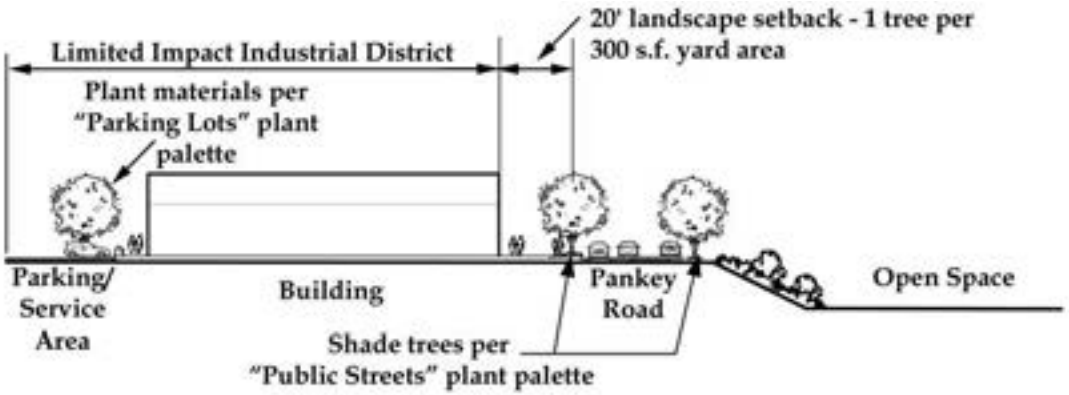
I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-26_Landscape Sections_CD.indd -KF

Landscape Sections - C-C & D-D

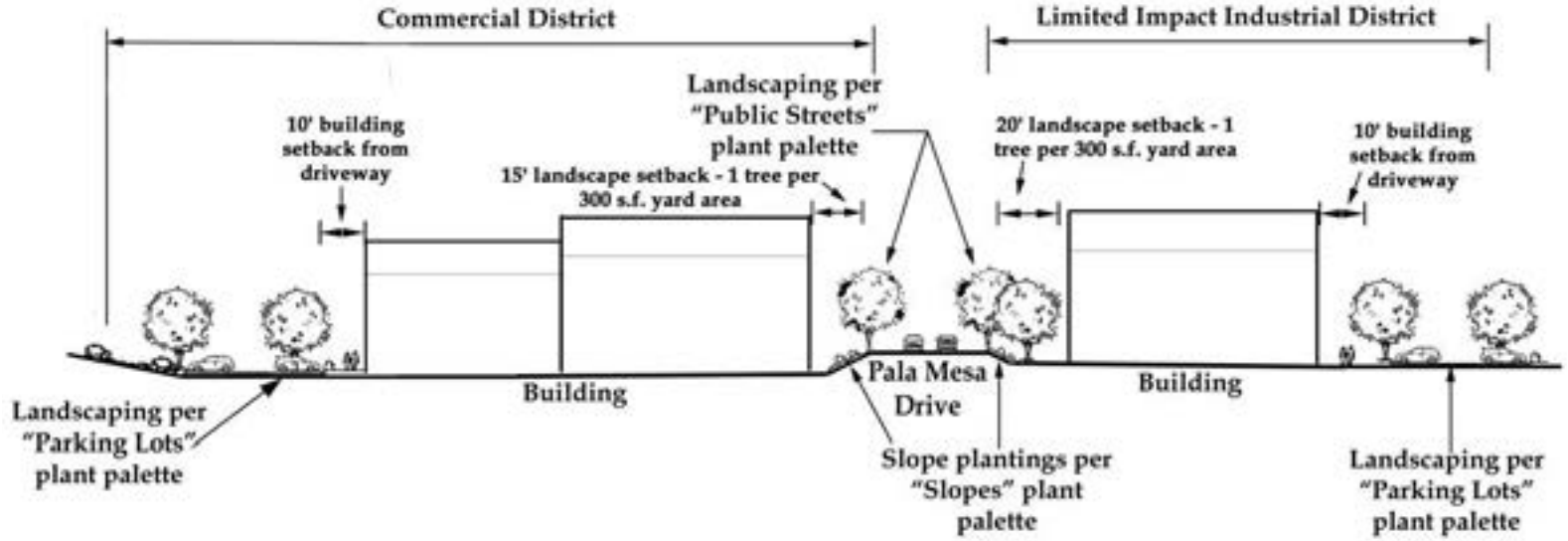
CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-26



SECTION E- E
LIMITED IMPACT INDUSTRIAL LAND USE



SECTION F - F
COMMERCIAL LAND USE / LIMITED IMPACT INDUSTRIAL LAND USE

Note: Refer to section locations on Figure 1-26

Source: PDC 2013

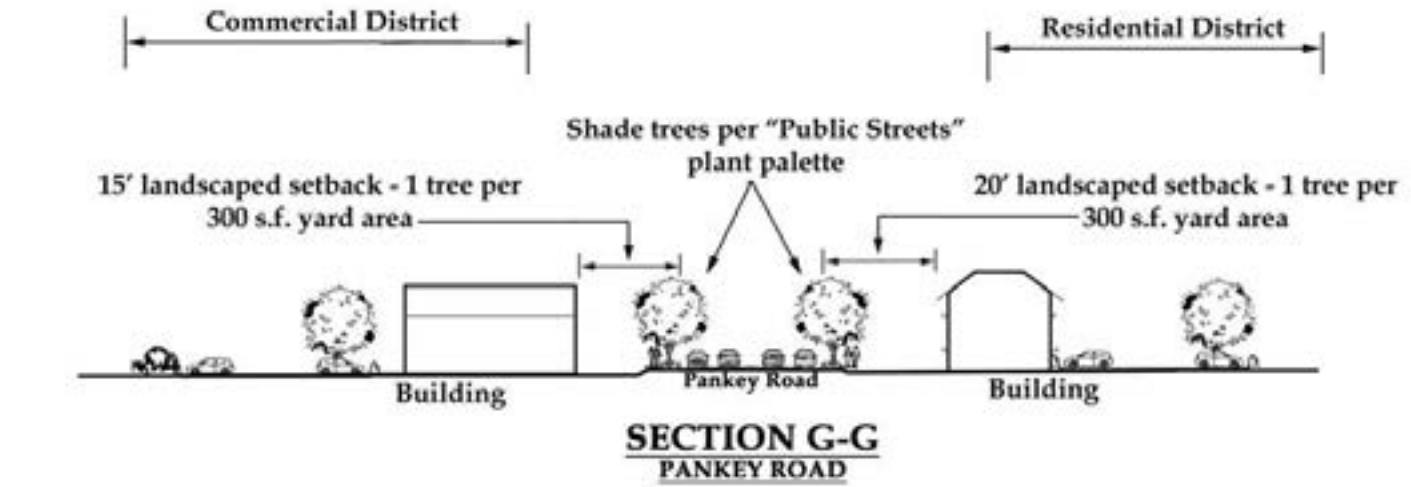
I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-26_L andscapeSections_EF.indd -KF

Landscape Sections - E-E & F-F

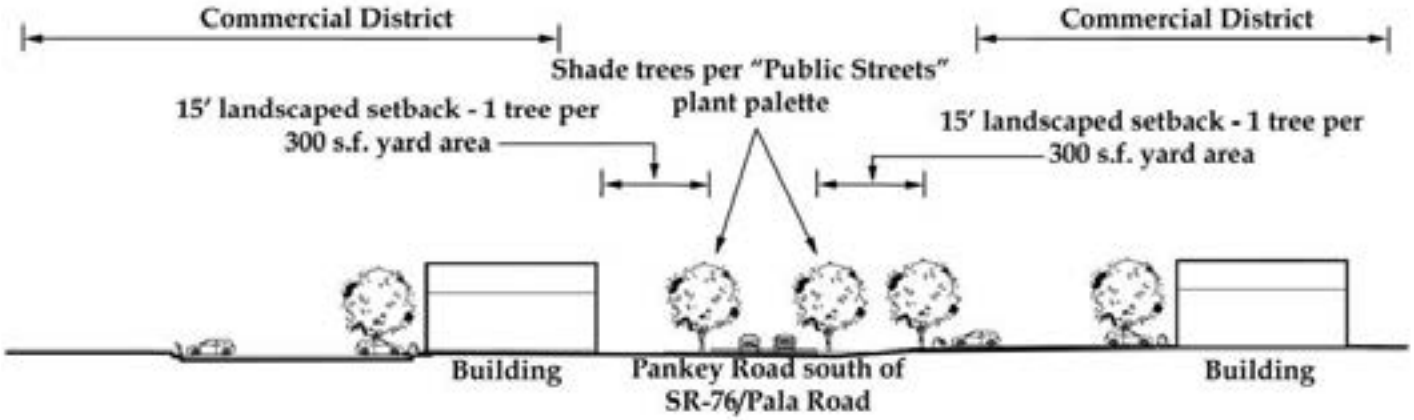
CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-26



SECTION G-G
PANKEY ROAD



SECTION H-H
PANKEY ROAD SOUTH OF SR-76/PALA ROAD

Note: Refer to section locations on Figure 1-26

Source: PDC 2013

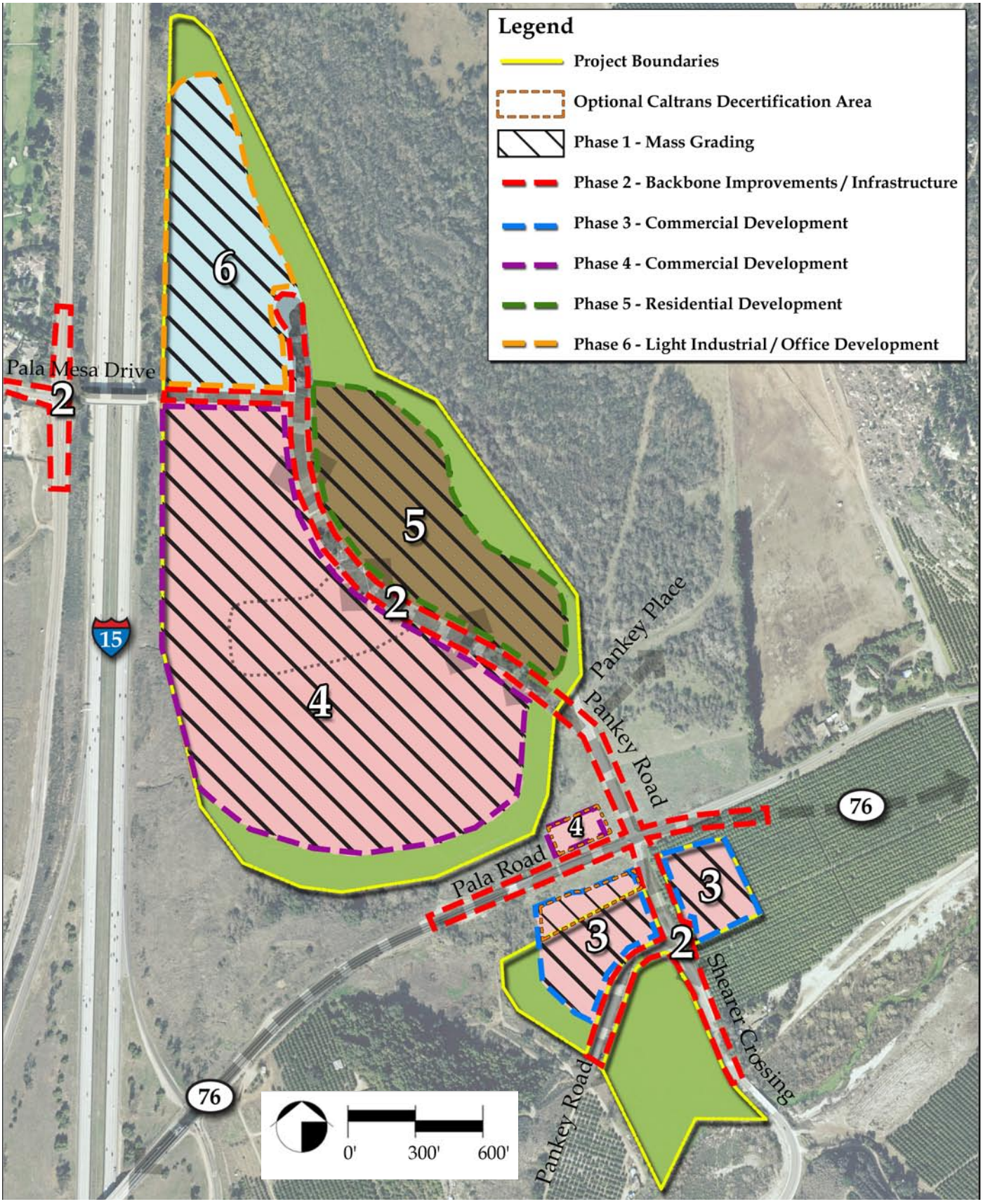
I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-26 _LandscapeSections_GH.indd -KF

Landscape Sections - G-G & H-H

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-26



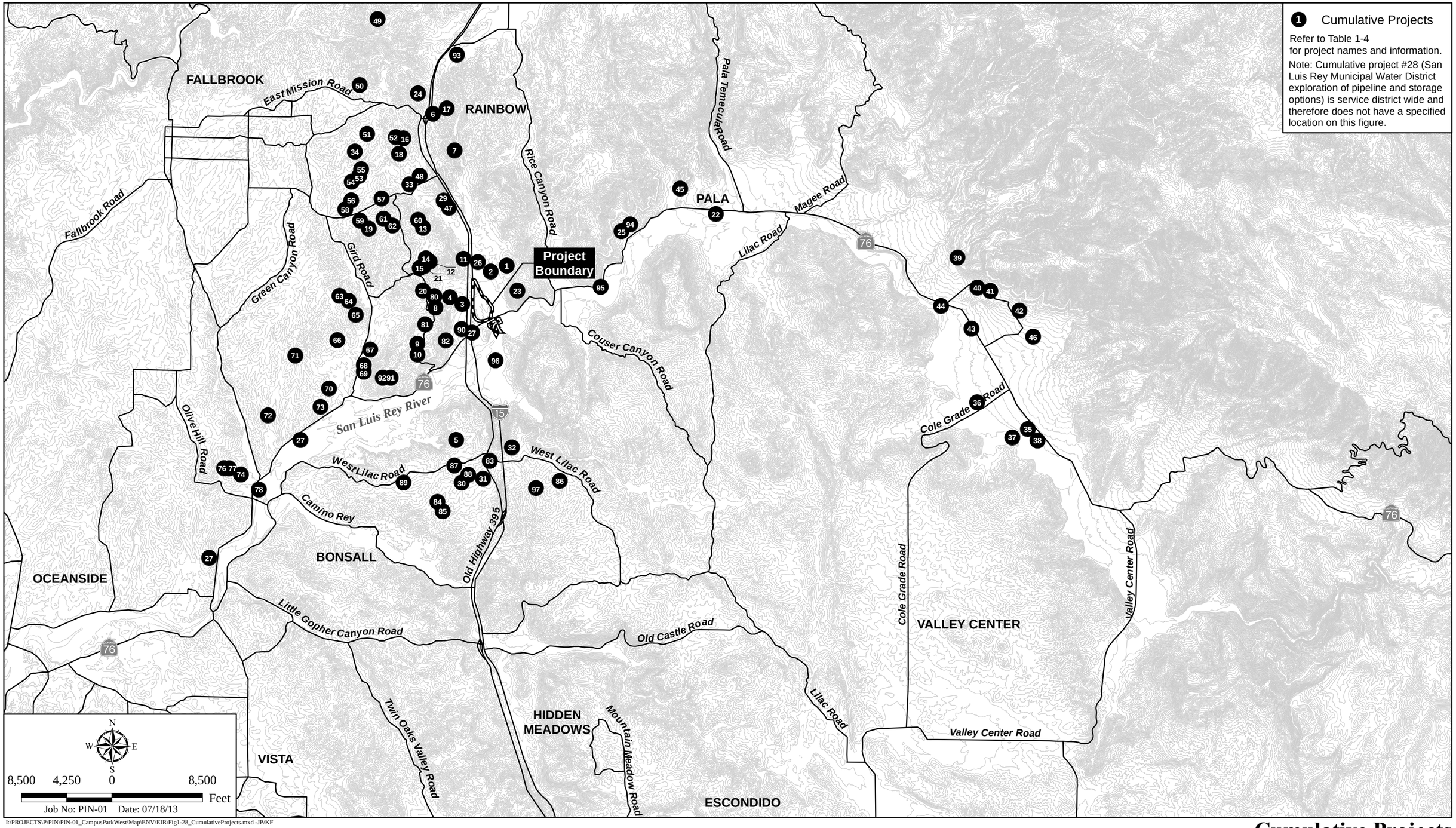
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig1-27_PhasingPlan.indd -EV

Conceptual Phasing Plan

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-27



I:\PROJECTS\P\PIN\PIN-01_CampusParkWest\Map\ENV\EIR\Fig1-28_CumulativeProjects.mxd -JP/KF

Cumulative Projects

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 1-28

CHAPTER 2.0

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

SUBCHAPTER 2.1

AESTHETICS

CHAPTER 2.0 – SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

This chapter of the EIR provides a detailed discussion of those subject areas for which project implementation would result in either: (1) significant impacts that cannot be avoided and/or (2) significant impacts that can be avoided, reduced, or minimized through mitigation measures required to be implemented as part of the Proposed Project.

At the beginning of each subchapter, there is a brief discussion of the extent to which the technical topic was addressed in the 1981 Sycamore Springs and 1983 Campus Park (Hewlett Packard) certified EIRs. A summary is presented regarding the significance identified for the impacts assessed in those documents, as well as whether mitigation was identified to lower significant impacts to less than significant levels. A brief assessment is then presented regarding the extent to which the earlier analyses are relevant, leading to a conclusion regarding whether or not new technical efforts were necessary for this subsequent EIR.

With regard to the impacts requiring new analyses, the subchapters below address existing conditions, set forth the technical analyses on which the section is based, present guidelines for the determination of significance (and the sources thereof), analyze the potential effects of Project implementation against existing and anticipated future conditions (including the potential cumulative effect of other likely projects also being implemented), identify potential mitigation measures, and assess whether or not implementation of those measures would lower identified significant impacts to less than significant levels. As appropriate, discussion in Chapter 2.0 also identifies issues specific to locations of on- or off-site Project effects, and any differences between development **Scenarios 1** and **2** as defined in Chapter 1 of this EIR.

In order to assist the reader in tracking between impacts and related mitigation measures, individual impacts and the associated mitigation measures have been given correlating numbers and letters. For example, for the issue of aesthetics, the first significant impact is identified in text in the analysis portion of the discussion as AE-1, representing aesthetics impact number 1. The measure designed to attenuate that impact is identified as M-AE-1 (i.e., mitigation for aesthetics impact number 1).

2.1 Aesthetics

The 1981 Sycamore Springs EIR addressed aesthetics in Subchapters 3.10 and 7.6. The analysis found impacts to be less than significant. Based on this analysis, the 1983 EIR addressed visual impacts wholly under "Effects Found Not to Be Significant." The 1981 document acknowledged the transition from agriculture and open space to suburban development, noted visibility from nearby SR-76, and addressed the preservation of on-site open space. The 1983 document summarized on-site topographic conditions, noted visibility from nearby scenic highways (SR-76 and I-15) as well as adjacent hillsides, addressed grading totals of approximately 2.5 million cy in the northern portion of the site, proposed landscaping of open space and manufactured slopes, disclosed manufactured slopes not to exceed 30 feet (with contour grading required of all slopes exceeding 20 feet in height), and retention of the southern third of the site as passive and active open space.

The 1983-proposed on-site uses (10.5 acres of commercial, a 150-unit townhouse area and a 226-unit mobile home park), have now been revised to include multi-family residential, mixed use, limited impact industrial, and general commercial uses as well as biological open space. Project water and sewer lines are proposed off site both east and west of the Project. All these uses require both different layout and grading requirements, including slope modification in both location and extent.

At this point, additional roads under the scenic highways program should be addressed, more detailed site planning and design guidelines are available (Fallbrook Design Guidelines [1989], I-15 Corridor Scenic Guideline and the Fallbrook Community Plan [available in 1974 but amended in 1988]), photographic simulations remove a level of uncertainty about ultimate Project configuration visibility/effect, and landscaping plans are available for the Proposed Project. In addition, since 1983, evaluation of construction-period effects, as well as cumulative impacts, has increased in importance.

These issues lead to the need for new subsequent analysis based on substantial changes in the Proposed Project requiring major revisions as well as new information of substantial importance which could result in significant effects not previously discussed.

The following sections address aesthetics evaluation summarized from the Visual Impact Analysis prepared by HELIX (2013), and presented in its entirety in Appendix B to this EIR. The reader is referred to text below for new and/or revised evaluation of all issues related to aesthetics for the Project.

2.1.1 Existing Conditions

The following sections address the current conditions at the Project site, including the existing environmental setting, viewer sensitivity with regard to visibility of the Project site, and the regulatory framework currently in place. The reader is referred to Figure 1-2 in Chapter 1.0 for an overview of the site location related to cultural and natural features discussed below.

2.1.1.1 *Existing Setting*

The Project Site

The portion of the site north of SR-76 encompasses gently sloped knolls and flat areas that are an average of approximately 40 feet above the site's drainages. Horse Ranch Creek, a tributary of the San Luis Rey River, abuts the northern and eastern site boundaries. Horse Ranch Creek also extends along the western boundary of the site parcels south of SR-76. The topography of these parcels generally is flat, and approximately 10 to 15 feet higher than the creek. The southern-most Project boundary encompasses portions of the northern banks of the San Luis Rey River. Topographic variation on the site is moderate (refer to Figure 2.1-1, Slope Analysis), with overall site elevations generally varying approximately 30 feet.

The majority of the Project site is undeveloped; historic active uses have included farming and horse breeding. The northern portion of the Project site currently supports a non-permitted

recreation center for radio-controlled model airplanes, and includes an airstrip and miscellaneous features, such as shade structures and fences. Unpaved roads occur in several portions of the site, and Pankey Road separates the three Project parcels south of SR-76.

The Project site is primarily dominated by disturbed and non-native vegetation. The vegetation is low-growing, brown most of the year, and green after receiving rainfall. Several large trees, which occur as individuals and in groups, occur on site. In addition, a variety of native vegetation occurs along the edges of the property and in its northernmost portion, primarily in the drainage areas. One of the parcels south of SR-76 continues to support a section of citrus orchard. Refer to the Visual Impact Assessment (Appendix B) and the Biological Technical Report (Appendix G) for further descriptions of Project site vegetation.

The Project site currently has no, or very low levels of, existing lighting; the existing remote control airplane and helicopter facilities generally are not used after dark. The County LPC (also known as Dark Sky Ordinance) identifies the location of the Project site as being outside the Zone A 15-mile radius of the Palomar Observatory.

A number of photographs are provided to illustrate the existing visual character of the Project site and the surrounding area. Figure 2.1-2, Photograph Location Map, is an aerial photograph of the Project site and the surrounding area, and shows the location from which each "typical view" (TV) photograph was taken. Detailed discussion regarding elements seen in each TV depicted at the back of this chapter is provided in Appendix B. TVs one through nine (Figures 2.1-3a through 2.1-3e, Typical Views) were taken on the Project site and depict the existing land forms, vegetation, and structures on site, as well as visible off-site background features of the surrounding area. This first set of TVs is more focused in nature; illustrating the existing rural and private recreational nature of the site, as well as showing the surrounding hills and mountains.

Surrounding Area

TVs 10 through 20 (Figures 2.1-3f through 2.1-3k) illustrate mid- and long-range views toward the Project site and illustrate the relationship of the site to the larger valley setting.

The Project site is located in a valley comprising a portion of the I-15 corridor north of the San Luis Rey River. The area surrounding the site is topographically varied and the immediate surroundings generally are undeveloped.

Located to the north of the Project site are Monserate Mountain and its foothills. A resource conservation area owned and managed by the Fallbrook Land Conservancy overlays a portion of the Monserate Mountain foothills. The highest point in the Monserate Mountain Range is 1,567 feet amsl. Neighboring peaks in this range step downward to the south, with the lowest peak reaching a height of 814 feet amsl. Rosemary's Mountain, located north of the San Luis Rey River and SR-76 east of the Project site, is a rocky mountain that reaches a height of 992 feet amsl.

Citrus and avocado groves and passive agriculture are the main land uses east of the Project site between the property and Monserate Mountain. Large-lot single-family residences also are present in this area. Numerous single-family homes and some nursery facilities are located among the hills north of the Project site.

Lancaster Mountain, with a peak at approximately 1,485 feet amsl, is located southeast of the Project site. The San Luis Rey River flows around the north side of Lancaster Mountain and trends southwestward, south of the Project site; the southernmost Project parcel abuts the northern portion of the river corridor. The area around the San Luis Rey River is an open space corridor, and the river is identified as a Resource Conservation Area in the County General Plan. Included in the open space and conservation area are large patches of riparian woodland vegetation. South of the river is the Lake Rancho Viejo residential subdivision. The hills comprising the southern edge of the valley are sparsely developed or undeveloped. I-15, the major north-sound roadway in the valley, transects these hills. The Lilac Road Bridge, a noted structural feature of the area, spans I-15 at the freeway's southern crest.

Another north/south trending series of peaks creates the valley's western boundary. The highest among these is a peak that rises to approximately 929 feet amsl. Development to the west of I-15 includes Pala Mesa Resort, located at the bottom of the hills to the west of I-15 and Old Highway 395, and northwest of the Project site. The eastern-facing slopes of the hills west of the Project site are developed with sparse single-family residences on large lots interspersed with small-scale agricultural facilities and pockets of preserved native vegetation (including the Beck Reservoir and the Engel Family Preserve; refer to Figure 1-2 of this EIR). Denser housing and other types of land uses are concentrated at the base of the hills along the west side of Old Highway 395, including housing developments with smaller lots, a hotel/restaurant, a gas station and other small restaurants or commercial buildings.

No public parks or recreation areas other than the north- and northeast-trending Monserate Mountain trail exist near the Project site on the east side of I-15. A trail owned and maintained by the Fallbrook Land Conservancy within the Engel Family Preserve is located near the top of the hills paralleling I-15 on the west. This trail is accessed from Sumac Road and overlooks the I-15 corridor and much of the Project site.

2.1.1.2 *Project Site Visibility/Viewshed*

A "viewshed" is defined as the surrounding geographic area from which a project is likely to be seen (see Figure 2.1-4, Project Viewshed).

The viewshed focuses on the Project site because the majority of long-term and visually notable Project elements (structures, landscaping, lighting, etc.) are associated with the development itself. The Project viewshed does not include isolated off-site improvement locations such as pipeline routes or focused roadway improvements as primary elements determining overall viewshed boundaries. These comprise ground level and/or generally small-scale elements such as a turn-lane or intersection signal; they are not sizable enough to "read" within a large-scale viewshed.

The viewshed boundary was determined through the computer analysis of local topographic maps. The areas highlighted in green shading on the map indicate areas that—based on topography and elevation relative to the site—potentially would see the Project site. This figure is based on topography only, without consideration for structures and vegetation, which often constrict views to the site in local areas (such as from Lake Rancho Viejo or from winding roads on the hills west of I-15). Other controlling features include distance (from some locations within the viewshed the Project site would be seen as one small aspect of a much larger view) and atmospheric conditions (haze/humidity can often diminish details of views).

TVs 10 through 20 illustrate views of the Project site from points within the viewshed, and represent the variety of views available that include the Project site, from close-in foreground views to panoramic views encompassing all or most of the Project site. Rosemary's Mountain and Lancaster Mountain generally form dominant landforms in the background to the east; mountains further in the distance (as well as to the south) are often visible.

2.1.1.3 *Visual Character*

Visual character is based on definition of attributes that are neither good nor bad in themselves. A change in visual character cannot be described as "good" or "bad" until it is compared with the viewer response to that change.

The visual character of the Project setting encompasses visually diverse forms, including the geometric and rectilinear structures in the residential and commercial areas, and more natural, complex vegetation in the riparian areas. The low-growing grasses in the flat portions of the valley are relatively smooth and simple, and the trees in the groves generally are of a standard shape and height. The Project site is relatively flat, and includes a few geometric structures and individual trees. The masses of trees in the drainages are visually dominant, but tend to hide the landform variations on the Project site.

This setting is encircled by the undulating, curved and irregular lines that comprise the horizon-line of the valley. These hills create a visually dominant background feature in almost any view of the Project site and surrounding area. The highways that extend through the area are strong linear visual elements with long, straight segments and sweeping curves. In closer views, the visual lines within the valley are more complex, such as the roads winding along the hillside on the west side of the valley and the boulders on Rosemary's Mountain and the hills on the east side of the valley. The Project site generally has few dominant, strongly geometric lines, as it encompasses mostly low-growing vegetation and trees that hide the slopes of the drainages. The airstrip on the Project site is a strongly geometric, short line when seen from higher elevations.

The visually dominant colors in the viewshed generally are the greens and browns of the vegetation, with occasional purple on the hills in the backgrounds. The structures in the area are often visible as white or light-color spots, and frequently have red roofs. They typically are small elements within the larger landscape unit, and generally are not massed in groupings large enough to be visually dominant within the landscape unit taken as a whole.

Seen as a whole, the hills and the valley within which the Project is located are visually smooth, with the vegetation screening structures and minute variations in landforms. Seen in more detail, the vegetation and other elements that comprise the visual environment of the valley are diverse and irregular. The valley encompasses undeveloped, open space areas and residential and commercial land uses; dense vegetation and sparsely vegetated areas; smooth hillsides and rough boulders; hard, developed highways and smooth, curved hills; and white or light colored developed structures and earth-toned hills and green or brown vegetation. The Project site has less diversity; the dominant visual elements on the site consist of flat areas covered with low-growing vegetation and drainages vegetated with taller trees. The individual trees growing on the flatter areas of the site tend to emphasize the general consistency of the visual elements on the site.

Most of these diverse elements are visually harmonious within the valley. Some of the seemingly dissonant elements emphasize the overall scale and form of the valley; for example, the highway curves on the north and south ends of the valley emphasize the curves and undulations of the hills. Some features, however, are visually contrasting elements, such as the Lake Rancho Viejo development, comprised of a group of residential structures with fewer trees than the neighboring river and groves. Most of the other visible structures in the valley are on the western hillsides, and are visually screened by mature vegetation. Rosemary's Mountain also is a contrasting element within the valley; it stands alone and has sparser vegetation and denser boulders. The Project site has high continuity, mostly due to the low diversity of elements.

The landforms that comprise the valley (e.g., the hills that make up the edges of the valley bowl and flat areas the make up the valley floor) are the most visually dominant feature. The structures within the valley, though at times visually contrasting, are not visually dominant due to the large scale of the landforms and the valley as a whole. The Project site is a small portion of the generally flat areas along the valley floor, and has few visually dominant elements, although the on-site airstrip and shade structures can be visually notable from some areas.

2.1.1.4 *Visual Quality*

Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed, defined as follows:

- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.

- **Intactness** is the visual integrity of the natural and man-made landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

The valley within which the Project site is located has high unity; as a whole, the area has visible compositional harmony, even among the variety of features. Some visual elements, such as Rosemary's Mountain and I-15, are visually prominent, and somewhat contrasting. These features, however, tend to emphasize the overall coherence of the visual environment because they are not dissonant elements (as noted above, for example, the highway emphasizes the curves of the hillsides). The Project site also has moderately high visual unity, due mostly to its low diversity (flat areas covered with low-growing vegetation, drainages vegetated with taller trees, and the occasional building or individual tree). The individual trees growing on the flatter areas of the site tend to emphasize the general consistency of the visual elements on the site. Groves located south of SR-76 do not provide visual focal points in overall views due to their low elevation, low scale, and relatively restricted extent relative to larger grove areas in this part of the County. They are peripheral to the majority of the panoramic view from the west (being located at the southern extent of the view), in a generally fragmented state given location on small and disparate parcels. Iconic San Diego County hillside groves (constituting part of the valued focal point) are located within the viewshed, but these are sited on the western-facing slopes of the mountains on the east side of the basin.

The intactness of the area is moderately high. Although the diverse elements comprising the view do not detract from the visual coherence of the environment as a whole, when viewed more closely, the developed areas and structures encroach somewhat into the natural areas of the valley, reducing its intactness. Most of the structures are located along the hillside on the west side of the valley, but more have recently been built on the valley floor, visually extending developed areas into the (previously generally undeveloped) valley. The Project site also has moderately high intactness; the flat areas and drainages with trees are visually dominant on the Project site, yet the airstrip and related facilities, such as shade structures, contrast with the rest of the undeveloped area.

The approach into the valley from north or south along that highway provides long-reaching views of the entire area. Although currently comprising an undeveloped feature, the valley floor is not the feature that draws the eye. It does contribute to the impression of openness. Relatively flat and largely non-descript, it visually reads as the base to the view which is shaped by the scale and steep nature of the edging mountains. The dominant features, however, are the surrounding hills and mountains. It is these edging features that define the space in the first place. In other words, if the mountains were removed, the visual effect provided by the valley would be strongly diminished. If the valley floor were to be comprised of different elements, the surrounding hills and mountains would still provide dramatic visual effect.

Within that valley, the Project provides a relatively small piece of the overall visual environment, and in itself has moderately low vividness. The flat areas are not visually unique, although the airstrip is a distinct feature on the site. Riparian vegetation associated with Horse Ranch Creek is also notable.

2.1.1.5 *Viewer Response*

Viewer response to Project change is composed of viewer sensitivity and viewer exposure. *Viewer sensitivity* is defined both as the viewers' concern for scenic quality and the viewers'

response to change. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional. *Viewer exposure* is assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of the view, position of the viewer, and the speed at which the viewer may move.

Motorists

The Project site is located at the interchange of I-15, a County Third Priority Scenic Highway and SR-76, which is a County Second Priority Scenic Highway west of I-15.[1] Generally, motorists on large highways have moderate sensitivity; however, the scenic highway listings for I-15 and SR-76 indicate that motorists may have higher sensitivity to the visual environment and potential changes to views from the highway than motorists on similar large highways not designated as scenic.

I-15 is heavily traveled, being one of the main north-south routes between the San Diego and the Los Angeles/Riverside areas. Currently, approximately 113,000 vehicles travel I-15 in the Project vicinity each day (Linscott, Law and Greenspan Engineers [LLG] 2013; pers. comm.). A car traveling at freeway speed (65 to 70 miles per hour [mph] or more) would pass through the valley in approximately two minutes. Based on the volume of traffic on I-15 and the extent of the viewshed, motorists on I-15 have high exposure. While the Project site is potentially visible from most of I-15 within the valley, the small hills between the freeway and the western Project boundary block views from a large portion (1.2 miles) of the freeway closest to the Project site (see TVs 10 and 11, Figure 2.1-3f). Next to the Project site, views from I-15 are peripheral to the direction of travel. Viewers along I-15 in areas farther from the Project site would have more direct views of the Project than those directly next to the site, although their views would be less detailed due to the greater distance. In general, drivers and passengers on I-15 are passing through the area. The transient nature of the viewers moderates their potentially high sensitivity.

Approximately 10,600 vehicles currently travel SR-76 between I-15 and Pankey Road (Appendix D). The Project site borders SR-76 for approximately one-quarter mile, and would be visible peripherally to the direction of travel. The viewshed analyses indicate up to two miles of SR-76 from which the site may be visible (barring screening vegetation), but views may be less detailed due to distance. Refer to TVs 12 and 13 in Figure 2.1-3g, and TV 14 in Figure 2.1-3h, for examples. The posted speed limit on SR-76 is 55 mph. Motorists traveling westward at the speed limit may have views toward the Project site for approximately two minutes. Viewers in vehicles at traffic lights near the I-15 interchange may have a longer view period. The volume of traffic and the extent of the views result in motorists on SR-76 having moderately high exposure. SR-76 would be used mainly by viewers passing though the area (there are few residential developments accessed via SR-76 in the vicinity). The transient nature of the viewers moderates their potentially high sensitivity.

The Project site is visible as well from Old Highway 395, which generally parallels I-15, but carries fewer motorists (5,000 to 7,100 in the vicinity of the Project). Views from Old Highway 395 are generally expansive since most of Old Highway 395 near the Project site and in

[1] Please refer to Section 2.1.1.4, Regulatory Framework, of this subchapter for information on scenic highways programs.

the southern portion of the Project viewshed is higher in elevation than I-15. Refer to TVs 15 and 16 on Figures 2.1-3h and 2.1-3i. Views from Old Highway 395 in the farther extents of the viewshed would be more direct, but would be less detailed. Old Highway 395 has a posted speed of 40 mph. Motorists on Old Highway 395 traveling north of SR-76 pass the Project site in approximately 1.5 minutes; they traverse the larger viewshed in approximately 4.5 minutes. This longer duration of views indicates that despite the lower number of viewers, motorists on Old Highway 395 have moderately high exposure. As Old Highway 395 provides access to residential and commercial areas west of I-15 and the project site, its travelers are more likely to be regular visitors to the area and their sensitivity is high.

The viewshed also includes smaller, private roads and public residential streets, particularly on the eastern facing hill in the west portion of the Project viewshed and in the far northern extent of the viewshed. On these roads, where multiple structures and vegetation do not block views, expansive views of the valley and the Project site are available. This is not the typical condition, however, and the brief duration of views and relatively low number of viewers results in a finding of moderate exposure for motorists on residential roads. Motorists on smaller, residential roads in the area generally have moderately high sensitivity.

Residents

Many area residents have elevated views of at least a portion of the Project site. These are long-term, stationary views toward a generally rural area with mountainous backdrop. Residential landscaping or nearby structures also provides frequent shielding of view elements. Where views exist, however, they can be expansive, and many homes are sited specifically to maximize these open views. In these instances, open views encompassing adjacent developed uses, the I-15 corridor valley, and the surrounding mountains to the east are visible, with Monserate Mountain and associated ridge features providing a dominant and natural background to the views from this area. Examples are provided in TVs 17 and 18, on Figures 2.1-3i and 2.1-3j, respectively. These viewers have high exposure, due to their long-term stationary views.

Residential viewers would be expected to be highly sensitive to changes in the viewscape. For these viewers, the Project area can provide an often-seen and intimately known view that contributes to the sense of home or the broader community. These viewers are expected to be extremely aware of all changes associated with Proposed Project improvements. While some are expected to welcome Proposed Project amenities that would be available to them, experience shows that a number of these residents will strongly desire retention of existing conditions.

Recreationalists

There are no public parks in the vicinity of the Project site. Several private golf courses exist within five miles of the Project site. The nearest is Pala Mesa Resort, directly west of the Project site and separated from it by I-15. The vegetation and landforms within this private golf course generally screen golfers' views of the highway and the Project site.

The Monserate Mountain Trail provides access for hikers to the Monserate Mountain Preserve and along the Monserate Mountain Foothills. Portions of the trail are included in the County of

San Diego Trail Master Plan. The trail, fire breaks and access roads, and water tank access roads Project are approximately two miles northeast of the Project site, and offer occasional unrestricted overviews of the Project site and the surrounding area (see TV 19, Figure 2.1-3j). Views currently are primarily natural and rural, and include natural vegetation, grassy areas, and citrus and avocado groves on neighboring properties, as well as residences, agriculture, highways, and natural areas in the background. Except for Monserate Mountain Trail, most of these paths are not easily accessible to the general public.

Fallbrook Land Conservancy's Engel Family Preserve, accessible from Sumac Road just south of Pala Mesa Drive is located in a mostly residential area west of I-15, approximately one-half mile west of the Project site. The Engel Family Preserve includes a trail with an extensive, elevated view of the San Luis Rey River Valley, the I-15 corridor, and the Project site (see TV 20, Figure 2.1-3k.) The existing view encompasses diverse elements—including buildings and developed areas, natural open space, and agricultural elements—but the scale of the agricultural areas and the hillsides and mountains in the background dominate the visual experience.

A proposed Priority 1 Community Trail in the Fallbrook Community Trails and Pathways Plan would provide a connection between this trail and a Priority 3 Community Pathway identified on the south side of SR-76. At this time, the portion of the trail alignment overlays private property and is not accessible to the public.

Another proposed Priority 1 Trail would extend along the eastern side of Old Highway 395 between SR-76 and Pala Mesa Drive, where it would turn westward. This corresponds to a Proposed Multi-use Trail in the San Luis Rey River Park Master Plan. The River Park Master Plan also identifies a Proposed Multi-use Trail extending east and west along each side of the San Luis Rey River. The Fallbrook Community Trails and Pathways Plan also identifies a Proposed Priority 3 Community Pathway on the south side of the river. The southernmost parcel of the Project site overlaps the northern banks of the river, including a portion that would support the trail. Refer to Figure 1-13 of this EIR, for the location of these pathways.

Despite the opportunity for expansive views of the Project site and surrounding area, recreationalists in the nearby conservancy lands and hiking on nearby trails have low exposure, mainly due to their low numbers. Per the Fallbrook Land Conservancy,[2] estimated users of the conservancy lands near the Project site average 20 to 25 people per day for the Monserate Mountain Trail, and 2 to 3 individuals per week for the Engel Family Preserve.

The other trails in the local planning documents do not currently exist. Although some bicyclists and hikers currently use SR-76 and Old Highway 395, their numbers, and therefore their exposure, also are low, particularly when compared to the high number of motorists in the area. Bicyclists in the area would have moderate awareness of off-road views. While they would have a longer duration of time to view the surrounding area, they would be expected to focus on navigating the small roads and avoiding vehicular traffic. Hikers in the nearby preserves would have a high awareness of the surrounding area and the available views. Regular visitors are expected to wish to retain the current, expansive views of mostly natural and rural areas, while

[2] Personal communication with Mike Peters, Executive Director of Fallbrook Land Conservancy, October 2012.

occasional or first time visitors may not expect the same visible conditions. Individuals using the cited trail system would be expected to be highly sensitive to changes in the immediate viewscape. Viewers using these trails would be moving at pedestrian rates of travel, or even sitting at overlooks (such as within the Engel Family Preserve). As a result, they are expected to be sensitive to Proposed Project modifications to the existing setting.

2.1.1.6 *Regulatory Framework*

A number of plans and policies address preserving and/or enhancing the visual qualities of an area, as discussed below. These policies aid in the evaluation of the planning agency and community perception of visual quality in an area, as well as providing guidance as to whether Proposed Project modifications would be visually compatible with County/community goals.

State of California

California adopted a Scenic Highway Program (Streets and Highways Code, Section 260 *et seq.*) in 1963 to preserve and protect scenic highway corridors from change that would diminish the visual quality of areas that are adjacent to highways. I-15 is classified as an "Eligible" California Scenic Highway from SR-76 north to SR-91 near the City of Corona.

County of San Diego General Plan Conservation and Open Space Element

The Conservation and Open Space Element of the County General Plan (2011) was established to support conservation, management, and utilization of natural and cultural resources; protect and preserve open space; and provide park and recreation resources. Scenic roadway corridors are included.

SR-76 from Oceanside east to I-15, and from I-15 to SR-79 andI-15 from SR-76 north to the Riverside County line are both scenic highways. Reche Road and Mission Road also are listed as scenic corridors between SR-76 and I-5. Both of these roads are west of I-15 and on the east-facing side of the slopes. Reche Road extends westward from Old Highway 395, west of I-15 and approximately 1.5 to two miles north of the Project site. Mission Road is an east-west trending road located approximately three miles north of the Project site.

Resource Protection Ordinance

The County's RPO provides special regulations applicable to certain types of discretionary applications, including tentative maps. The ordinance focuses on the preservation and protection of the County's unique topography, natural beauty, diversity, natural resources, and quality of life. It is intended to protect the integrity of sensitive lands including wetlands, wetland buffers, floodplains/floodways, sensitive habitats, cultural resources, and steep slopes (lands having a natural gradient of 25 percent or greater and a minimum rise of 50 vertical feet, unless said land has been substantially disturbed by previous legal grading), all of which are components of visual quality and community character.

There are no slopes on the Project property that meet the definition of steep slopes under the County's RPO. As discussed in Chapter 1.0 of this EIR, the County Planning Commission granted an RPO exemption for Campus Park West in July, 2004. This covers the Project parcels.

Dark Skies/Glare

The County of San Diego Outdoor Lighting Ordinance (Division 9, sections 59.101-59.15 of the Zoning Ordinance) seeks to control undesirable light rays emitted into the night sky in order to reduce detrimental effects on astronomical research. Zone A, defined as the area within a 15-mile radius centered on the Palomar Observatory and within a 15-mile radius centered on the Mount Laguna Observatory, has specific light emission restrictions. The unincorporated portions of San Diego County not within Zone A fall within Zone B, and are subject to lesser restrictions. Outdoor lighting, such as security or parking lot lighting, must be less than 4,050 lumens and fully shielded within Zone B. The Project site is located approximately 17 miles from the Palomar Observatory and even farther from the Mount Laguna Observatory, and is therefore within the Outdoor Lighting Ordinance Zone B.

County of San Diego Fallbrook Community Plan/I-15 Corridor Plan and County of San Diego Fallbrook Design Guidelines

The Project site is located within the Fallbrook Community Plan area, which encompasses a segment of I-15 identified for scenic preservation (the unincorporated portion of the I-15 Corridor from northern Escondido city limits to the Riverside County line). The purpose of these documents is to identify standards and guidelines for planned development and retention of important cultural or natural elements that contribute to the lifestyle and community character of this part of the County. Specific to the I-15 Corridor Scenic Preservation Guidelines, the document states that:

> The purpose of the following scenic and planning quality guidelines is to: (1) protect and enhance scenic resources within the I-15 Corridor planning area while accommodating coordinated planned development which harmonizes with the natural environment; (2) establish standards to regulate the visual quality and the environmental integrity of the entire corridor; and, (3) encourage scenic preservation and development practices compatible with the goals and policies of the five community and Subregional Planning areas encompassed by the I-15 Corridor area, when appropriate (County of San Diego 1988:24).

The standards are specifically noted as addressing both man-made and natural features with the potential to affect scenic quality of the I-15 Corridor area. Also noted in these documents is the need for development of more detailed design criteria, to be applied to areas with a "B" designator and requiring preparation of a Site Plan in order to obtain a development permit (as is the case for the Proposed Project). The Fallbrook Design Guidelines were in fact developed, and are implemented via a design review process, in which a Project Applicant works to ensure that a potential project is consistent with the guidelines.

Applicable goals and policies within the Fallbrook Community Plan/I-15 Corridor Plan, and the Fallbrook Design Guidelines, are presented in the Project GPA Report and are additionally discussed in Section 3.1.5, Land Use. Standards relating to site planning; walls, fences and berms; landform; vegetation retention; parking and circulation; lighting; landscaping; non-motorized circulation; building equipment and services; architecture; and signage are included. These guidelines were created to guide the anticipated growth and development of land within the corridor in such a way as to maintain the scenic eligibility of the roadway as well as visual elements important to community character.

2.1.2 Analysis of Project Effects and Determination as to Significance

2.1.2.1 *Potential Conflict with Important Visual Elements or Inconsistency with Applicable Design Guidelines*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

1. Introduce features that would detract from or contrast with the existing visual character and/or quality of a neighborhood, community, or localized area by conflicting with important visual elements or the quality of the area (such as theme, style, setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.) or by being inconsistent with applicable design guidelines.

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Visual Resources (July 30, 2007).

Analysis

Conflict with Important Visual Elements

The primary visual elements that comprise the site setting are four-fold: major transportation corridors, agricultural references (groves and pasture), the Horse Ranch Creek riparian corridor and the dominating surrounding hills and ridgelines.

The Proposed Project would be visible from approximately two miles away (Figure 2.1-4). From the outlying portions of the viewshed, the Project site is a small feature within a larger view that encompasses existing development such as Lake Rancho Viejo, Pala Mesa Resort, and the residential areas west of I-15. The Proposed Project buildings and landscaping would visually extend these developed areas onto the valley floor. The memorability of the area, however, primarily relies on the distinct visual patterns created by the area topography. Proposed Project development would not change large landforms or the overall geographical configuration of the viewshed. The creek and existing linear transportation elements would remain. These are the

majority of, and determinative, elements in the visual experience of the site; and particularly so when the viewer is at distance from the site.

In order to ensure a full understanding of potential visual effects related to Project implementation, Project analysts coordinated with County staff regarding locations from which to simulate projected conditions following construction. Four locations were chosen as representative of potential future views seen by the greatest number of viewers. The locations include SR-76 westbound, SR-76 eastbound, Old Highway 395 looking easterly and I-15 southbound.

Key View 1, Figure 2.1-5, depicts **Scenario 1** development simulated from westbound SR-76, just east of Pankey Road. This view looks southwestward at the general commercial parcels south of SR-76 and on either side of Pankey Road. A six-foot-high fire protection wall would be placed along the northern edge of each of these lots. This simulation incorporates the fire wall, as well as a restaurant building, a retail building, a gas station, and a convenience store, based on information provided by the Project Applicant and the SPA and GPA Report (PDC 2014). An additional parcel south of the general commercial areas (PA 6, south of Pankey Road and west of Shearer Crossing and not visible in this view) would remain undeveloped. Pankey Road also would be realigned to extend more directly southward, perpendicular to SR-76. It would align with existing Shearer Crossing south of the simulated retail and restaurant buildings. This ground-level modification would not be highly noticeable even without the structures, and would be visually absorbed by other Project additions upon construction.

The majority of the background is comprised of a hill southeast of the SR-76 and I-15 interchange. The hill also supports citrus trees, which are visible as a dark green mass of color. Lighter green riparian trees are growing at the base of the hill. SR-76 extends from the foreground of the view and curves around the north (right) side of the hill. A hill west of I-15 comprises the background of the right side of the photograph.

From this view point, the buildings east of Pankey Road would be visible and they would block views of the parcel west of Pankey Road. These buildings would become visible as the viewer travels westward at which point the retail building to the viewer's left in this simulation would not be visible (and the restaurant would be only partially visible). Only a glimpse of buildings west of Pankey Road would be visible to westward travelers, until the viewer is nearer to the intersection at Pankey Road. This is due to the setback of the buildings west of Pankey, the angle of SR-76, and the proposed locations of the buildings east of Pankey Road. Proposed development north of SR-76 would not be visible from this viewpoint and angle.

All four buildings and the fire protection walls would be visible for motorists traveling eastward. Development of the Proposed Project would replace citrus trees and open space that currently exists on the property parcels. Buildings and walls would be located in front of remaining citrus groves, with a background of local hills and mountain slopes. The structures would have stronger geometric forms and lines, fewer green or natural colors, and harder textures than the vegetation that currently exists within the view. The development, however, would include landscaping that would be sparser than the grove, but which would provide more variety of color and texture than currently exists; most of the vegetation that would be visible would be between

the shoulder of the road and the fire protection wall. The canopies of some trees within the lot beyond the wall would be visible. The scale of the buildings would be approximately the same height or slightly taller than the existing trees. The wall would be shorter than the buildings, but would serve to obscure views to parking lots and vehicular activity associated with the commercial uses. The structures would not, therefore, obstruct features in the background of this view. The proposed elements, however, would not be distinctly vivid or create vivid visual patterns in the Key View.

The Proposed Project would cause a moderately high change within the visual environment of Key View 1, based on the degree of change to the visual environment and the anticipated viewer response. The key view is looking west and south of SR-76. The existing condition focuses on the four-lane state route, adjacent signage and fencing, disturbed dirt, and some areas of disturbed vegetation with a vegetated nobbed hill in the midground and larger hills to the west with development on them. The elements that compose this view are not unique landmarks or visual elements with high visual quality. The most vivid elements within the view are the hills in the background, which would not be obstructed by Proposed Project features. In fact, the inclusion of a uniform built element would visually intensify the more natural nature of the midground hill. Change to this view, therefore, would not highly conflict with important visual elements or the quality of the area, and impacts would be **less than significant**.

Under **Scenario 2,** the easterly portion of this simulation (PA 4) would remain the same, but development similar in its relationship to SR-76 would occur on PA 5. In other words, rather than the set back of disturbed vegetation/ground currently visible in the Caltrans right-of-way west of Pankey Road, PA 5 would extend northerly to SR-76. A similar firewall and vegetative screening would be provided as shown in Figure 2.1-5. Part of the northern extending hill would be additionally screened by this scenario that is visible in **Scenario 1**. As can be seen by the scale of the hill relative to the simulated structures, however, the extension of the site northerly would not obscure views of the top of the hillside, nor would potential structures obscure views to the hill's northern extent (or, the larger and intermittently developed hills to the west). Although more built elements would be present in **Scenario 2** than in **Scenario 1**, project implementation would still not highly conflict with important visual elements or the quality of the area, and impacts would remain **less than significant**.

SR-76 is elevated near I-15, and eastbound travelers on SR-76 near I-15 would have more encompassing views of the Project elements. Key View 2, Figure 2.1-6, represents such a view. Undeveloped land north of SR-76 is visible in the center of the view. Dense, dark green trees are located in the lower areas between the hills. The Monserate Mountains make up the majority of the background.

Figure 2.1-6 depicts the **Scenario 1** largest proposed buildings within the general commercial areas north of SR-76, a six-foot-high fire protection wall that would edge the western and southern boundaries of PA 2, and some proposed graded slopes. The proposed buildings would be sited approximately 500 feet north of SR-76. The simulation depicts general commercial and mixed-use core buildings up to 35 feet in height. As shown, some buildings could have articulated corners with towers, domes, turrets (or similar structures) that would comprise elements rising above the general roof height. As described in Section 1.0 of this EIR, there is

the potential for a single higher structure (up to 45 feet overall) to house a community commercial use such as a movie theatre.[3] The fire protection wall would be placed along the southern and western edge of the lots visible from this viewpoint, and is represented in the simulation by a band of color along the lower visible edge of the buildings. A portion of the south-facing slope that would be created by Proposed Project grading would be visible as well, depicted as the low vegetated area between the firewall and the intermittent line of trees. The Proposed Project would not change the drainages and low hills immediately abutting SR-76. The vegetation that would remain undisturbed within these drainages would visually screen a portion of the buildings and the fire protection wall.

The Proposed Project elements would be more geometric, have more rectilinear lines and hard surfaces, and fewer natural green and brown colors than the existing visual environment. The proposed buildings would be large in scale and massing (particularly width and depth) compared to the existing visual elements. The buildings, however, would be approximately as tall as the existing trees on the site, and would not extend above the horizon line, or obscure views of the hills in the background, which are a distinctive feature of the visual environment in the viewshed and near the Project site. The proposed fire protection wall would be a small scale element, especially when compared to the proposed buildings.

The buildings, the wall, and the grading necessary to create the building pads would require the removal of some of the existing trees on the Project site. The Proposed Project would include landscaping, however, on the graded slopes in front of the wall, as well as on Project streets and interior to the lots and surrounding the buildings. This landscaping, in particular the required trees, would break up the structural massing and soften the "hard edge" or rectilinear view elements that would be visible.

Proposed Project elements would result in a moderately high change to the visual character and quality of the visual environment of Key View 2. Combined with an anticipated moderately high response from westbound travelers, the Proposed Project is assessed as resulting in a moderately high change to Key View 2. As noted above, however, the existing non-permitted airstrip and related facilities, such as shade structures, visually contrast with undeveloped portions of the site. As indicated in Figure 2.1-10, Cumulative View, below, the approach into the valley from north or south along that highway provides long-reaching views of the entire area. The Project is a relatively small piece of the overall visual environment, and in itself has moderately low vividness. The flat areas and drainages are not visually unique, although the airstrip is a distinct feature on the site. Closer in, as shown in the Figure 2.1-6 existing condition, although it is undeveloped, the disturbed nature of the site is notable. The vibrant and memorable elements of this view are the dense vegetation of Horse Ranch Creek and the impressive shift to the height and more natural aspect of the hills and mountains to the north and east. As shown in the Figure 2.1-6 simulation, most of the dense vegetation associated with Horse Ranch Creek would

[3] If the NCFPD acquires upgraded facilities that provide the ability to serve structures exceeding the 35-foot height limit, a height exception (up to 45 feet overall, including any architectural projections) may be granted to accommodate a specific use (e.g., a movie theatre). This increase in specific structure height is expected to be limited on site (as indicated by the specific use restriction), and would be subject to NCFPD approval. Given the overall size and massing of structures and the slight visual variation provided within the general commercial categories. A taller structure and additional articulation would not have a negative aesthetic effect, and might even be perceived as having a beneficial visual effect as it could provide additional visual interest.

be retained. Given the higher existing (and retained) topography to the west, and the rising nature of the topography to the east, the developed portions of the Project would nestle into the lower portions of the valley; minimizing structure height and retaining views to the western foot of slope associated with the higher hills and mountains. As such, the visually important hills in the background of this view would not be blocked from view, and impacts would be **less than significant**.

Under **Scenario 2**, part of the Caltrans right-of-way toward the right-hand side of the photograph would be decertified and incorporated into Campus Park West. That parcel would remain in open space, however, with only a low profile entry monument in the vicinity of the SR-76/Pankey Road intersection. There would be no discernible difference to the simulation from this viewpoint.

In addition to roadway viewers, a few private residential parcels are located north of SR-76, approximately one-quarter mile east of the Project site. Figure 2.1-4 indicates that these viewers would be able to see the site based on topography alone. Dense trees and landscaping surround these parcels, however, and views toward the site are not readily available. Project landscaping additionally would screen visible portions of the proposed development from this area. Identified impacts would be **less than significant**.

Key View 3, Figure 2.1-7, represents **Scenarios 1** and **2** views (identical from this viewpoint) from the western portion of the viewshed. The photograph was taken approximately 500 to 600 feet south of the Pala Mesa Drive Bridge from the eastern shoulder of Old Highway 395 where the road parallels and abuts I-15. The photograph looks due east into the heart of the proposed development north of SR-76.

The Project site is evident due to the contrast between the mowed, more brightly-colored vegetation on the site and the brown low-growing plants immediately abutting I-15. The two power poles in the left half of the photograph are located on the Project site.

Proposed Project grading would abut the I-15 right-of-way and the proposed buildings would be the closest to the freeway in this area, at approximately 125 feet from the edge of the property/I-15 right-of-way. Portions of the mixed-use core buildings in the center of the Proposed Project would be visible behind the general commercial buildings. Each of the elements discussed for Figure 2.1-6 with regard to variation in building height and design would also pertain to this view. The northernmost portion of the site would be zoned industrial. Research facilities and office buildings up to 35 feet tall could be built in this area, and are represented on the left side of the simulation.

Most of the Project site would be graded—including the existing, generally flat portions of the Project—to create flatter pads for buildings and their surrounding parking lots. The trees, buildings, and utility poles on the Project site would be removed. New trees would be placed in the parking lots (each parking space would be within 30 feet of the trunk of a canopy tree) and at each corner of the buildings, as well as along the façades of the longer buildings. The slopes resulting from grading would be landscaped with trees, shrubs, and ground cover as described in

Chapter 1.0. Utilities would be located underground, eliminating views to overhead lines that currently exist.

Introduction of the Proposed Project features would cause a moderately high degree of change in the visual environment of Key View 3. The new buildings would introduce geometric, hard-textured, forms with fewer green and brown colors than exist on site. The buildings would be taller and/or larger in scale than a number of currently existing on-site features, but would be approximately the same height as the trees on the site. Trees that would remain next to the northern portion of the site (the left side of the view) would screen views of some of the proposed buildings. The Proposed Project elements would create more diversity within the view than existing on-site elements due to their visual contrast with the embankments next to the freeway and the mountains in the background. Lancaster Mountain in the background, however, would remain a dominant feature, and the Proposed Project elements would not obstruct views of the mountain or hills that comprise the valley walls.

Viewers on Old Highway 395 would have moderately high sensitivity and exposure, and a moderately high response to changes in the visual environment. Old Highway 395 is at a higher elevation than I-15 and approximately 10 feet higher than the Project site. Relative to this Key View, motorists and their passengers on I-15 would be approximately 10 feet lower than the Project site. After Project development, viewers on I-15 would see fewer Proposed Project features than viewers on Old Highway 395. Additionally, due to their lower viewing angle, the more northerly/westerly buildings they would see would block views to the buildings that would be in the interior of the site.

The moderately high degree of change to the visual environment and the moderately high anticipated viewer response indicate that the Proposed Project would result in a moderately high degree of change to Key View 3. The important visual elements that dominate the visual environment of Key View 3 (Lancaster Mountain), however, would not be obscured from view or changed by the Proposed Project. The Project, therefore, would not significantly conflict with the important visual elements and quality of the area. Impacts would be **less than significant**.

Also from areas west of the site, views toward the Project are available from surrounding residences. These are similar to those available from the public roads just discussed, but are stationary and long term. As noted, Project implementation would change the Project site from primarily open, undeveloped or agricultural parcels to a suburban pattern of development, with roadways, parking lots, and rooftops overlaying the Project site. The density of structures within the Project would be greater than the residential lots from which the Project would be viewed. The Proposed Project, however, would not modify other view elements integral to the current visual experience, including intervening development between the residential viewer, vegetation surrounding the Project site, or the background natural horizon of the mountains and hills.

Residential lots also are located at the base of the slope that comprise the western edge of the valley, west of the Project site and I-15; in particular, a single family residential development is located directly west of the southbound I-15 to SR-76 ramp, and another is located north of Pala Mesa Road, surrounding portions of the Pala Mesa Resort golf course. These are closer to the Project site and nearer in elevation than most of the residential areas west of I-15. The eastern

edge of each of these clusters of houses, however, is planted with dense vegetation that blocks eastward views. Some views are available from higher points within each cluster; however, the vegetation serves to screen views of the Project site. The Proposed Project generally would not be visible from these residential areas due to intervening structures and vegetation, and the Monserate Mountains in the east remain dominant features from each of these areas.

These considerations combined result in a finding consistent with the above analysis. Residents would be expected to find Project-related changes adverse in nature. Given the existing elements of the major roadways, the retained Project elements of the Horse Ranch Creek drainage (which would continue to provide natural riparian elements and soft edges to the eastern edge of the development when viewed from higher elevations), the Project-mandated landscaping plan, and the continued dominance of the more distant topographical features, impacts to these viewers are identified as **less than significant.**

Key View 4, Figure 2.1-8, represents a **Scenario 1** and **2** view from I-15. The Project site, located to the viewer's left, is not highly distinguishable. Tall trees and vegetation on the left side of the photograph are growing in the I-15 right-of-way. Despite what appears to be relatively low visibility to the site, Key View 4 represents the most open and visible view to the Project along I-15.

This area of the Project would contain light industrial office or research buildings. The simulation indicates that the roofs of these buildings would be the most visible portion of the Project from this viewpoint. Proposed landscaping around the buildings and in the parking lots would provide some screening of the buildings and the parking lots. A small portion of buildings within the interior of the Project site also would be visible behind the office buildings. Some of the trees on the Project site would be removed due to Project grading. Some of the manufactured slopes resulting from Project grading would be visible from I-15 as well. A maximum of 15 feet of fill slope (sloping to less) would be visible from Key View 4 between the buildings and the northbound lanes. Additional Project slopes would be visible in the distance, closer to the Pala Mesa Drive overcrossing. Proposed Project landscaping would include trees, shrubs, and groundcover on the slopes as well as surrounding the buildings and parking lots; the plants would help to screen the slopes and provide some visual blending with the surrounding area.

The changes resulting from introduction of Proposed Project features into Key View 4 would cause a moderate level of change to the visual environment of views from I-15 near the Project site. The buildings would comprise geometric forms with rectilinear lines, hard textures, and could include bright or neutral colors, such as red roofs and white or light-color walls. Proposed buildings would be moderately scaled features within the view; they would not be as tall as the large trees that would remain visible on either side of the freeway, but would be taller than the Project berms abutting the freeway. The Proposed Project would change views of the background; the buildings would block a small portion of the hills, while the grading and change in vegetation would reveal different portions of the hills.

The new features would increase the diversity of elements within the view—currently the only structural feature visible is the Pala Mesa Drive overcrossing in the distance. This would create

contrast within the view, although the buildings would not be visually dominant elements. Consistent with its size and visual importance, views to Lancaster Mountain in the background on the left would not be obstructed.

The only viewers of Key View 4 are motorists and passengers on I-15. Despite their travel speed, which would limit duration of their views, this viewer group has high exposure to such views due to the high number of vehicles on I-15 each day. Viewers on this Scenic Highway are assumed to have a moderately high response to changes in the visual environment. The moderate degree of change to the visual environment and the anticipated viewer response indicate that the Proposed Project would cause a moderately high change to the visual environment of Key View 4. The elements would contrast with the existing visual environment, but would not obstruct views of the visually dominant and defining mountains and hillsides in the background. For southbound viewers, therefore, the Project would result in **less than significant impacts**.

The situation would be somewhat different for northbound viewers. The hills enclosing the northeastern portion of the valley are less prominent than those to the east and south. The northbound lanes are closer to the Project site, and in the northernmost portion of the Proposed Project, the PA 1 and PA 2 buildings would be the closest to the freeway. In the areas highlighted on the detailed viewshed map (Figure 2.1-4), Proposed Project buildings may dominate views from the northbound lanes closest to the Project site and partially obstruct views of the hills in the background, due to northbound viewers' relatively close proximity to the Project site. These close-up views of the proposed buildings and Project slopes and landscaping from the highway would be brief, however, because viewers would be traveling at highway speeds up to 70 mph. As mentioned above, travelers would drive next to the Project site for less than one minute, and would see the Project site only through the view "windows" between the existing berms east of the freeway. This would lessen the impact of the changes to the visual environment for viewers traveling next to the Project site on I-15. Due to the brevity of viewing opportunities, impacts to views seen by northbound travelers are identified as **less than significant.**

Off-site Facilities

If the adjacent approved project Campus Park does not complete installation of sewer lines and a pump station prior to Campus Park West implementation, the Proposed Project would install a small sewer pump station east of Pankey Road and north of SR-76, on a parcel owned by the abutting Campus Park project. The structure would be placed at an elevation lower than Pankey Road, the Project site, and SR-76. Placement of the station would require the removal of some of the trees in the area, while retaining most of the riparian vegetation surrounding it. The retained vegetation and the elevation of the structure in relation to the surrounding roadways would limit views toward the structure, and it would not result in a significant visual impact. A small pump station being environmentally cleared for RMWD at the northern end of the project also would result in minimal visual effect relative to its setting. If located in Campus Park West, it would be sited in the developed limited impact area north of Pala Mesa Drive, and would be incorporated into the larger developed setting. If located west of I-15, it would be sited between Old Highway 395 and I-15, in an area already disturbed by road construction. The small station

(with structural shielding measuring approximately three feet by three feet by four feet) would be observable between the two roads but would be too small to conflict with important visual elements or the quality of the area (see Figure 1-22).

Long-term Sound Barriers Proposed as Noise Mitigation. As discussed in Section 2.5.5 of this EIR, a 5.5-foot-high sound barrier is proposed as mitigation for long-term on-site traffic noise impacts. The wall would be located along the eastern edge of Pankey Road abutting PA 3 and would not be highly visible from the surrounding area. It would be, at the closest, approximately 875 feet from SR-76. In northwesterly views from SR-76 toward the Project, the noise attenuation barrier would be screened by riparian vegetation that would remain undisturbed in Horse Ranch Creek and the open space areas surrounding the site. Where small portions of the wall may be visible between these elements, they would be smaller in scale than the proposed buildings, and would be similar in appearance to privacy fences in other nearby residential areas. In northeasterly views toward the Project site from SR-76, the fire protection wall that would be placed along most of the south and west edges of the lots and Project elements such as buildings and landscaping would obscure or block views of the wall. Potential noise attenuation barriers potentially proposed to attenuate traffic noise within PA 2 would be smaller than their surrounding mixed-use structures would generally read visually as balcony features, and largely would not be visible (if at all) in northeastern views from SR-76. Visual impacts associated with the noise attenuation barriers recommended as mitigation in Section 2.5.5, therefore, would be **less than significant**.

As discussed in Sections 2.6.2.1 and 2.6.5 of this EIR and in Appendix G, sound barrier/ separation of residential uses from the open space may be provided by placement of two 5.5-foot barriers (solid on the bottom and transparent on the top for visibility to the open space) or fencing on the east side of the northern and southern sections of PA 3, in order to minimize indirect impacts to sensitive species. If implemented, sound walls would not be visible to public viewers on Pankey Road as they would be placed between future PA 3 multi-family residential uses (shielding viewers to the west) and the biological open space (shielding potential more distant viewers to the east). Relatively small in size (length and height), as noted, they would contain transparent panels; and therefore also would not block views for PA 3 residents. Impacts would be **less than significant**.

Off-site Visual Effects

Off-site Road Improvements. The Proposed Project includes changes to off-site roadways to provide access to the Project site; including realignment of Pankey Road north of SR-76 between SR-76 and the Project site, realignment of Pankey Road and Shearer Crossing south of SR-76 adjacent to the Project parcels, the addition of turn lanes to SR-76 at the Pankey Road intersection, the addition of turn or through lanes to Old Highway 395 at Pala Mesa Drive, and surface improvements to the existing (unused) Pala Mesa Drive overcrossing structure at I-15.

These roadway realignments and the addition of turn lanes would be changes to the surface of the roads, and while some widening would occur in some areas, the improvements generally would occur within the respective rights-of-way. The realignment of Pankey Road both north and south of SR-76 would shift the roadway away from its current alignment, but would retain

the current intersection with SR-76. Due to the low-profile nature of the proposed off-site roadway improvements, the changes would not be highly noticeable within the viewshed, and would not conflict or contrast with the existing visual environment. Any associated visual impacts would be **less than significant**.

Off-site Grading. Some off-site grading would occur to support the connection of Project roadways to existing Pala Mesa Drive on the east side of I-15. This would result in small north- and south-facing slope up to approximately 20 feet in height at the Pala Mesa Drive bridge juncture with roadway. Immediately to the north, an approximately 10-foot slope would extend north-south along the Project boundary for approximately 370 feet. These would be visible from I-15 as well as from the eastbound Pala Mesa Drive overcrossing. These slopes would be planted per Project-mandated landscaping. They would be approximately the same height as the berms that currently exist along the east side of I-15 and the west side of the Project site. Although they would be highly visible to motorists (the largest viewer group) on I-15, they would generally have the same form, scale, and vegetation as existing landforms, and would not change the visual character of the area or obstruct views toward distinctive features in the viewshed. From further distances, they would a small detail within the larger view. These slopes would result in **less than significant impacts**.

Traffic Mitigation Measures. Several off-site mitigation measures are proposed for Project-related traffic impacts. Potential visual effects of these features also must be reviewed under CEQA. A traffic light would be installed at Reche Road and Live Oak Park approximately three miles northwest of the Project site. Reche Road is a County Scenic Corridor. Reche Road and Live Oak Park meet in a Y-intersection. There are dense eucalyptus, pine and oak trees surrounding the intersection and a steep bank approximately 10 to 15 feet high on the south side. Power lines are located at the intersection, approximately as tall as the noted trees. Each of the roads curves just beyond the intersection, so it is not visible from long distances. Assuming that the signal would be approximately as tall as the existing trees, and the trees would generally be retained, the signal would not exceed tree or horizon height. It therefore would not obscure visual elements of the area or change the character of the intersection. Restriping and minor widening in the vicinity of Pala Mesa Drive and Old Highway 395 intersection would largely occur within existing pavement/right-of-way. Focused in nature (in the vicinity of the intersection) and adjacent to I-5, the visual change would not be notable. These traffic mitigation measures, therefore, would result in **less than significant impacts.**

Short-term Construction-related Visual Effects

Construction phasing for the Proposed Project would be market driven and cannot be known with specificity at this time. As noted in Section 1.2.2.6 of this EIR, however, a likely projection of the order of development has been developed (see Figure 1-27). Following mass grading of PAs 2, 4 and 5, infrastructure (roads, utilities) installation would occur site-wide. Building, or "vertical," construction would follow infrastructure installation, and may be phased if the mass grading is phased to prioritize PAs 2, 4 and 5, with completion of grading for PAs 1 and 3 at a later date. Regardless of mass grading timing, this plan anticipates that vertical buildout would occur generally south to north, with the commercial parcels south of SR-76 developed first (PAs 4 and 5), the general commercial area north of SR-76 (PA 2) developed second, the

residential area (PA 3) developed third, and the northernmost light industrial/office area (PA 1) developed last.

Construction activities would visibly contrast with existing conditions due to removal of existing vegetation and the introduction of new, visually dominant elements, including raw soil; newly graded building pads and cut or filled slopes; construction-period fencing; construction equipment; and construction materials stockpiling and storage. These elements would be visible from each key view location discussed above, including the views from I-15 and other area roadways, the Engel Family Preserve, the Monserate Mountain trail, the future recreational trail along the San Luis Rey River, and from area residences. If the phasing of mass grading is implemented, a smaller portion of the site would contain raw soil at any one time; i.e., PAs 2, 4 and 5 would be graded while PAs 1 and 3 would remain generally in their current state. At some point following completion of vertical construction and installation of landscaping, PAs 1 and 3 would be graded. Activities on PA 3, in particular, would be screened for some westerly viewers by the intervening PA 2 general commercial development.

Similar to the overall discussion for permanent Project elements, the construction-period impacts would not obscure views to the surrounding dominant landforms. The site is also often screened by vegetation or topography and, given the scale of the valley within view, a relatively small portion of the overall viewscape. Additional screening is not feasible for viewers from elevated locations relative to the site and at distance. Such screening would require placement of built features on off-site private property or within off-site open space public reserves and would also break current views to the larger eastern slopes and mountains as well as the expansive valley floor (far larger than the Project).

Construction effects ultimately would be temporary and addressed through Project-required landscaping in the long-term. Landscaping installed subsequent to each construction phase also would help lessen visual effects of grading activities by providing cover of graded slope and pads. Street trees and internal landscaping, when mature, would help buffer the structures from views to the Proposed Project from off-site areas by softening sharp edges and unifying the Project.

Despite these attenuating effects, the size of the Project, and the potential length of the construction period (between approximately 12 to 17 years overall from initiation of mass grading through ultimate project completion) result in construction-period impacts being identified as **significant**. (**Impact AE-1**)

Conflict with Area Visual Quality

This threshold focuses on introduction of features that would conflict with visual quality of the area based on such development elements as overall theme and style, combined with appropriate setbacks, density, size, massing, coverage, scale, color, architecture, building materials, etc.

The Applicant has coordinated closely with County staff to design a project that would meet Project goals, as well as substantially conform to Fallbrook community and County goals for this area. To that end, the Applicant has committed to Community Design Guidelines outlined

within the SPA (and summarized below) that are reflective of (and largely adhere directly to) the Fallbrook Community Plan Design Guidelines, the I-15 Corridor Subregional Plan, and the County's Dark Sky Ordinance. Setbacks, density, building size and massing, lot coverage, and relative scale also would be guided by local zoning regulations as specified in the Project SPA.

Architectural guidelines prepared for the development and outlined in the SPA and GPA Report provide general design criteria. Each land use area would include unique architecture with shared characteristics consistent with the overall community theme. For example, the buildings' architectural styling would be Mediterranean, rustic ranch, cottage or urban Victorian, inspired by architectural themes of nearby downtown Fallbrook, and would include colors and building materials consistent with the Fallbrook Community Plan.

Building form, mass and elevations would be articulated to create interesting roof lines, shadow patterns, and architectural detailing. As a general rule, building façades over 50 feet in length would incorporate changes in plane and architectural features that provide visual interest (projections, recesses, cornices, balconies, etc.). Blank unarticulated (or large uninterrupted expanses of) walls would not be permitted for building sides visible from a street or common area. Façade articulation would consist of changes in the wall plane, use of openings and projections, cornice details, overhangs, and/or material and color variations. Where structure function requires a box-like building form, exterior articulation would be provided on façades visible from public streets through use of elements such as: offsets, projections, overhangs, horizontal and vertical color bands, windows, recesses, and cornice detailing. Varied roof pitches, gables, tower elements, arches, and roof structures also would be encouraged. Together, these elements would result in levels of architectural variation consistent with "typicals" depicted for appropriate architectural styles on Figure 1-6, thereby ensuring that the theme, style, size, massing, coverage, scale, etc., would be consistent with the applicable design guidelines.

To encourage walkability along roadways, architecture would include pedestrian-scale elements, such as façades and walls that would incorporate offsets, balconies, deep openings and entryways, and windows. To the extent feasible, buildings would be sited parallel to the street and abutting streetscape. Sidewalks along Project roads would be linked to walkways within the separate land uses as well as trails and pathways, where possible. Bicycle parking facilities would be provided to encourage alternative transit, particularly for employees, shoppers, and residents.

The conceptual Landscaping Plan includes a plant palette that conforms to County mandates with regard to fire resistance and drought tolerance/use of natives as appropriate. Shade trees are incorporated into path areas, parking areas and perimeter landscaping in numbers and spacing consistent with the Fallbrook Design Guidelines. This would result in a Project more comfortable and aesthetically pleasing for the resident/visitor—but also more aesthetically pleasing for off-site viewers of the Project.

Although the details would not be visible in detail from the surrounding area, such design guidelines would ensure that the Proposed Project would not have a significant visual impact related to overall consistency in terms of style and design. The Proposed Project design options would guide the development of a variety of uses, separate and consistent within each use, but

still bound by a consistent set of over-arching design principles. The variety of potential styles echoes those in the immediate vicinity of the Project, as well as in the downtown portion of Fallbrook, the leading community in this area. The reader is referred to Section 2.1.2.4 for additional discussion of specific elements of the Fallbrook Design Guidelines, but in terms of overarching design principles, visual impacts related to theme and style would be **less than significant**.

Inconsistency with Applicable Design Guidelines

The Project's compliance with applicable goals, policies, and requirements of the local Community Plan is discussed under Section 2.1.2.4, below. Specifically with regard to existing design guidelines, however, the proposed SPA and GPA Report (PDC 2014) for the Project lays out design guidelines for the Project. This is necessary because the existing approved uses on the property included golf course and mobile home uses in addition to multi-family uses. The difference in planned uses, as well as the increase in scrutiny of planned design over the last 25 to 30 years, resulted in development of wholly new guidelines being required for the Project.

The current design guidelines address all visible elements of the Proposed Project. These are discussed in Chapter 1.0 of this EIR. They include: building length specifics as appropriate; architectural detailing; location, orientation and landscaping of parking areas; pathway design; setbacks from retained open space; fencing specifics; lighting requirements and restrictions; sign location; recommended plant types (varying by location and purpose); etc. Specified setbacks, density, building size and massing, lot coverage, and relative scale have been guided by local zoning regulations. All of the required guidelines were designed to substantially conform to the Fallbrook Community Plan and I-15 corridor design guidelines (although see also additional discussion on this topic in Section 2.1.2.4). Because conformance with the Project design guidelines is required as a matter of Project design, the Project would comply with them. Impacts related to inconsistency with applicable design guidelines would be **less than significant**.

2.1.2.2 *Removal or Substantial Adverse Change of a Valued Feature*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

2. Result in the removal or substantial adverse change of one or more features that contribute to the valued visual character or image of the neighborhood, community, or localized area, including but not limited to landmarks (designated), historic resources, trees, and rock outcroppings.

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Visual Resources (July 30, 2007).

Analysis

The topography of the Project site, as mentioned above, is generally flat, but does encompass slopes near the drainages that cross the site and those that abut the site on the northeast and south boundaries. The disturbed nature of the uplands portion of the site, its relatively small size in the overall view and visual minimization relative to the hills to the east combine to result in on-site trees comprising the most substantial local focal point to off-site viewers.

According to the property's Cultural Resources Survey (2004 as updated through 2014; Appendix E), the eucalyptus and pepper trees on the site, along with remnants of one outbuilding and a concrete slab, are remnants of a thoroughbred horse breeding and training facility that once existed on the property. To the extent that they exist, archaeological elements associated with these historic uses are largely not surface features, and do not constitute valued focal points. Please also see also Subchapter 2.4, Cultural Resources, for documentation that these remnants do not meet significance or eligibility criteria to be eligible for the California register of Historic Places.

The individual trees on the northern portion of the Project site and the citrus grove on the parcel south of SR-76 comprise the most visually dominant vegetation on the Project site. Development of the Proposed Project would require the removal of the citrus grove and the trees on the flat portions of the site, as well as some trees within the transverse drainages. Particularly in arid San Diego County, riparian vegetation—which usually varies in color and density from surrounding upland vegetation--can provide a valued focal point.

With regard to Project area north of SR-76, as depicted on Figures 2.1-2 through 2.1-3i, very few trees are located on site that are not associated with riparian corridor. The majority of the site consists of non-native grassland, pasture or disturbed land, ornamental non-native or scrub categories (see Figure 2.6-1, On- and Off-site Biological Resources/Impacts). Trees to be removed generally are associated with the southern riparian forest zones (largely contained within open space set-aside), or eucalyptus woodland. As discussed in Chapter 1 and above in this subchapter the Proposed Project includes required landscaping. As depicted in Figures 2.1-6 through 2.1-8 (Figure 2.1-8 depicts removal of the existing eucalyptus woodland) the number of trees to be installed on site due to perimeter landscaping, provision of shade trees in parking lots and landscaping of pedestrian zones would far exceed the number of trees that would be removed from the site. This would serve to soften the geometry of the buildings and provide some screening that may reduce the contrast between the buildings and the remaining vegetation. As indicated above, trees and riparian vegetation in Horse Ranch Creek and drainages near the perimeter of the site also would largely remain undisturbed. Also as depicted in Figure 2.1-6, the intensity of color, continuity of plant species, and density of the Horse Ranch Creek vegetation would remain distinguishable from the Project planting, which would provide more variety in species and generally be located up slope from the drainage. Regarding on-site removal or change of a valued visual feature associated with trees located north of SR-76, the Proposed Project would result in **less than significant impacts**.

With regard to the groves south of SR-76, some Project elements would be sited on a portion of groves that cover several parcels in the area. Groves provide a significant element to views in

this part of the County and are often notable as deep green agricultural areas located on steep and otherwise scrub- and boulder-covered hillsides. As noted in Section 2.1.1.4 of this subchapter, however, the groves do not provide a primary focal point within the viewshed as they are peripheral to the majority of the panoramic view (being located at the southern extent of the view), are in a generally fragmented state given location on small and disparate parcels, and also visually "dominated" by the San Luis Rey River. Locally, to more "close-in" viewers, the groves to be removed are primarily visible to east-west travelers on SR-76. The trees are relatively low profile and, unlike some of the iconoclastic southern California avocado and citrus groves located on highly visible hillsides, are nestled between the road and the San Luis Rey River on primarily flat terrain. This minimizes their visual effect, as depth and size of the grove are not apparent, and the trees do not present as significant arboreal cover. Although several hundreds of the trees would be removed during construction of general commercial uses in PA 4, the long-term visual effect would be substantially less than that. Long-distance views to the grove from SR-76 are minimal—for east-bound travelers the grove is obscured by the hill immediately west of PA 5 and for west-bound travelers a bend in the SR-76 results in views being deflected to the north. As the trees are lined up in rows in the grove, the most visible elements are the length along SR-76, with the viewer looking into the grove only when directly adjacent to it and looking sideways to the south. This would occur for approximately 325 feet along SR-76, with twice that length of undisturbed grove continuing immediately to the east. Other groves, east of this area, further back from SR-76, up the small hill between the Project and I-15, etc., would remain. In consideration of the small size of the grove relative to groves in the vicinity, the overall low visibility, the continued existence of other groves in the immediate vicinity, a substantial impact is not identified. Regarding on-site removal or change of a valued visual feature associated with trees located south of SR-76, the Proposed Project also would result in **less than significant impacts**.[4]

2.1.2.3 *Substantial Obstruction, Interruption or Detraction from a Valued Vista*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

3. Substantially obstruct, interrupt, or detract from a valued focal and/or panoramic vista from:

    - a public road
    - a trail within an adopted County or State trail system
    - a scenic vista or highway
    - a recreational area

[4] The reader should note that although this analysis relies on factors stated above, agriculture is dependent upon socioeconomic and natural factures. Based on review of Google Earth photography of this grove (as well as the grove across SR-76), die off appears to be occurring. The viability of these agricultural features is unknown. Certainly, without irrigation, these groves do not survive in San Diego County.

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Visual Resources (July 30, 2007).

Analysis

The Project and vicinity are located within a panoramic vista consisting of the hills and mountains surrounding a much lower-laying (and less visually relevant) valley floor. Although development would result modification to the valley view, it would neither obstruct views to, nor affect the scale and surrounding nature of, the hillsides and mountains, which provide the primary valued focal point to this vista.

For north-bound motorists, Scenic Highway I-15 is included in the viewshed to its southern boundaries, as well as for approximately one mile north of the Project site, after which point the alignment of the roadway shifts westward, and local topography alternately blocks and reveals the Project site from view for approximately another mile before the freeway extends beyond the viewshed limits. The portion of SR-76 west of I-15 (i.e., the portion that is a Scenic Highway) is not within the viewshed. The Scenic Highway portion that extends east of I-15 looks directly toward PAs 2, 3, 4 and 5 of the Proposed Project. Scenic Corridor Reche Road also is not within the Project viewshed. Small portions of Scenic Corridor Mission Road are highlighted as being located within the viewshed based on topography. Mission Road, however, is approximately three miles north of the Project site. From this distance, atmospheric conditions and foreground elements reduce the visibility of the Project site.

I-15, SR-76, and Old Highway 395 are the largest roadways in the Project viewshed. There are very few public roadways east of I-15 in the vicinity. Most roads in the viewshed extend south and west of the Project site, in the vicinity of Lake Rancho Viejo and on the eastern-facing slopes above Pala Mesa Resort.

Views from I-15 range from sweeping, expansive, and at times dramatic, views across this valley to the mountains (especially at distance when the entire mountain basin is visible). Once on the valley floor, extensive views across the valley to the hill and mountain slopes are available, but somewhat diminished by intermittently intervening topography and vegetation. As described above, the scenic value to this corridor is largely based on the visibility to the mountains and ridgelines associated with the slopes to the east, as well as the developed and bouldered slopes to the west. The Project proposes numerous on-site structures up to approximately 35 feet in height, with some focused elements and potential intermittent structures potentially reaching to 45 feet in height if concurrence is obtained from the NCFPD. At times, this would occur below line of sight due to property elevations relative to I-15. Even where structures would be visible, they would not obstruct views to the higher eastern features. Depending on viewer location, therefore, the project could be highly visible, but impacts to the elements that create this scenic corridor would be **less than significant**.

Based on topography alone, Lake Rancho Viejo and the public roads providing access to Lake Rancho Viejo (in particular, Shearer Crossing and Dulin Road), are highlighted in the viewshed

analysis (Figure 2.1-4) as having the potential to see the Project site. Views from this area toward the Project site, however, generally are blocked by structures and vegetation, and, in particular, the dense vegetation within the San Luis Rey River corridor. The Proposed Project would not alter these view-restricting features. Views of the general commercial areas south of SR-76 would be available to those traveling on Shearer Crossing once they are north of the river. Proposed Project buildings would be located on either side of Shearer Crossing, south of SR-76, and would be new elements in views that currently include mostly undeveloped lots and citrus groves. Views northward from Shearer Crossing north of the San Luis Rey River include the hillsides and mountains that surround the valley. The Proposed Project buildings would not be tall enough to extend above the horizon line created by these hillsides. They also would be screened by Proposed Project landscaping. The proposed buildings in the larger, northern portion of the Project site also would be visible from Shearer Crossing, but would be small features in the distance until those traveling on Shearer Crossing reach SR-76, at which point views would be similar to those discussed for SR-76 above. Overall, the Proposed Project would not substantially obstruct, interrupt, or detract from views from roadways (including Scenic Highway SR-76) south of the Proposed Project. Impacts would be **less than significant**.

More expansive views of the Project site are available from some points along public roadways in the western portion of the viewshed. West of the Project site, the main east-west routes are SR-76 and Reche Road. Pala Mesa Drive also extends westward from Old Highway 395. Primary north-south roadways are Gird Road (west of the Project site's viewshed) and Wilt Road, which transects the ridgeline at the Project site's western viewshed boundary. Most of the other public roads west of the Project site are two-lane rural collectors. They mostly are used by local residents within the existing low-density residential community and often transition into private roads and private residential access drives. Many of these roadways are not within the Project viewshed.

Local structures and vegetation frequently confine the travelers' view to the immediate vicinity of the local roadway. The Project site mostly is visible from areas of higher elevation and/or from roadways with lesser levels of landscaping/vegetation in the surrounding vicinity. The curving nature of many of the roads results in a frequent shifting of the viewers' focus and few points with views oriented toward the Project site. Most views toward the Project site from these areas are brief, and include intervening elements. The Proposed Project would not obstruct or interrupt views from these roadways; it would, rather, be a smaller element within the larger view, and at a lower elevation than the viewer. Although the proposed buildings would create a change in that larger view, Project features would not detract from the fleeting panoramic vistas available from these roadways because they would not reduce the visual dominance of the Monserate Mountains and Lancaster Mountain east of the Project site. Impacts would be **less than significant**.

Other scenic corridors in the general vicinity include Reche Road and Mission Road. Views toward the Project site are not available from Reche Road. Mission Road, approximately three miles north of the Project site, has some small areas with potential to view the Project site. Given distance and the intervening topography, changes to views from Mission Road would be **less than significant**.

A County Priority 1 public hiking trail, Monserate Mountain Trail, owned and maintained by the Fallbrook Land Conservancy, provides access to the slopes and ridge of the Monserate Mountain range. As mentioned above, Project circulation maps and local area trail plans indicate that a new trail segment may connect to SR-76 and the San Luis Rey River via a trail extension along the base of Rosemary's Mountain, approximately 0.5 mile east of the Project site. The area through which this extension would occur, however, currently is private property. Therefore, although recreationalists on trails on the western slopes of Monserate Mountain have high sensitivity, they would have low exposure to any changes caused by the Proposed Project. Currently, views from Monserate Mountain Trail encompass a largely undeveloped valley. The Proposed Project would introduce new developed elements where none currently are visible. This change potentially would constitute more of a visual impact from this viewpoint than from views looking easterly since views from Monserate Mountain Trail extend the length of the valley, as well as encompassing the north-south trending ridgelines and distant views to hills to the south. I-15 snakes through the views from this vantage point and the residential development on hills to the west is notable, but the currently open valley provides a critical element of this view. The distance from the trail minimizes views to the site; and the substantially sized Campus Park and Palomar College parcels would intervene. This distance also would minimize the scale of the Proposed Project, and the Proposed Project landscaping would further soften the geometric built elements. Furthermore, the hills in the background of views from this area would not be disturbed, and would continue to be dominant visual elements in views for recreationalists. The changes to views from Monserate Mountain Trail, therefore, would be **less than significant**.

A hiking trail with viewing benches within the Engel Family Preserve provides extensive, elevated views of the San Luis Rey River Valley and the I-15 corridor, including the Project site. The Proposed Project would change the visual character of the Project site to be more developed (and therefore more consistent with development in the foreground of views from the Preserve). The Proposed Project would not obstruct or interrupt views from this Preserve, and although the proposed buildings would create a change in that larger view, the Project features would not alter or reduce the visual dominance of the Monserate Mountains and Lancaster Mountain east of the Project site. The Proposed Project also includes landscaping that would provide some integration of the site features with vegetation that would remain surrounding the site. Additionally, views from the Engel Family Preserve are experienced by a small number of people. Therefore, although the Project features would contrast with the existing setting, the distance from which this middle ground view is observed, the minimization of structure scale due to proposed vegetation and the distance from (and elevation of) the viewer, the retention of diverse vegetative surrounding the site, and the continued dominance of the background hills, all combine to result in impacts being **less than significant**.

A future San Diego County Third Priority Trail is identified north of the San Luis Rey River; it would extend across the southernmost Project site parcel. This parcel would remain entirely in MSCP open space, and no Project development would occur on it. Most of the trail when it is developed likely would be south of existing groves and dense riparian vegetation, which would block views of development to the north. Portions of the trail on the property and near it, however, potentially would have views of the southernmost portion of the Project site, including the general commercial parcels south of SR-76. Similar to views from Shearer Crossing,

buildings within the Proposed Project, when viewed from the trail, would not be tall enough to extend above the horizon line created by the surrounding hills, and would be screened by Proposed Project landscaping. The proposed buildings in the portion of the Project site north of SR-76 also may be visible from the trail area, but would be small features in the distance. Additionally, this trail is not yet developed or designated, and users would be experiencing the trail at a point in time in which the presence of the Project would be part of their existing setting. Overall, the Proposed Project would not substantially obstruct, interrupt, or detract views from the area of this future trail and impacts would be **less than significant**.

Off-site Facilities

Neither of the potential off-site pump stations described in Section 1.2.2.3 have the potential to substantially detract from the panoramic vista that constitutes this focal point. Overall, they are each too small to obstruct any view to higher hills. The locations affect the visibility as well as size. As noted above, the Pankey Road facility would be at an elevation lower than Pankey Road, and also would be seen by a viewer looking northerly rather than toward the panorama to the east. Similarly, the RMWD facility, if stand alone, would require a viewer to look westerly, across I-15 and away from the panoramic vista. For viewers from the west looking east, it generally would be below line of sight to the eastern ridgelines. Neither could result in a *substantial* effect. Impacts would be **less than significant**.

2.1.2.4 *Inconsistency with Applicable Goals, Policies or Requirements of an Applicable County Community Plan, and Subregional Plan.*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

4. Not comply with applicable goals, policies or requirements of an applicable County Community Plan, and Subregional Plan,

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Visual Resources (July 30, 2007).

Analysis

The Project is located within areas covered by the Fallbrook Community Plan and the Fallbrook Design Guidelines. Additionally, as mentioned above, due to the Project site's location adjacent to Scenic Highway I-15, the site is subject to the I-15 Corridor Subregional Plan area of the Fallbrook Community Plan. These guidelines were created to guide the anticipated growth and development of land within the I-15 corridor in such a way as to maintain the scenic quality of the roadway as well as visual elements important to the maintenance of community character.

The Project's SPA includes design guidelines for the overall development and for the specific areas within the Project (i.e., mixed-use core, general commercial, residential, and limited impact industrial). The intent of the design guidelines is to provide design continuity within the Project based on common design objectives. The specific plan outlines site design and layout, architecture, and landscape architecture goals, criteria, and guidance related to: sidewalks and trails; ramps and crosswalks; lighting; site furnishings; bicycle parking; architectural themes, articulation, entries, and roofs (including shielding of rooftop equipment); and landscape architectural palettes; brush modification zones; irrigation standards; site retaining and noise attenuation walls; and safety fencing.

Specific to roof-top uses, equipment would be screened from view from adjacent roads, properties, and pedestrian areas in PAs 2, 3, 4 and 5. This equipment is expected to include HVAC, etc. In the area north of Pala Mesa Drive, where shielding of routine roof equipment may not be possible, equipment would be organized in an orderly, uncluttered fashion and painted to match the roof color. Rooftop equipment screening would be identified on site plans. With regard to solar collectors, adjacent architectural detailing (similar to that on the San Diego County Commons roof) may also make the panels "read" as architectural detail for elevated viewers who can see these distant and relatively small scale features. Where solar panels are mounted on roofs that are large enough to also support green roof uses, the uses potentially could be split.

The SPA's Goals, Policies, and Objectives related to Community Design specifically state that the project shall comply with the I-15 Scenic Preservation Guidelines. Therefore, while the Proposed Project would result in change to the visual environment east of I-15, the Proposed Project's conformance to the I-15 Corridor Subregional Plan would ensure a less than significant level of overall compositional change to the visual environment of the I-15 corridor in this area.

Although the Proposed Project would conform to a great majority of the Fallbrook Design Guidelines, some inconsistencies have been identified. The areas in which inconsistency is found are few, and the "amount" of non-compliance is generally minimal. In particular, the Specific Plan potentially varies from the Fallbrook Design Guidelines with regard to signage height of letters, colors, and size; light standard heights and pole colors in parking areas; and open space configurations in residential areas. Detailed discussion of Campus Park West's compliance with the Fallbrook Design Guidelines is included in Appendix A to the Visual Impact Assessment (Appendix B of this EIR).

Specifically, while particular stores and uses are not yet identified, the Project SPA/GPA includes a requirement that a comprehensive sign plan be submitted and approved once site plan specifics are identified. The Fallbrook Design Guidelines call for simplistic and clarifying signs that contain no more than three colors in addition to black and white. Project Specific Plan guidelines generally restrict signage to color use as specified, but would allow more colors and typefaces for corporate logos and artistic elements where appropriate. Mixed-use tenants would be permitted two wall signs (one facing the central drive aisle/traditional main street and one facing the rear/parking lot area), corner tenants would be permitted two wall signs, and tenants that back or side onto Pala Mesa Drive, SR-76, or I-15 would be permitted to have up to three wall signs.

The Design Guidelines, include standards for letter sizes on signs, with lettering and symbols on commercial, industrial, and town center commercial development (such as the proposed mixed-use core*)* signage to be limited to a maximum of eight inches. The signage deviations proposed by the Project are necessary to accommodate the proposed regional commercial center, which was not contemplated in Fallbrook when the guidelines were originally drafted. When appropriate, deviations would include an exceedance of the eight-inch letter/symbol limit, so that signage would be proportionate to the size of the building on which it is located. For example, the largest letter size would be proportionate to the largest building size (i.e., for business uses exceeding 60,000 s.f., letters could be a maximum of 5 feet in height). An approved sign program would be required for the non-residential land use districts within the Project prior to the issuance of building permits. Although inconsistent with that component of the guidelines, the land use issue of plan to plan conformance is addressed in Section 3.1.5 of this EIR. Impacts are identified as **less than significant**.

With regard to the site lighting, the Fallbrook Design Guidelines call for overhead lighting within commercial and residential parking areas to be no higher than 20 and 15 feet, respectively. The Proposed Project would comply with the residential guidelines, as overhead lighting in residential parking areas would be limited to 15 feet. In commercial area parking lots, however, lights as high as 25 feet are proposed and poles may be dark colors in addition to the Design Guidelines-noted black, white and natural stain finish. They would be configured so as to provide the amount of light necessary for safety while also complying with the Dark Sky policies. The restriction to lower heights is completely reasonable in town center areas where light standards should be in scale with immediately abutting structures. In a commercial structures parking lot, however, safety issues associated with potential user isolation and visibility as pedestrians move among cars becomes paramount. The difference of five feet in height of the pole lights associated with parking lot lighting would not visually read as "out-of-scale" given the size of the parking lot and the required trees within it. The taller light standards also would help reduce the number of light poles in the large commercial parking lots, which may be viewed as a positive benefit. Inclusion of "dark" colors also would help the poles visually fade. As a result, adverse effects associated with visibility of these features are considered **less than significant**. Please also refer to Section 3.1.5 of this document for land use analysis regarding plan to plan consistency.

Although the amount of open space associated with residential uses would be consistent with the Fallbrook Design Guidelines, the final area of potential inconsistency concerns the location of common open space areas in the multi-family residential district. The Project proposes that common open space be permitted atop buildings in the PA 3 multi-family residential district that support seating areas (potentially with potted plants or sod areas) and can be used as an outdoor recreational space. These **"**green roofs" would provide additional common open space for Project residents**,** consistent with the intent of the open space requirements. Green roofs likely were not contemplated in the Guidelines because the document was prepared before they became commonplace in planning efforts as an element to expand open space in constrained locations and to provide visual relief from routine roofing features**.** Green roofs are considered consistent with the Guidelines**,** however, because they directly address a number of items called out in the Guidelines relative to climate and energy conservation (e.g., temperature-moderating and passive solar elements that reduce energy consumption, provide more comfortable living spaces, and

adding visual character to buildings). Elevated viewers able to see the roof tops would be viewing from a distance, with the roofs expected to blend into portions of the site visible as developed when not obscured by Project vegetation. This state would be considered visually preferable to standard roof top. Visual effects relative to roof-top use in PA 3 are therefore assessed as **less than significant**. Please also refer to Section 3.1.5 of this document for land use analysis regarding plan to plan consistency.

Proposed Project differences from the Fallbrook Design Guidelines, therefore, would not result in significant adverse visual impacts. Since the Project would meet goals and policies of the applicable documents, **no impact** is identified.

Off-site Facilities

Installation of utility pipelines within roadbeds, potential installation of small pump station features into disturbed areas, and upgrades to area roadways through installation of signals or improvements of intersections through provision of turn lanes on existing roadways would not conflict with applicable goals, policies or requirements of an applicable County Community Plan, or Subregional Plan. **No impact** is identified.

2.1.2.5 *Installation of Outdoor Light Fixtures Inconsistent with the County Light Pollution Code*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

5. Install outdoor light fixtures that do not conform to the lamp type and shielding requirements described in Section 59.105 and are not otherwise exempted pursuant to Sections 59.108 or 59.109 of the County Light Pollution Code (LPC).

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Dark Skies and Glare (July 30, 2007 as modified January 15, 2009).

Analysis

Development of the Proposed Project would include numerous lights for safety and aesthetic reasons (indoor lights, safety and access lights, street lights, pedestrian pathway lighting, parking lot lighting, and accent lights on signs and within landscape areas) onto a property with virtually no current night lighting.

Project lighting, however, would conform to the lamp type and shielding requirements as well as the hours of operation detailed in the LPC (Section 59.101-59.115). The Project would not install any of the following: lighting that directly illuminates neighboring properties; lighting that would cast a direct beam angle toward a potential observer, such as a motorist, cyclist or

pedestrian; and/or outdoor lighting for vertical surfaces such as buildings, landscaping or signs in a manner that would result in useful light or spill light being cast beyond the boundaries of the intended area to be lit.

The County LPC effectively addresses and minimizes the impacts of new light pollution sources. Project-related impacts would be **less than significant**.

2.1.2.6 *Installation of Highly Reflective Building Materials*

Guideline for the Determination of Significance

The Proposed Project will result in a significant impact if it would:

6. Install highly reflective building materials including, but not limited to, reflective glass and high-gloss surface color in areas that would be visible along roadways, pedestrian walkways or in the line of sight of adjacent properties.

Guideline Source

This guideline is from the County Guidelines for Determining Significance – Dark Skies and Glare (July 30, 2007 as modified January 15, 2009).

Analysis

The SPA (PDC 2014) states that highly reflective surfaces such as glare-producing glass or high-gloss surface color that would be visible along roadways, pedestrian walkways, or in the line of sight of adjacent properties are prohibited (PDC 2014). **No impact** is identified.

There is also a possibility that final building design would incorporate solar/photovoltaic panels. These panels are typically constructed of primarily dark absorptive material that is designed to capture as much light energy as possible. Because they are designed to get as much sun exposure as possible, they are routinely placed on roofs, which would have visibility to viewers from off-site elevated view points. Although not highly reflective, typically, once per day the view angle is such that sunlight can be reflected. When this occurs relative to the viewer, glare may be experienced. Because this occurs for such a short duration per day under worst-case conditions (i.e., reflection 365 days per year, assuming no diffusion related to cloud cover or atmospheric conditions), visual impacts related to glare from solar/photovoltaic panels would be **less than significant**.

2.1.3 Cumulative Impact Analysis

As noted in CEQA Guidelines Definitions and Section 15130, cumulative impacts are those resulting from combination of two or more individual effects; either (1) within a single project, or (2) from a combination of multiple projects. Projects within the above-described Project viewshed (including the Proposed Project) would contribute to regionally cumulative visual effects, and are evaluated in this discussion. Although these projects are all within the Project

viewshed, not all would be visible at any one time or from one point; they are not concentrated in one portion of the viewshed, and local topography, vegetation, intervening structures and land uses would often block views to them. As shown on Figure 2.1-9, Cumulative Projects for Visual Resources, the projects within the viewshed include 35 development projects ranging in size from 1 DU to 844 or 886 DU. Implementation of all the cumulative projects within the viewshed (including the Proposed Project) would result in more than 2,290 residences, as well as commercial and retail businesses, a college campus, hotels, offices, parks, and an elementary school.

A number of the cumulative projects would subdivide existing private lots for the purpose of building one to seven new single-family residences (8, 9, 10, 13, 16, 17, 20, 21, 24, 47, 48, 52, 75, 81, 82, 91 and 92).[5] These proposed minor subdivisions are generally located west of the Proposed Project, within the existing neighborhoods located on the east-facing slope of the hills west of I-15; one is north of the Proposed Project (17). One of these cumulative projects, located north of SR-76 and west of I-15, involves development of a single-unit home (82); one other would create two residential/agricultural lots (9). The proposed minor subdivisions and the single-family residence would result in the construction of approximately 67 new single-family houses within the Project viewshed. Visual changes associated with these cumulative projects would be minor; these proposed structures would be located within existing neighborhoods, and generally at higher elevations than the Proposed Project. With anticipated ornamental landscaping, and, where required, project-specific mitigation, these would visually blend with similar surrounding uses and result in **cumulatively less than significant impacts**.

A number of the cumulative projects consist of 10 to 51 single-family residential developments (4, 6, 18, 33, 49 and 60). These proposed cumulative projects would result in the construction of 145 single-family residences. Most of these single-family residential projects are located west of the Proposed Project on the east-facing slope of the hills west of I-15. One single-family residential cumulative project is located north of the Proposed Project (6), east of I-15 near Stewart Canyon Road. Two larger single-family residential projects are located near the edge of the viewshed. Although several would be converting areas that currently are used for agriculture (e.g., groves), the majority would create large lots with similar characteristics to the existing residential development in the area. Most of the cumulative projects are at higher elevations than the Proposed Project and include landscaping, and therefore would visually blend in with surrounding uses.

One multi-family development (29) west of I-15 and the Proposed Project would create 39 condominium units near the existing Pala Mesa Resort. Although visual effects associated with these units are potentially significant due to community character conflicts, they would not be highly visible in conjunction with the Proposed Project due to screening provided by existing mature trees at the Pala Mesa Resort, the I-15 concrete center barrier, vehicles on I-15, chain link fences, and vegetation.

One project consists of expansion of the existing facilities at the Pala Mesa Resort and the addition of new hotel rooms (11) and a wedding facility. Visual elements of Pala Mesa Resort,

[5] Numbers refer to cumulative projects, located in Table 1-4. These numbers refer to the locations of the related projects, as found in Figure 1-27.

located directly west of I-15 from the Project site, consist of a golf course, low-rise resort facilities, and low-rise residential buildings. The resort currently is surrounded by ornamental landscaping; the additions also would include landscaping. The addition of new resort rooms and more landscaped acreage would not result in major visual changes to the viewshed. Much of the proposed development would not be visible from scenic highways, recreational trails, or area residences.

Another cumulative project would consist of additional units at a bed and breakfast north of the Proposed Project (7). The existing facility is located at a relatively low elevation within the viewshed, and would not be highly visible in conjunction with the Proposed Project. The contribution of this project to the cumulative condition would be less than considerable and impacts would be **less than significant**.

The addition of commercial buildings to an existing commercial site (90) on Old Highway 395 just northwest of the intersection of I-15 and SR-76 similarly would not result in major visual changes within the viewshed. The five buildings added by this project would be similar in visual character to the existing grocery store, service station, and a take-out restaurant. Views toward the Project site potentially are available from this location, but intervening vegetation screens eastward views. Additionally, the two projects are on opposite sides of I-15, and thus not visible at the same time by viewers on the highway. (Also, the freeway is lower in elevation than the commercial areas, and the commercial areas are therefore not visible from many of the travel lanes.) From farther distances in the viewshed, when the two sites may be visible at the same time; however, the distance would reduce visible details and render them small elements within the larger view. From westbound SR-76, vegetation that would not be disturbed by the Proposed Project and the angle of the roadway restricts views of the commercial site. Local topography also restricts views toward the commercial site for eastbound travelers. Lastly, a few points in the viewshed are located "behind," or west and uphill, from the commercial site, and those points are screened by structures and vegetation. Therefore, development of the proposed commercial buildings combined with the Proposed Project would result in cumulative visual impacts being **less than significant**.

One cumulative project relates to the exploration of pipeline and water storage options (28). This project would not create visible changes to the viewshed. **No impact** is identified.

One cumulative project consists of buildout of Lake Rancho Viejo. The most recently completed phase ended with construction of 16 single-family residences in this approximately 750 unit development. The development draws the eye due to its circular pattern of residences and red roofs in an otherwise less developed area and is therefore included with this discussion of valley development with the four projects discussed below.

Four of the proposed cumulative projects would be multiple-land-use developments. Three of these, Meadowood (1), Campus Park (2), and Palomar College (26), would be located on property in the immediately vicinity of the Project site. Pala Mesa Highlands (3) would be located west of I-15 and north of SR-76. Altogether, these four cumulative projects would develop 1,006 single-family houses, 719 multi-family residences, commercial uses, offices, parks, a college site and an elementary school.

Meadowood (1) would be located on 390 acres east of Campus Park (2). Citrus/avocado groves cover most of the sloping acres within that project site, which is generally undeveloped. Meadowood proposes 355 single-family residences and 489 multi-family DU, with densities ranging from 3.5 to 19.9 du/ac. It also would include parks, several miles of trails, designation of a site for a future elementary school, community facilities, 125.3 acres of preserved open space, and 56.8 acres of preserved active agricultural land.

Campus Park (2) would be located on approximately 416 acres north and east of the proposed site. This mixed-use development proposes 521 single family residences; 230 multi-family DU; 61,200 s.f. of general commercial uses; 157,000 s.f. of office professional uses an active sports park, and neighborhood parks, and approximately 197 acres of biological open space. The Campus Park project site currently is undeveloped except for one residence, and contains visual elements similar to the Campus Park West Project site.

Pala Mesa Highlands (3) would be located west of I-15 and the Project site, and north of SR-76. This proposed cumulative project, with densities of 1.6 du/ac, would include 130 single-family residences, two parks, and 36.5 acres of open space on approximately 85 acres.

Palomar College (26) would be located north of the Proposed Project site and Horse Ranch Creek, abutting the I-15 right-of-way. Palomar College would develop a new community college campus to serve approximately 12,000 students. The campus would include classroom and administration buildings, parking, open space, and athletic fields. This campus would not include residential facilities for students.

Meadowood, Campus Park, Palomar College, and the Proposed Project—located adjacent to one another east of I-15—would introduce development over most of the currently undeveloped valley floor and would be visible together from area roadways and recreational trails. As stated above, from elevated areas with more panoramic views, Lake Rancho Viejo, south of the San Luis Rey River, also would be notable as part of the cumulative condition.

Cumulative View 1, Figure 2.1-10, is a photograph taken from Old Highway 395 in the southern portion of the viewshed, north of Lilac Road. Expansive views of the valley within which the Project site is located are available from both I-15 and Old Highway 395 (Old Highway 395 is much higher in elevation at this point than I-15).

Each of these proposed cumulative projects and the Proposed Project have introduced or would introduce a large number of buildings and suburban elements into areas that are currently undeveloped and/or used for agriculture. Views to the Project site and surrounding area from public roads, recreational trails, scenic highways, and recreational areas would be affected. Some or all of the largest cumulative projects and the Project site are visible from views from public roads west of I-15; from the proposed San Luis Rey River trail; the Monserate Mountain trail; the Engel Family Preserve Old Highway 395; and from County Third Priority Scenic Highway I-15. Palomar College would introduce large scale buildings and parking areas into a locale abutting I-15. Meadowood would remove groves currently providing irrigated agricultural visual elements on the steep slopes of the westward facing eastern hills. Campus Park would introduce residential, office and Town Center uses into a large area north and east of the

Proposed Project site. These projects, containing visual elements similar to the proposed Campus Park Project, would each introduce suburban elements into a currently open view of grasslands and orchards. While some development currently is visible within the valley and the I-15 corridor's viewshed east of the freeway (most notably Lake Rancho Viejo south of the river), the projects would combine to create a major change in visual character north of SR-76.

Overall, the visual environment of the I-15 corridor viewshed in this area would be adversely affected by the major change in composition introduced by the cumulative projects. The change would conflict with the existing visual character and quality of the area. Therefore, the **cumulative visual impact would be significant**. (**Impact AE-2**)

These cumulative effects are the result of: (1) some development that is already in place, (2) some development that is under the purview of another jurisdiction than the County, and (3) already-approved adjacent projects. There are, therefore, no Project mitigation measures that can make this substantial amount of development look like the open valley floor and grove agricultural areas that have been and will be replaced during cumulative project buildout. Similarly, because the Project would replace undeveloped acreage with a largely built environment that is visible from adjacent major roadways (including I-15) and higher elevations in the vicinity, there are no reasonable and feasible mitigation measures to screen the Project's contribution to the cumulative effect.

Views to the Project site and surrounding area from recreational trails also would be affected. The Proposed Project and cumulative projects in the area would be visible from the Monserate Mountain Trail (refer to Figure 2.1-3h). Views from the trail would encompass the Campus Park project in the foreground, and Palomar College, Meadowood, and the Proposed Project in the distance. The Engel Family Preserve also has extensive overviews of the Project area from a higher elevation (refer to Figure 2.1-3k), and the Proposed Project would comprise a major element within its view. The proposed cumulative projects would create introduce multiple structures, more vegetation, and many roads and trails into views of the currently undeveloped valley and would extend the suburban elements from surrounding hillsides into undeveloped/agricultural lots on the west-facing slopes of the hills and mountains to the east. The overall effect would result in physical changes that would substantially detract from the panoramic vistas available in these recreational areas, creating a **significant visual impact**. (**Impact AE-3**)

Similar to the discussion for Impact AE-2, panoramic vistas would be affected by development that is: (1) already in place, (2) under the purview of another jurisdiction than the County, and/or (3) already approved. There is, therefore, no Project mitigation that can address the cumulative effect to panoramic vistas from these recreational areas. Similarly, because the Project would replace undeveloped acreage with a largely built environment that is visible from adjacent major roadways (including I-15) and higher elevations in the vicinity, there are no reasonable and feasible mitigation measures to screen the Project's contribution to the cumulative effect.

Specific to removal of irrigated hillside groves, which provide a notable visual element in this part of the County, the cumulative effect is less certain. Meadowood would replace groves with residential development on the project's west-facing slopes. On a localized level, this would be seen by viewers from the west as the groves are clearly in view along Old Highway 395, I-15

and easterly facing residence in the hills west of I-15. Substantial (and more mature and visually impressive) groves, however, would remain visible south of the San Luis Rey River, where vibrant hillside groves are juxtaposed with the large Lake Rancho Viejo development on the valley floor. Although the effect of grove loss due to Meadowood development may be notable, the loss of those groves alone may not result in contribution to a significant cumulative visual loss in this area.

Regardless, the Campus Park West Project would not make a considerable contribution to the cumulative effect. As discussed in Section 5.4.2 of this report, Project groves do not provide a primary focal point within the viewshed, as they are peripheral to the majority of the panoramic view (being located at the southern extent of the view), are in a generally fragmented state given location on small and disparate parcels, and are also visually dominated by the San Luis Rey River riparian vegetation. The trees are relatively low profile and, unlike groves located on highly visible hillsides, are nestled between the road and the San Luis Rey River on primarily flat terrain. This minimizes their visual effect, as depth and size of the grove are not apparent, and the trees do not present as significant arboreal cover. Other groves, south and east of this area, and up the small hill between the Project and I-15, would remain. The Project contribution to loss of hillside groves would be nil, and any contribution related to loss of groves in general would be less than considerable. **No impact** is identified.

2.1.4 Significance of Impacts Prior to Mitigation

The following significant impacts related to aesthetics would occur with Project implementation:

Impact AE-1 Visual effects during the Project construction period related to grading and ongoing development would be substantial until buildout occurs and all vegetation is installed.

Impact AE-2 The visual environment of the I-15 corridor viewshed in the Project area would be affected by the change in composition introduced by the cumulative projects that would be incompatible with the prior visual character of the area.

Impact AE-3 The cumulative conversion of the viewshed from a rural area with abundant open space to a developed area with less open space, and development encroaching into westerly facing slopes would adversely affect this panoramic vista.

2.1.5 Mitigation

Significant visual impacts assessed to the Project are related to: (1) the construction period (and would end following full Project implementation), and (2) cumulative effects which would occur based on buildout by other projects even if Campus Park West is not approved.

With regard to potential mitigation of construction activities, shielding could be attained for users of I-15 and SR-76 through placement of fencing (e.g., wood, fabric panels) or temporary vegetative screening. This screening would not shield views to the site from elevated view points (frequently on private property), however, and it would also be likely to result in other substantial impacts to views. If the screening is adequate to shield viewers from views to the

site, it could also potentially affect the openness of views to the more distant hills and mountains, which provide the valued focal viewpoint in the panorama.

With regard to cumulative impacts, design features such as landscaping, creek retention, and architectural details would help to reduce visual effects of the Proposed Project by screening parking lots, buildings, and lighting. As discussed above, the Project conforms to all but minor deviations to the Fallbrook Design Guidelines; authored to apply to "village" character design features. Additional mitigative features could include substantial redesign of Project extent or components. In order to comply with General Plan development for the area (as well as long-standing land use assumptions related to the I-15/SR-76 node), however, alternative projects would be anticipated to consist of similar elements.

As described throughout this subchapter, Project features would not affect the dominance of cumulative project build-out due to the mass and scale of cumulative past and planned development in the viewshed. Absent the presence of existing and planned hillside development in this area, the primary contributing elements to character change would not occur. Campus Park West would be wholly located in the valley bottom, and is the most visually shielded of the four projects building out in the valley due to its proximity to I-15 berming, existing roadside planting, and size. As a result, the actual contribution of Campus Park West to the cumulative condition is minimal, and the Project clearly would not contribute to the cumulative effect assessed to hillside development. Assuming that it does make a considerable contribution to the cumulative condition, implementation of the project design features would not reduce the Project contribution to cumulative visual impacts to less than significant levels, and no mitigation measures are known that would reduce levels of changes associated with development in this quadrant.

2.1.6 Conclusion

One Project direct impact, temporary construction effects, was found to be visually significant. Significant cumulative impacts also were identified.

With regard to construction-period effects, with the exception of mass grading (hydroseeded to minimize erosion as well as visibility of the graded area), phasing of construction activities would restrict the amount of site under active build at any one time. Landscaping, installed subsequent to each construction phase, also would help minimize visual effects of grading activities and building construction. Nonetheless, incompatible changes to the existing visual character due to construction-period effects related to vegetation removal and the introduction of built elements into a rural setting, as well as night-lighting, would degrade the quality of views from the surrounding areas during the construction period. Screening of construction-period views from locations adjacent to the site would be largely ineffective due to the elevation of the affected viewers (above the Project site from the north or west) or possible long sight-lines for viewers travelling north-south along I-15. Potential screening of stationary views through placement of screening closer to off-site residential or recreational viewers would require fencing on off-site private property or within public open space reserves, which would impede current views to the larger eastern slopes and mountains, as well as the expansive valley floor (far larger than the Project). Mitigation measures were therefore found to be either infeasible given the

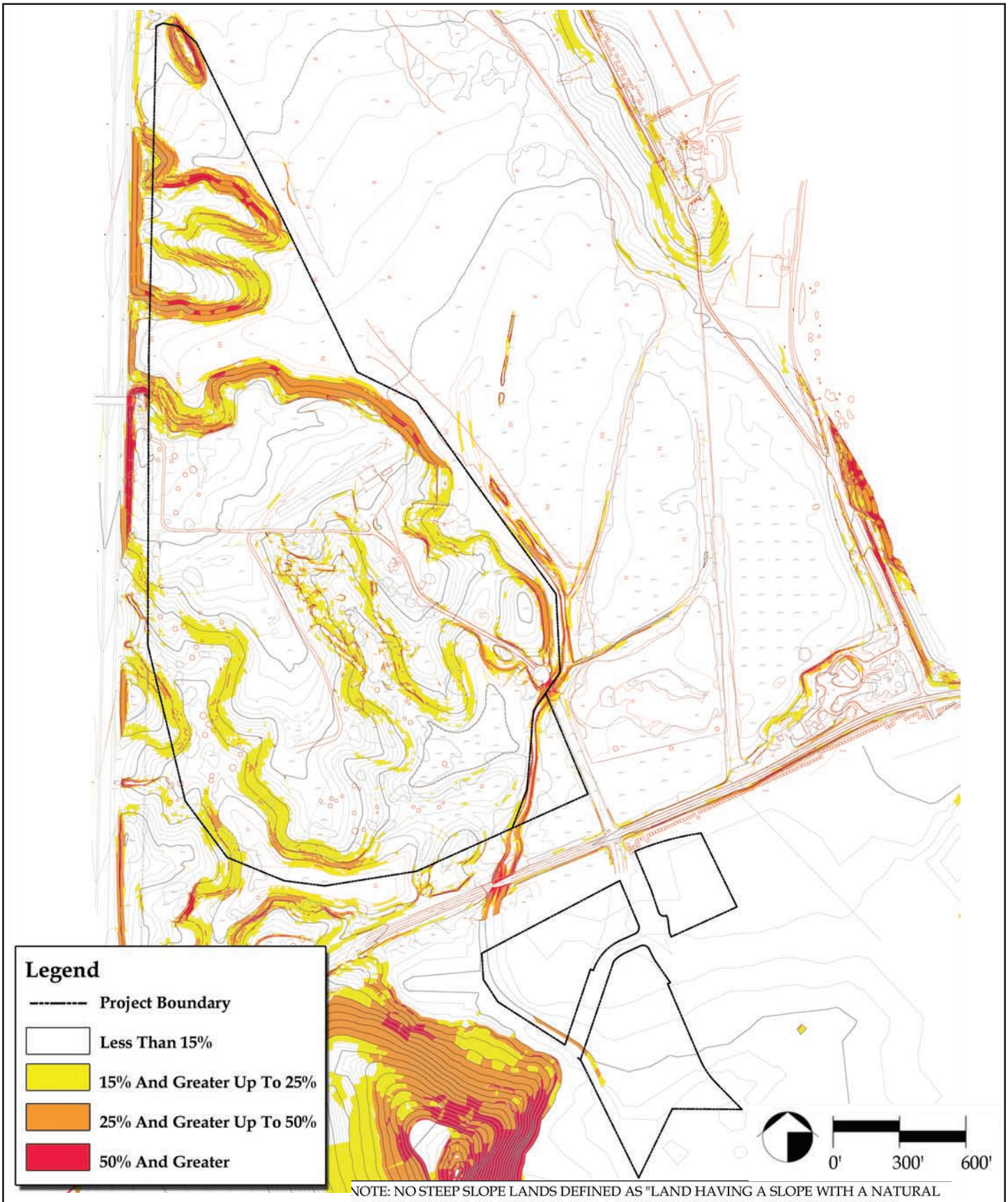
orientation of viewers to the Project, or resulting in obscuring views to the primary valued focal point. As a result, the construction-period impacts were identified as significant and unmitigable. These impacts would be eliminated, however, upon Project buildout and attainment of landscaping maturity. (Impact AE-1)

While approximately 35 development projects are identified within the Project viewshed, most are not visible in the same view as the Proposed Project. Three projects (Campus Park, Meadowood, and Palomar College) located adjacent to or in the same general area as the Proposed Project, however, together with the Proposed Project, would cumulatively introduce a large number of buildings and suburban elements into areas that are currently undeveloped and/or used for agriculture. While some development currently is visible within the valley and the I-15 corridor's viewshed east of the freeway (e.g., the Rancho Lake Viejo housing development south of the river), the projects would combine to create a major change in visual character north of the river. Though additional development in this area has been projected and planned for (see Section 3.1.5, Land Use, and discussion of the Fallbrook Community Plan and 1983 Hewlett Packard Specific Plan), the character of this valley would visibly change with implementation of these projects; with Lake Rancho Viejo, Campus Park West, Campus Park and Meadowood all notable as a group for their valley development elements east of I-15. The change would conflict with the existing visual character and quality of the area, and the cumulative visual impact would be significant. (Impact AE-2)

Additionally, four newer contiguous cumulative projects (including the Proposed Project) would be visible from the Engel Family Preserve and the Monserate Mountain Trail. They would extend the suburban elements from the valley floor into surrounding hillsides and adjacent undeveloped/agricultural lots north of the river. The overall effect would result in physical changes that would substantially detract from the panoramic vistas available in this recreational area and create a cumulatively significant visual impact. (Impact AE-3)

As noted above, several Project design features such as landscaping, creek retention, fire protection walls, and architectural details would help to reduce the visual impacts created by the Proposed Project (and adjacent projects) by screening parking lots, buildings, and lighting. These features would not affect the dominance of the cumulative projects due to their scale, however, and therefore would not reduce the Project contribution to cumulative visual impacts to less than significant levels. Screening of views from off-site viewpoints would be ineffective for the reasons described above. Other mitigation elements would require substantial redesign or elimination of all three of the other three valley projects in the cumulative view which is not only unlikely given the fact that these projects are approved and, in some instances, actively starting construction (with at least one of the projects, Palomar College, being out of County jurisdictional control), but also would contravene regional plans for the I-15/SR-76 node. As a result, these effects remain unmitigable and long-term.

Overall, any Project alternative that includes structures would contribute to changes planned to the open, undeveloped views from I-15 and from the trails. These projected cumulative impacts also would result whether or not the Proposed Project is built based on ongoing implementation of the Palomar College campus and the approved Campus Park and Meadowood projects.



NOTE: NO STEEP SLOPE LANDS DEFINED AS "LAND HAVING A SLOPE WITH A NATURAL GRADIENT OF 25% OR GREATER AND A MINIMUM RISE OF 50 FEET" EXIST ON SITE.

Source: PDC 2010

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Slp e Analy is

CAMPUS PARK WEST

Figure 2.1-1

HELIX Environmental Planning

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Photograph Location Map

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.1-2

Typical View 1: Northwest along the unpaved portion of Pankey Road

Typical View 2: Northward from the unpaved portion of Pankey Road

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Typical Views

CAMPUS PARK WEST

Figure 2.1-3a

HELIX Environmental Planning

Typical View 3: Eastward from the western Project boundary toward the airstrip

Typical View 4: Southeastward from the western Project boundary toward the airstrip

Typical View 5: Typical unpaved tracks and trees on the Project site

Typical View 6: Southward from the western, central portion of the Project site

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Typical Views

CAMPUS PARK WEST

Figure 2.1-3c

HELIX Environmental Planning

Typical View 7: Southwestward from south of the airstrip

Typical View 8: Westward view of the remote-control helicopter area

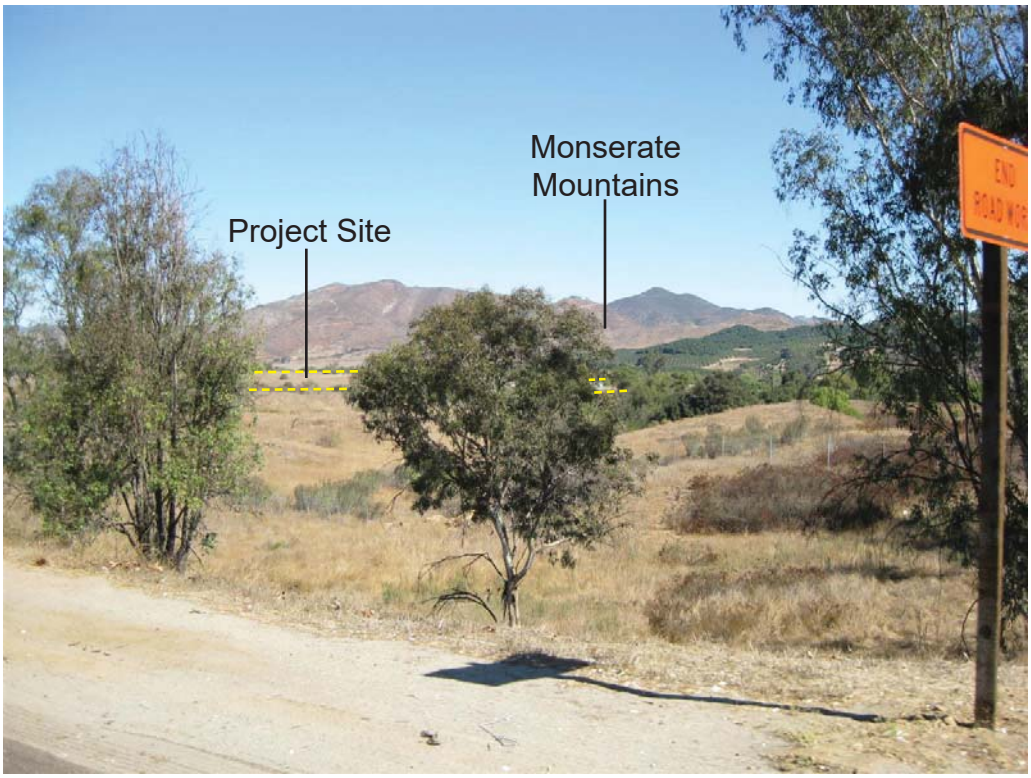
Typical View 9: Northwest from Pankey Road, south of SR 76

Typical View 10: Northeast from northbound I-15

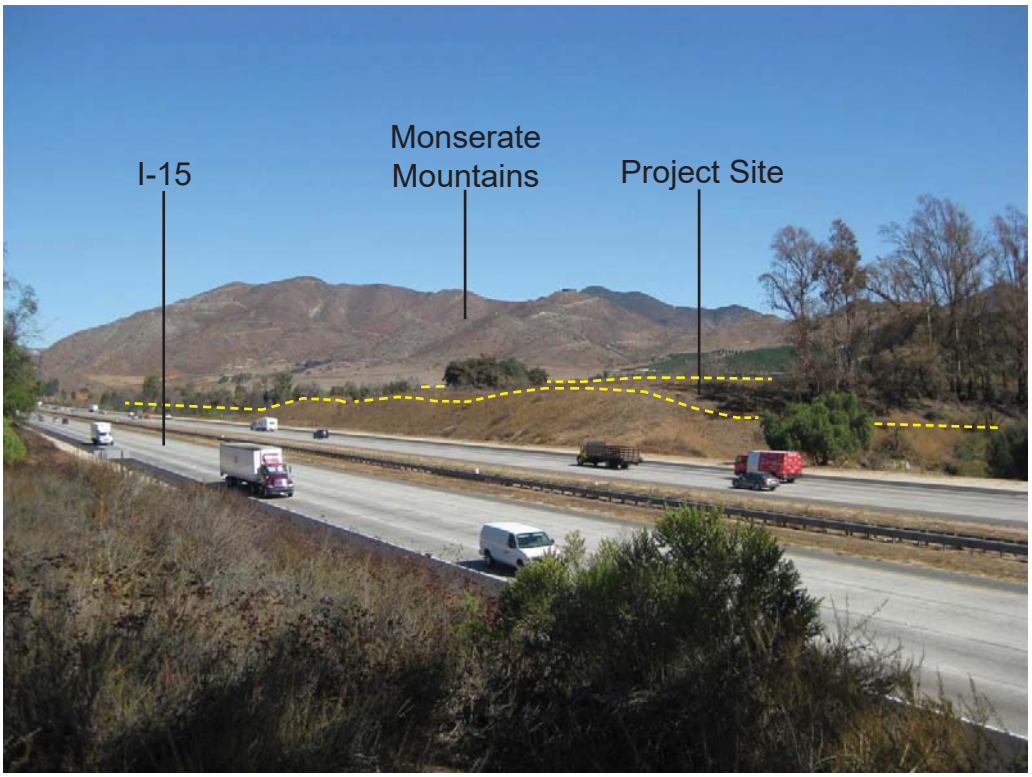
Typical View 11: Southeast from southbound I-15

Typical View 12: Southward from SR 76

Typical View 13: Northeast from SR 76

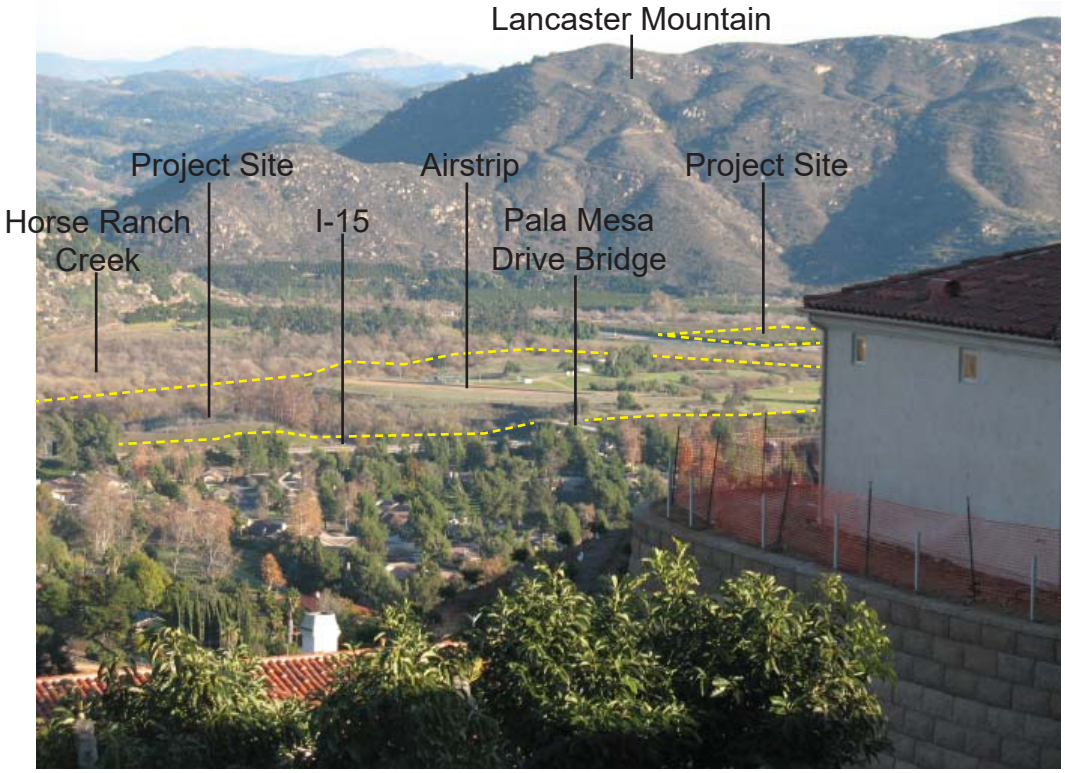


Typical View 14: Northeast from SR 76/Northbound I-15 on-ramp

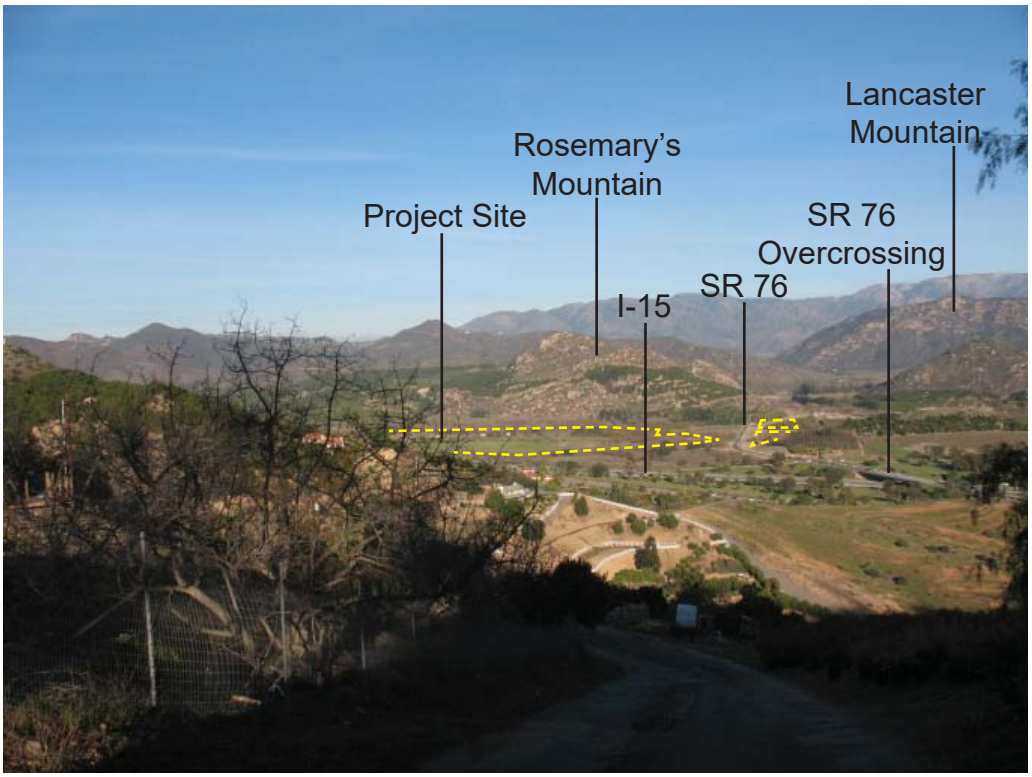


Typical View 15: Northeast from Old Highway 395 north of Pala Mesa Drive

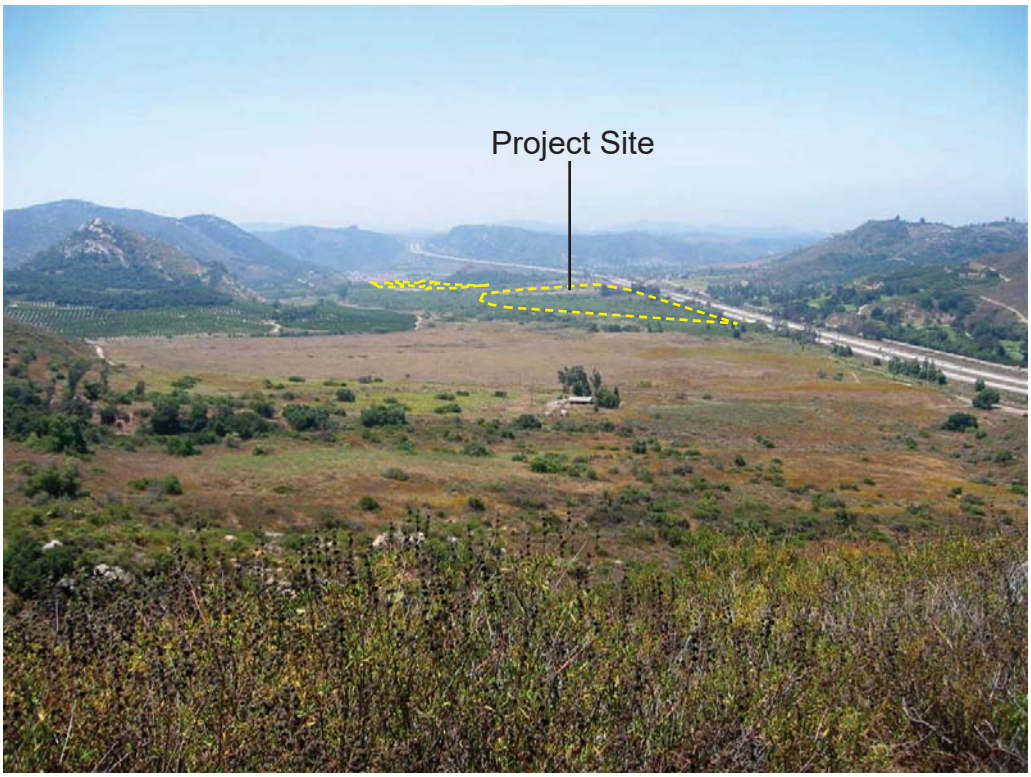
Typical View 16: Northeast from Old Highway 395 south of Pala Mesa Drive



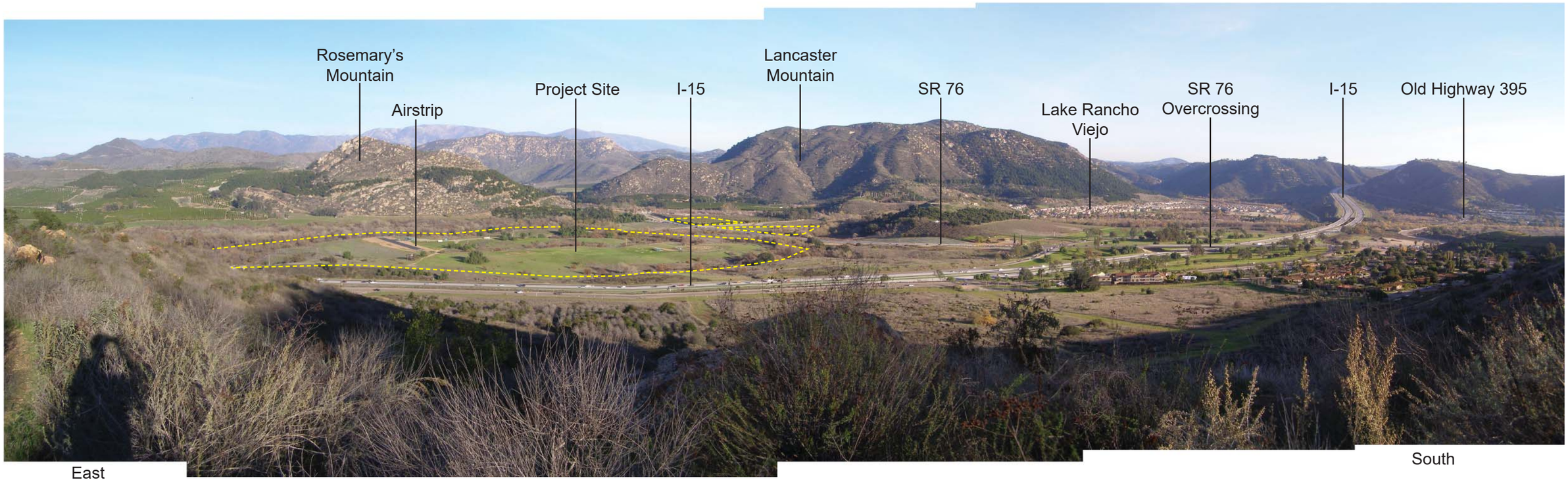
Typical View 17: East from Vern Drive



Typical View 18: Northeast from Brodea Lane



Typical View 19: Southward from trail on Monserate Mountain



Typical View 20: Panoramic from trail in Engel Family Preserve

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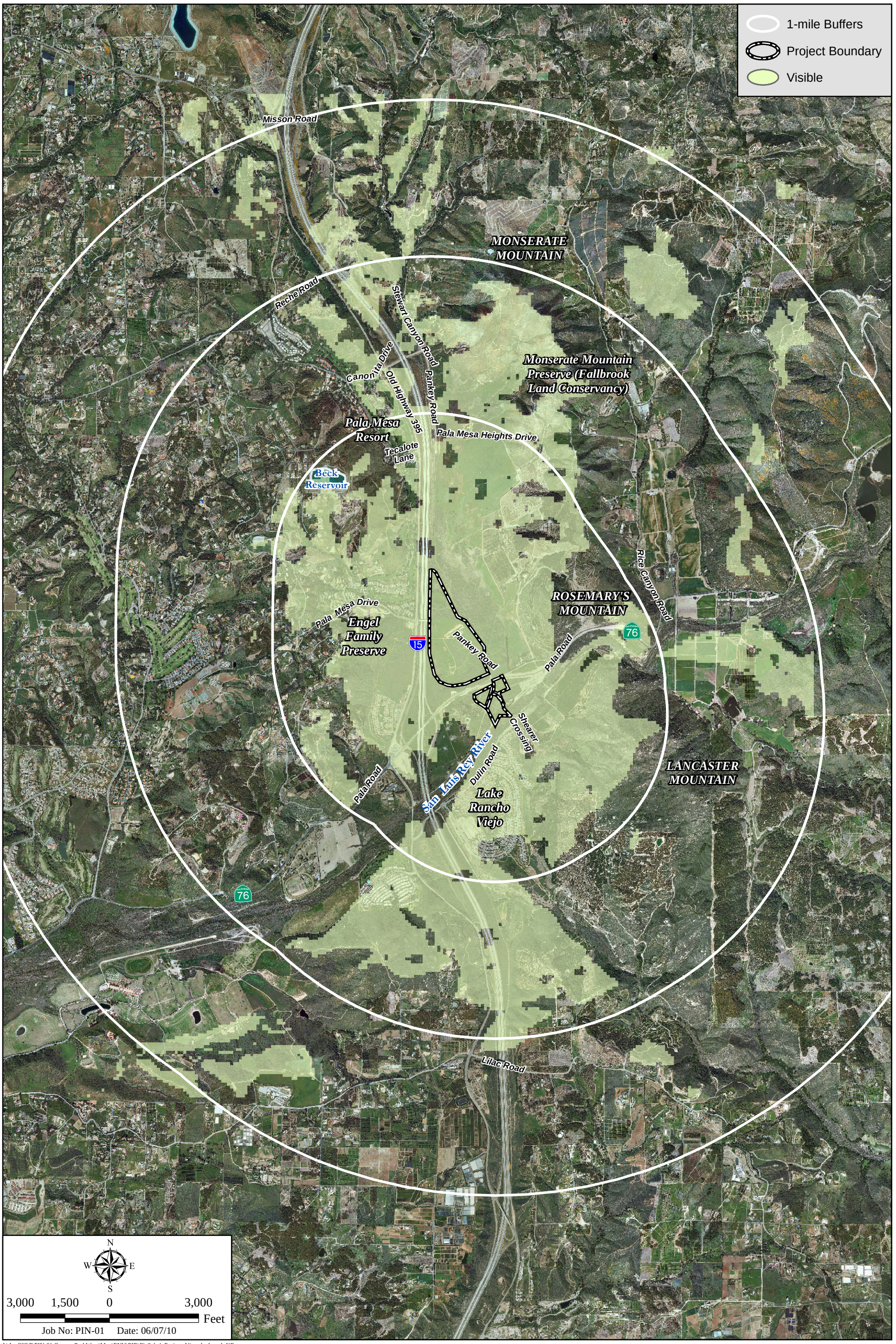
Typical View

CAMPUS PARK WEST

Figure 2.1-3k

HELIX Environmental Planning



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Project Viewshed

CAMPUS PARK WEST

Figure 2.1-4

HELIX Environmental Planning

Existing Conditions
Looking westerly on SR 76 from east of Pankey Road

Proposed Configuration

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Key View 1 / Simulation 1

CAMPUS PARK WEST

Figure 2.1-5

HELIX Environmental Planning

Existing Conditions
Looking northerly to the Project site from SR 76
east of the I-15 on-ramp

Proposed Configuration

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Key View 2 / Simulation 2

CAMPUS PARK WEST

Figure 2.1-6

HELIX Environmental Planning

Existing Conditions
Looking east from Old Highway 395 into the central portion of the Project north of SR 76

Proposed Configuration

Existing Conditions
Looking southeasterly to the northern portion
of the Project from southbound I-15

Proposed Configuration

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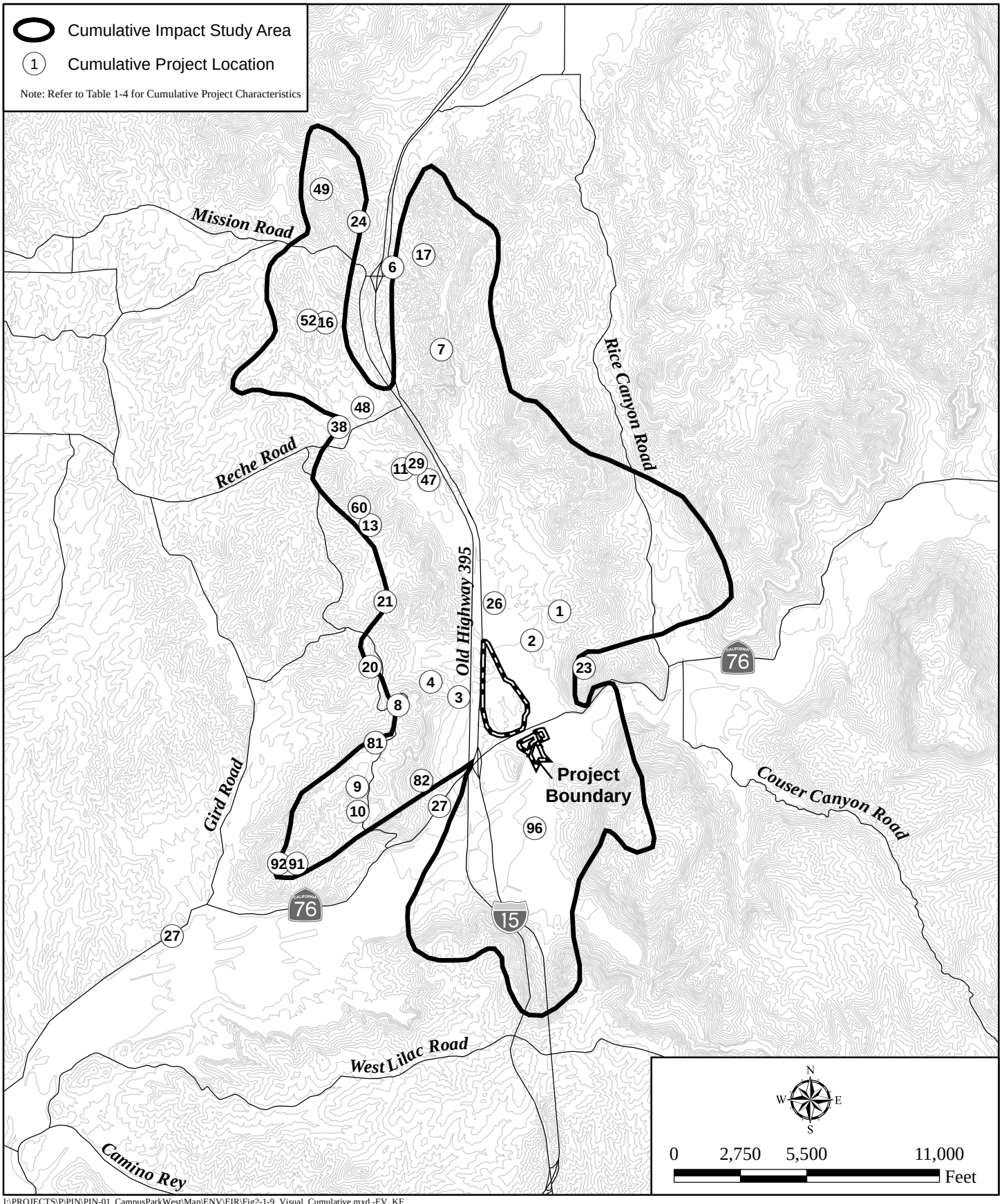
Key View 4 / Simulation 4

CAMPUS PARK WEST

Figure 2.1-8

HELIX Environmental Planning



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Cumulative Projects for Visual Resources

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.1-9

Cumulative View 1: Northward from Old Highway 395, north of Lilac Road

SUBCHAPTER 2.2

AIR QUALITY

2.2 Air Quality

Air quality issues were addressed in the 1981 Sycamore Springs EIR and 1983 Hewlett Packard EIR. The 1981 EIR provided information related to air quality monitoring based on data from the Temecula monitoring station. Incremental impacts related to then-proposed project uses associated with vehicles, electricity generation, and wood-burning fireplaces were identified. These effects, as well as those resulting from construction-period dust generation and fumes, were identified as significant but mitigable. The 1983 EIR provided 1979, 1980, and 1981 air quality data for criteria pollutants based on the Escondido monitoring station. Compliance analysis focused on those data with the remainder of text addressing projected pollutant generation based on the mix of uses proposed (manufacturing, residential, research, etc.). Significant project-direct, as well as a significant contribution to cumulative/regional, air quality impacts were identified in 1983.

Project-specific pollutant generation varies by type of proposed use. The uses proposed in 1981 (a large-scale mobile-home park and golf course) and 1983 (mixed residential, commercial uses, and large-scale light industrial/manufacturing complex) would generate quantities and types of pollutants that would differ from those generated under the current Project, which proposes a different mix of multi-family residential, general commercial, and limited impact industrial uses.

Since certification of the 1981 and 1983 documents, the importance of construction-period emissions, as well as some additional categories of pollutant emissions (e.g., particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]), has become better understood. Even more recently, the issue of climate change/greenhouse gases (GHGs) has been incorporated into baseline adequacy requirements (refer to Section 3.1.1, Climate Change). A new analysis, therefore, has been prepared based on current County guidelines and a new Air Quality Analysis Report for Campus Park West (HELIX 2013b). The report is included in Appendix C of this EIR.

2.2.1 Existing Conditions

2.2.1.1 *Regional Meteorology/Climate*

The Project site is located in the San Diego Air Basin (SDAB). The climate of San Diego County is characterized by hot, dry summers and mild, wet winters and is dominated by a semi-permanent, high-pressure cell located over the Pacific Ocean. Wind monitoring data recorded at the Gillespie Field Airport Station indicates that the predominant wind direction in the vicinity of the project site is from the west. Average wind speed in the vicinity is approximately 5.9 miles per hour (2.6 meters per second). The annual average temperature in the project area is approximately 55 degrees Fahrenheit (ºF) during the winter and approximately 74ºF during the summer. Total precipitation in the project area averages approximately 16.2 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center 2012).

The atmospheric conditions of the SDAB contribute to the region's air quality problems. Due to its climate, the SDAB experiences frequent temperature inversions. Typically, temperature decreases with height. Under inversion conditions, however, temperature increases as altitude

increases. Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and nitrous oxides react under strong sunlight, creating smog. Light, daytime winds, predominately from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills.

High air pollution levels in coastal communities of San Diego often occur when polluted air from the South Coast Air Basin, particularly Los Angeles, travels southwest over the ocean at night, and is brought onshore into San Diego by the sea breeze during the day. Smog transported from the Los Angeles area is a key factor on more than 50 percent of the days San Diego exceeds clean air standards. Ozone and precursor emissions are transported to San Diego during relatively mild Santa Ana weather conditions, although during strong Santa Ana weather conditions, pollutants are pushed far out to sea and miss San Diego. When smog is blown in from the SDAB at ground level, the highest O_3 concentrations are measured at coastal and near-coastal monitoring stations. When the transported smog is elevated, coastal sites may be passed over, and the transported ozone is measured further inland and on the mountain slopes.

2.2.1.2 *Air Pollutants of Concern*

Federal and state laws regulate air pollutants emitted into the ambient air by stationary and mobile sources. These regulated air pollutants are known as "criteria air pollutants" and are categorized as primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Secondary pollutants form in the air when primary pollutants react or interact. Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. Specific descriptions of health effects for each of the following air pollutants are in Appendix C.

- **Ozone**. Ozone is formed when volatile organic compounds (VOCs) and oxides of nitrogen (NO_X), both by-products of fuel combustion, react in the presence of ultraviolet light.

- **Carbon Monoxide**. Carbon Monoxide (CO) is a product of fuel combustion; the main source of CO in the SDAB is from motor vehicle exhaust.

- **Nitrogen Dioxide**. Nitrogen dioxide (NO_2) is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen.

- **Respirable Particulate Matter and Fine Particulate Matter**. Respirable particulate matter, or PM_{10}, refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or $PM_{2.5}$, refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. PM_{10} and $PM_{2.5}$ arise from a variety of sources,

including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations and windblown dust.

- **Sulfur Dioxide**. Sulfur dioxide (SO_2) is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil, and by other industrial processes.

- **Lead**. Lead (Pb) in the atmosphere occurs as particulate matter. Lead has historically been emitted from vehicles combusting leaded gasoline, as well as from industrial sources. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions.

- **Sulfates**. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur.

- **Hydrogen Sulfide**. Hydrogen sulfide (H_2S) is a colorless gas formed during bacterial decomposition of sulfur-containing organic substances.

- **Vinyl Chloride**. Vinyl chloride, a chlorinated hydrocarbon, is a colorless gas used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

- **Visibility-Reducing Particles**. Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt. These particles in the atmosphere would obstruct the range of visibility. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze.

The public's exposure to toxic air contaminants (TACs) is another environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code (§39655, subd. (a).) defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the Federal Act (42 United States Code [USC] Section 7412[b]) is a TAC; these substances are controlled under a different regulatory process than criteria pollutants. Under state law, the California Environmental Protection Agency (CalEPA), acting through the California Air Resources Board (CARB), is authorized to identify a substance as a TAC if it determines the substance meets the Health and Safety Code definition above.

2.2.1.3 *Regulatory Setting*

Federal and State Regulations and Standards

At the federal level, the U.S. Environmental Protection Agency (USEPA) is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of airborne pollutants below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for criteria pollutants (specifically, ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead). Primary standards are designed to protect human health with an adequate margin of safety. Secondary standards are designed to protect property and the public welfare from air pollutants in the atmosphere.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. The state agency responsible for coordination of state and local air pollution control programs is the CARB, which established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA), and also has established CAAQS for additional pollutants, including sulfates, H_2S, vinyl chloride and visibility-reducing particles.

CARB also is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program and the State Implementation Plan (SIP) with input from local agencies. The San Diego Air Pollution Control District (SDAPCD) has developed its input to the SIP, which includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. SDAPCD submitted an air quality plan to USEPA in 2007; the plan demonstrated how the 8-hour ozone standard would be attained by 2009. Despite best efforts, SDAB did not meet the ozone NAAQS in 2008 and 2009, and the SDAPCD is currently revising their air quality plan. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the USEPA and the CARB, and the emissions and reduction strategies related to mobile sources are considered in the Regional Air Quality Strategy (RAQS) and SIP.

On July 26, 2007, CARB adopted vehicle regulations to reduce diesel emissions from heavy-duty diesel equipment (CARB 2007a). The regulation requires any person who owns or operates off-road diesel equipment to apply exhaust retrofits to capture pollutants and to quickly re-power heavy polluting fleets with newer, cleaner engines. The compliance date for large fleets (greater than 5,000 hp) was originally scheduled for March 2010. As of February 2010, some of the provisions have been identified as currently unenforceable. CARB is still working toward achieving the stated commitments, however, and it is assumed that this or a similarly effective regulation will be in place during Project construction.

Local Regulations and Standards

Areas that do not meet the NAAQS or CAAQS for a particular pollutant are considered to be "non-attainment areas" for that pollutant. CARB reviews operations and programs of the local air districts, and requires each air district with jurisdiction over a non-attainment area to develop its own strategy for achieving the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County.

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County RAQS was initially adopted in 1991, and was updated in 1995, 1998, 2001, 2004 and 2009. The local RAQS, in combination with those from all other California non-attainment areas with serious (or worse) air quality problems, is submitted to the CARB, which develops the SIP.

The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the County as part of the development of the County's General Plan, and by cities within the County. As such, projects that propose development that is consistent with, or less dense than, the growth anticipated by the general plans would be consistent with the RAQS. If a project proposed development greater than that anticipated in a general plan and SANDAG's growth projections, the project might be in conflict with the RAQS and SIP, and might have a potentially significant impact on air quality.

In addition, SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material causing nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. Rule 55 prohibits construction activity that would discharge fugitive dust emissions into the atmosphere beyond the property line. Finally, Rule 67 prohibits the use of architectural coatings (i.e., paints) that would exceed VOC content limits specified for each coating category in the rule.

Air Basin Attainment Status

Federal Attainment

On April 30, 2012, the SDAB was classified as a marginal nonattainment area for the 8-hour NAAQS for ozone. The SDAB is an attainment area for the NAAQS for all other criteria pollutants. The SDAB currently falls under a national "maintenance plan" for CO, following a 1998 redesignation as a CO attainment area (SDAPCD 2010).

State Attainment

The SDAB is currently classified as a non-attainment area under the CAAQS for ozone (serious non-attainment), PM_{10} and $PM_{2.5}$ (CARB 2009).

Each nonattainment area must submit a SIP outlining the combination of local, state, and federal actions and emission control regulations necessary to bring the area into attainment as expeditiously as practicable. Then, even after the nonattainment area attains the air quality standard, it will remain designated a nonattainment area unless and until the state submits a formal request for redesignation to attainment to the USEPA. The request must include a "maintenance" plan demonstrating that the area will maintain compliance with that NAAQS for at least 10 years after USEPA redesignates the area to attainment.

The SDAPCD is now requesting redesignation of San Diego County to attainment of the 1997 ozone NAAQS. Because the region attained the standard in 2011, and this request for redesignation to attainment is being submitted prior to the June 2013 SIP submittal due date, those Moderate area SIP requirements will not apply after USEPA redesignates San Diego County to attainment for the 1997 ozone NAAQS. Instead, the Maintenance Plan included in this SIP submittal will fulfill that SIP submittal requirement (SDAPCD 2012). In addition, the SDAPCD is currently drafting its *Ozone Redesignation Request and Maintenance Plan*, which calls for the SDAB to attain the 1997 federal 8-hour ozone NAAQS. As of September 12, 2012, the SDAPCD has released a working draft *Ozone Redesignation Request and Maintenance Plan* for public review.

A more detailed discussion of the redesignation request and maintenance plan is provided in Appendix C. Refer to Table 2 in the appendix for a summary of the region's attainment status for all applicable criteria pollutants.

2.2.1.4 *Background Air Quality*

Table 2.2-1, Ambient Air Quality Standards, presents a summary of the adopted ambient federal and state air quality standards that are used to determine attainment or non-attainment.

The SDAPCD operates a County-wide network of air monitoring stations to measure ambient concentrations of pollutants and determine whether the ambient air quality meets the CAAQS and NAAQS. The nearest ambient monitoring stations to the Project site are the Escondido East Valley Parkway station and the San Diego 12th Avenue station (which is the closest station that measures SO_2). There is no ambient monitoring station in the Fallbrook or other nearby areas of the Project site. Because both the Escondido East Valley Parkway and San Diego 12th Avenue monitoring stations are located in areas where there is substantial traffic congestion, it is likely that pollutant concentrations measured at those monitoring stations are higher than concentrations that would be observed or measured in the Project area, and would thus provide a conservative estimate of background ambient air quality.

In particular, concentrations of CO at the Escondido monitoring station tend to be among the highest in the SDAB due to the fact that the monitor is located along East Valley Parkway in a

congested area in downtown Escondido. The station sees higher concentrations of CO than have historically been measured elsewhere in San Diego County, and the background data are not likely to be representative of background ambient CO concentrations at the Project site due to the site's location in a less developed area.

Ambient concentrations of pollutants over the last five years are presented in Table 2.2-2, Ambient Background Concentrations – San Diego Monitoring Stations. The federal 8-hour ozone standard was exceeded at the Escondido monitoring station 3 times in 2007, 13 times in 2008, 1 time in 2009, 3 times in 2010, and 2 times in 2011. The federal 24-hour $PM_{2.5}$ standard was exceeded 11 times in 2007, 3 times in 2008, 2 times in both 2009 and 2010, and 3 times in 2011. The 1-hour state ozone standard was exceeded nine times in 2008 at the Escondido monitoring station, zero times in 2007 and 2009, two times in 2010, and one time in 2011. The 8-hour state ozone standard was exceeded 5 times in 2007, 23 times in 2008, 9 times in 2009, 5 times in 2010, and 2 times in 2011. The Escondido monitoring station measured exceedances of the state 24-hour PM_{10} standard two times in 2007, one time in both 2008 and 2009 and not once in 2010 and 2011. The annual PM_{10} and $PM_{2.5}$ standards were exceed in most years. The data from the monitoring stations indicate that air quality is in attainment of all other federal and state NO_2, CO and SO_2 standards.

2.2.2 Analysis of Project Effects and Determination as to Significance

The following air quality analysis does not make a distinction between on- and off-site Project effects because emissions attributable to such impacts would occur within the SDAB regardless of their location. With regard to operational emissions, the analysis generally evaluates the worst-case of the two land use scenarios. If there are substantive differences between **Scenarios 1** and **2**, both land use scenarios are analyzed.

2.2.2.1 *Conformance to the RAQS*

Guideline for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if it would:

1. Conflict with or obstruct the implementation of the San Diego RAQS and/or applicable portions of the SIP.

Guideline Source

Guideline No. 1 is taken from the County Guidelines for Determining Significance – Air Quality (March 19, 2007).

Analysis

As noted above, consistency with the RAQS and SIP is determined by evaluating consistency of a project with growth anticipated in the relevant General Plan. As noted in Section 2.2.1.3, if a project proposes development that is greater than anticipated in the relevant General Plan and

SANDAG's growth projections upon which the RAQS is based, the project potentially would conflict with the RAQS and SIP, and further analysis would be warranted to determine if the project and surrounding projects exceed the growth projections used in the RAQS and SIP for the specific subregional area. Also, projects that are consistent with the SIP rules (i.e., the federally approved rules and regulations adopted by the SDAPCD) are consistent with the SIP.

The current RAQS and SIP are based on projections for residential, commercial, industrial and recreational land uses contained in the previous County General Plan that was in place at the time the RAQS were adopted in 2009. Implementation of the Project would result in fewer residential dwelling units and increased commercial and industrial development than assumed in the previously adopted County General Plan for the North County East Major Statistical Area, in the Fallbrook Subregional Area. Specifically, the total number of dwelling units for residential land uses is proposed to decrease from 486 units assumed in the Hewlett Packard Campus Park Specific Plan (SP-83-01) approved in 1983 to 283 units. The total number of acres for the commercial retail and industrial office land uses is proposed to increase from 10.5 acres of commercial land uses to 52.4 acres (with a maximum of 503,500 s.f. [**Scenario 1**] to 513,500 s.f. [**Scenario 2**]) of general commercial and 12.9 acres (with a maximum of 120,000 s.f.) of industrial office land uses. Both of these proposed commercial land uses, however, are less than the 2.5 million square feet approved for the commercial land uses at the Project site under the prior General Plan. Regardless, since the Project proposes commercial and industrial development greater than that anticipated in the previous General Plan (even though residential development would be less), further analysis is warranted.

As noted above, the Project proposes up to 283 residential dwelling units. The Project's projected growth of 283 dwelling units, when added to the cumulative housing units projected for the Fallbrook Subregional Area, based on the cumulative projects identified on Table 1-4 of this EIR, totals approximately 3,379 units. The total cumulative housing projected for the Fallbrook Subregional Area for 2030 according to SANDAG projections is an additional 9,630 DU. Based on information regarding development projects currently proposed within the Project cumulative study area, the Project and surrounding projects would result in less residential growth than SANDAG's 2030 projected growth for the Fallbrook Subregional Area.

The Project proposes 52.4 (**Scenario 1**) to 53.6 (**Scenario 2**) acres of general commercial uses, and 12.6 acres of limited impact industrial uses regardless of scenario. The Project's projected size of the commercial retail and light industrial area would be greater than in the previously-adopted General Plan, which anticipates 10.5 acres of commercial land uses. Development proposed by implementation of the proposed Project would be required to be consistent with the emission reduction strategies in the RAQS, including use of low-VOC architectural coatings, use of low-NO_X water heaters, and compliance with rules and regulations governing stationary sources. The Project also would be required to comply with all applicable rules and regulations adopted by the SDAPCD.

As previously mentioned, the SDAPCD is currently drafting its *Ozone Redesignation Request and Maintenance Plan*, which calls for the SDAB to attain the 1997 federal 8-hour ozone NAAQS (SDAPCD 2012). As part of that draft document, SDAPCD will outline the County's contribution to the *Eight-Hour Ozone Attainment Plan* (i.e., SIP) for the 2008 8-hour NAAQS

for ozone, and the Plan will outline strategies and measures to reduce emissions of ozone precursors. The SIP strategies mainly focus on stationary sources through adoption of rules by the SDAPCD, and on mobile sources through adoption of transportation control measures. According to the 2011 General Plan, Goal COS-13 regarding land use development implements policies designed to reduce emissions of criteria pollutants while protecting public health (County 2011). These policies include the following:

- COS-13.1 **Design and Construction of New Development**. Require new development design and construction methods to minimize impacts to air quality.

- COS-13.2 **Reduction of Vehicular Trips**. Encourage future development to reduce vehicular trips by utilizing compact regional and community-level development patterns.

- COS-13.3 **Villages and Rural Villages**. Encourage new development to reduce air pollution by incorporating a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit.

- COS-13.4 **Minimize Air Pollution**. Minimize land use conflicts that expose people to significant amounts of air pollution.

The Project has been developed to include smart growth concepts which cluster residential uses around services and jobs and help to reduce the average vehicle miles traveled (VMT) for the average commuter. The Project Traffic Impact Analysis by Linscott, Law and Greenspan (LLG 2014) assumes that the combined mixed uses of Campus Park West, Campus Park and Meadowood would reduce trips by 30 percent (an internal capture rate). Buses would also serve the Project area, further reducing vehicle trips and serving to reduce mobile emissions. In addition, the emissions estimates calculated for the Proposed Project assumed that dust control measures (i.e., watering three times per day, soil stabilizers, sweeping) during Project construction would comply with strategies in RAQS (SDAPCD 2009), as well as SDAPCD Rule 55, for attaining and maintaining the air quality standards and minimizing construction effects on regional air quality. Construction of the Project would therefore not conflict with or obstruct the implementation of the RAQS or applicable portions of the SIP.

Because the Project would have less residential development, addresses several RAQS control measures for operation and construction, and addresses the General Plan goals that are relevant to the Project site through clustering uses to reduce VMT, the Project would be consistent with the RAQS and SIP. Impacts would be **less than significant.**

When the RAQS are updated in the future, they will incorporate the land use designation for the Project site contained in the current General Plan or the proposed General Plan Amendment, whichever is in place at the time of the revisions. Therefore, the Project ultimately would be consistent with the emissions projections in the RAQS.

2.2.2.2 *Conformance to Federal and State Ambient Air Quality Standards*

Guideline for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if it would:

2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, as follows:

    a. Ozone Precursors: The Project would result in emissions that exceed 250 pounds per day (lbs/day) of NO_X, or 75 lbs/day of VOCs.

    b. Carbon Monoxide: The Project would result in emissions of carbon monoxide of 550 lbs/day, and when totaled with the ambient concentrations would exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm.

    c. Fine Particulate Matter: The Project would result in emissions of $PM_{2.5}$ that exceed 55 lbs/day.

    d. Particulate Matter: The Project would result in emissions of PM_{10} that exceed 100 lbs/day and increase the ambient PM_{10} concentration by 5 micrograms per cubic meter (5.0 $\mu g/m^3$) or greater at the maximum exposed individual.

Guideline Source

Guideline No. 2 is taken from the County Guidelines for Determining Significance – Air Quality (March 19, 2007).

Analysis

The County recognizes the SDAPCD's established screening level thresholds for air quality emissions (Rules 20.1 et seq.) as screening-level thresholds for land development projects. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA). The County has also adopted the South Coast Air Quality Management District's (SCAQMD's) screening threshold of 55 lbs/day or 10 tons per year as a significance threshold for $PM_{2.5}$. The screening thresholds used in the following analysis are included in Table 2.2-3, Screening-level Thresholds for Air Quality Impact Analysis.

Project Construction

Modeling Assumptions

Construction activities associated with the Project would create diesel emissions, and would generate emissions of dust. In general, emissions from diesel-powered equipment contain more NO_X, oxides of sulfur (SO_X), and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less reactive organic gases than do gasoline-powered engines. Standard construction equipment includes dozers, rollers, scrapers,

backhoes, loaders, paving equipment, delivery/haul trucks, and so on. Emissions associated with construction of the Project were calculated using the California Emission Estimator Model (CalEEMod) assuming that construction would generally begin in January 2015 and last until 2025. This results in conservative (greatest impact) projections, as construction activities have been compressed into the first two thirds of what might actually be a 15-year buildout. Results of the modeling are presented in Appendix C and summarized below.

Under the first potential phasing option (Option 1), construction activities are assumed to occur in three separate phases (i.e., Phase 1, Phase 2, and Phase 3); as the specific tasks to be completed daily during each phase would not be exactly comparable, the worst case construction day for each phase was chosen for the purpose of the air quality analysis. For purposes of calculating construction emissions, construction activities have been broken into several distinct stages of activity, as follows:

Phase 1 Construction Activities. Phase 1 construction activities would include mass grading of the entire 116.5-acre Project site.

Phase 2 Construction Activities. Phase 2 construction activities would involve the utility installation at the Project site. This would include all the elements necessary to support developed uses on site, such as widening of SR-76, road connections to Pala Mesa Drive, off-site potable water and sewer pipelines if not already in place, one to two potential pump stations and the sewer main in Pankey Road. Detention basins also would be completed during this phase.

These efforts are anticipated to take between 6 months and a year, regardless of whether **Scenario 1** or **Scenario 2** of the Proposed Project is implemented, for a total of one year to 18 months for grading and infrastructure.

Phase 3 Construction Activities. A conservative approach (assuming operations during construction) was analyzed. A likely scenario for Phase 3 construction activities would include the following:

- Vertical construction to generally trend south to north, as described in Section 1.2.2.6 of this EIR. The analysis anticipated that the commercial parcels south of SR-76 would be developed first (PAs 4 and 5), the general commercial retail area north of SR-76 (PA 2) would be developed second, the residential area (PA 3) would be developed third, and the light industrial/office area (PA 1) would be developed last, as described in Section 1.2.2.6.

Phase 3 is anticipated to take 10 to 15 years regardless of whether **Scenario 1** or **Scenario 2** of the Proposed Project is implemented.

The following four options were selected in the CalEEMod model: mass site grading, building construction, paving, and architectural coatings. Grading activity would be substantially balanced, meaning that no significant quantity of soil would be transported off site for disposal nor would soil be transported on site for use in construction activities.

The main source of NO_X and VOC emissions during construction are emissions from heavy construction equipment and architectural coating, respectively. In accordance with County PDS requirements, the Project would require the entire construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or CARB-certified Tier 4 equipment. For off-road construction equipment, all applicable off-road diesel equipment would use engines compliant with USEPA's Tier 4 emissions standards for non-road diesel equipment. Emissions were estimated based on phasing and equipment data assumed for the Project and the respective emission factors from OFFROAD2007 data module in CalEEMod model. Specifically, CARB requirements note that all off-road diesel-powered construction equipment greater than 50 hp is required to meet the Tier 4 emission standards, where available, and any associated emissions control devices are required to achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. In addition, the Project would utilize low-VOC coatings in accordance with SDAPCD Rule 67.0 requirements. With use of the construction fleet retrofit and/or repower and use of low-VOC coatings, the Project would minimize emissions to the extent feasible. Fugitive dust (including visible dust) would be controlled in accordance with SDAPCD Rule 55 requirements to use water, soil stabilizers, and other methods.

Under the other phasing option (Option 2), Phase 1 grading activities would include the commercial parcels south of SR-76, the commercial parcel north of SR-76 and west of Pankey Road, and Pankey Road and Pala Mesa Drive. The remainder of the site could be graded following vertical construction activities in these areas. During the Phase 1 (Option 2), mass grading and backbone infrastructure activities may occur or overlap on any single peak day during the construction period.

Impacts

As previously noted, construction emissions were estimated using the CalEEMod Version 2011.1.1 (SCAQMD 2011) and construction equipment estimates were from Project Design Consultants and default values in the model. Table 2.2-4, Grading (Option 1) and Backbone Infrastructure Construction Emissions, provides a summary of the Phase 1 and 2 construction emission estimates. Table 2.2-5, Grading (Option 2) and Backbone Infrastructure Construction Emissions, provides a summary of the construction emission estimates for Phase 1 (Option 2).

As noted above, it was assumed that dust control measures (watering a minimum of three times daily) would be employed to reduce emissions of fugitive dust during site grading. The resultant emissions from the combined Phase 1 and Phase 2 activity are compared to the daily emission thresholds to determine significance. As shown in Tables 2.2-4 and 2.2-5, with application of USEPA Tier 4 equipment, CARB diesel particulate filter devices, SDAPCD Rule 55 and best management practices to control emissions of fugitive dust, emissions of all criteria pollutants, including PM_{10} and $PM_{2.5}$, would be below the daily thresholds during construction.

For structure construction associated with Phase 3, development of the residential, commercial, and limited impact industrial land uses would occur in sequential order as described in Section 1.2.2.6, Project Phasing, of this report. None of these construction phases would

overlap, although operations would overlap with some of the construction periods, as discussed below under *Project Operations*. The resultant emissions from structure construction for the various PAs are compared to the daily emission thresholds to determine significance in Table 2.2-6, Commercial Development (PAs 4 and 5) Construction Emissions, Table 2.2-7, Mixed-Use and Commercial Development (PA 2) Construction Emissions, Table 2.2-8, Residential Development (PA 3) Construction Emissions, and Table 2.2-9, Limited Impact Industrial Development (PA 1) Construction Emissions. The Phase 2 construction emissions were estimated and are presented herein based on the overall project implementation schedule (i.e., PAs 4 and 5, PA 2, PA 3 and PA 1).

The structure construction emissions estimates indicate that with the use of USEPA Tier 4 equipment and CARB diesel particulate filter devices, and application of SDAPCD Rule 55 and best management practices to control emissions of fugitive dust, emissions of all criteria pollutants, including PM_{10} and $PM_{2.5,}$ during each stand-alone construction phase would be below the screening-level thresholds and construction impacts would be **less than significant**. If, however, general commercial (in PAs 4 and 5) are in place and operational during construction of the mixed-use core and general commercial uses (in PA 2), impacts would combine, as discussed under Project Operations. Similar, if PAs 2, 4, and 5 are operational while multi-family residential (PA 3) is constructed, impacts would combine.

Project Operations

Modeling Assumptions

The main operational impacts associated with the Project would be traffic related; impacts associated with area sources such as energy use, landscaping, and the use of fireplaces at the residences also would occur.

Based on the TIA, at full buildout **Scenario 1** would generate 36,206 average daily trips (ADT) associated with the residential, mixed-use core and commercial, and limited impact industrial uses. This ADT does not reflect the 30 percent internal capture rate reduction assumed by LLG in Appendix D (LLG Engineers 2014). The air quality modeling used the gross trip generation rate to reflect the worst-case daily emission conditions. To estimate emissions associated with Project-generated traffic, the EMFAC2007 emission program (CARB 2007b) inside the CalEEMod model was used. Equipment emission factors representing the state-wide vehicle mix for emission analysis years 2015 through 2025 were used to estimate emissions. Based on the results of the model for subsequent years, emissions would decrease on an annual basis from 2015 onward due to phase-out of higher polluting vehicles and implementation of more stringent emission standards. Default vehicle speeds, trip rates, trip lengths, trip purpose, and trip type percentages for each land use type were applied in the CalEEMod model. All residential units were assumed to have natural gas fireplaces. Area source emissions, including emissions from energy use, fireplaces, landscaping, and maintenance use of architectural coatings, were calculated using the CalEEMod model.

Results of the modeling are presented in detail in Appendix C and summarized below.

Near-term Operational Impacts

Operational emission calculations were conducted for the five planning areas using the CalEEMod model; model outputs are provided in Attachment A to Appendix C. The resultant emissions from operations of the various PAs are individually compared to the daily emission thresholds to determine significance in Table 2.2-10, Commercial Development (PAs 4 and 5) Operational Emissions, Table 2.2-11, Mixed-use Core and Commercial Development (PA 2) Operational Emissions, Table 2.2-12, Residential Development (PA 3) Operational Emissions, and Table 2.2-13, Limited Impact Industrial Development (PA 1) Operational Emissions. As shown in these tables, emissions of all criteria pollutants during operation of PA 1, 3, 4, and 5 would be below the daily thresholds. However, operational emissions for PA 2 would exceed the thresholds for VOC, CO, and PM_{10} and Project implementation would result in a **significant impact**. **(Impact AQ-1)**

Because the Project would be phased over a period of 10 or more years, it was assumed that peak construction of mixed-use core/general commercial (PA 2) and operation of the general commercial development south of (PAs 4 and 5) would overlap, as would peak construction for commercial development (PAs 2, 4 and 5) and residential operations (PA 3), and then all PAs to the south during construction of PA 1. Because the operational phasing would be the same under both land use scenarios, the construction-operations overlap would occur regardless of which scenario would be implemented, although the extent of impact would be affected by which scenario is implemented. The combined (construction plus operational) emissions are compared for both **Scenarios 1** and **2** with the daily emission thresholds in Table 2.2-14, Combined Commercial Operations plus Mixed-use Core/Commercial Construction Emissions, Table 2.2-15, Combined Mixed-use Core/Commercial, Commercial Operations Plus Residential Construction Emissions, and Table 2.2-16, Combined Mixed-use Core/Commercial, Commercial and Limited Impact Industrial Operations Plus Residential Construction Emissions, to evaluate the worst-case condition with regard to daily air pollutant emissions. As shown in the tables, should long-term operations of the Proposed Project combine with latter phases of near-term construction, air pollutant emissions would exceed the screening level thresholds for all pollutants, except for NO_X, SO_2 and $PM_{2.5.}$

Although the Project incorporates some features designed to reduce the number and distance of the Project-related trips and minimize operational emissions associated with energy and water usage, there are no feasible mitigation measures to reduce emissions from the remaining Project-related traffic. Therefore, impacts from emissions for the combined construction and operational phases in the near-term would be **significant. (Impact AQ-2)**

Long-term Operational Impacts

The model was run for the conservative build-out year of 2025. The results of the emission calculations, in pounds per day, are summarized in Table 2.2-17, Total Operational Emissions 2025, along with emissions associated with area sources and a comparison with the screening level thresholds.

Based on projected emissions associated with long-term Project operations, including all five planning areas, the emissions of VOCs, CO, and PM_{10} due to Project related traffic would be above screening level thresholds in 2025. Although emission levels would decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, long-term operational impacts for VOCs, CO, and PM_{10} would be **significant. (Impact AQ-3)**

CO Hot Spots

Because the CO emissions associated with the Project in both near-term and long–term scenarios were estimated to be above the screening-level thresholds, an analysis was conducted in accordance with Caltrans guidance to evaluate whether these emissions would cause a ground-level exceedance of the NAAQS or CAAQS for CO. Locally high concentrations of CO due to traffic are known as CO "hot spots." The Caltrans ITS Transportation Project-Level Carbon Monoxide Protocol (Caltrans 1998) was followed to determine whether a CO "hot spot" is likely to form due to Project-generated traffic. In accordance with the Protocol, CO "hot spots" are typically evaluated when: (a) the level of service (LOS) of an intersection or roadway decreases to a LOS E or worse; (b) signalization and/or channelization is added to an intersection; and (c) sensitive receptors such as residences, commercial developments, schools, hospitals, etc. are located in the vicinity of the affected intersection or roadway segment.

The Traffic Impact Analysis (LLG Engineers 2014) evaluated the level of Service (LOS) at 38 intersections in the Project vicinity for the Existing, Existing + Project, and Existing + Project + Cumulative, conditions. The CO "hot spots" would be possible at intersections that would operate in future years at LOS E or F with or without Project traffic. Based on the traffic analysis, the Project would degrade LOS at the following 20 intersections:

- E. Mission Road at Old Highway 395
- Mission Road at I-15 SB Ramps
- Mission Road at I-15 NB Ramps
- Reche Road at Old Highway 395
- Stewart Canyon Road at Old Highway 395
- Pala Mesa Road at Old Highway 395
- SR-76 (Pala Road) at E. Vista Way
- SR-76 (Pala Road) at N. River Road
- SR-76 (Pala Road) at Olive Hill Road
- SR-76 (Pala Road) at S. Mission Road
- SR-76 (Pala Road) at Via Monserate Road
- SR-76 (Pala Road) at Gird Road
- SR-76 (Pala Road) at Sage Road
- SR-76 (Pala Road) at Old Highway 395
- SR-76 (Pala Road) at I-15 Southbound Ramps
- SR-76 (Pala Road) at I-15 Northbound Ramps
- SR-76 (Pala Road) at Pankey Road
- SR-76 (Pala Road) at Rice Canyon Road

- SR-76 (Pala Road) at Couser Canyon Road
- Dulin Road at Old Highway 395

To conservatively analyze CO hot spots, CALINE4 modeling was conducted for the intersections identified above. The results are presented in Appendix C. The predicted CO concentrations would be substantially below the 1-hour and 8-hour NAAQS and CAAQS for CO; therefore, no exceedances of the CO standard are predicted, and the Project would not cause or contribute to a violation of the air quality standard. Furthermore, traffic impacts would be mitigated to less than significant levels and emissions of CO would continue to decrease with increasingly stringent vehicular emission standards and phase-out of older vehicles. Impacts of CO hot spots would be **less than significant**.

2.2.2.3 *Cumulatively Considerable Net Increase of Criteria Pollutants*

Guideline for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if it would:

3. Result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is non-attainment under an applicable federal or state ambient air quality standard (including emissions which exceed the screening-level thresholds for ozone precursors listed in Table 2.2-3).

    a. Construction Phase (Direct): A project that has a significant direct impact on air quality with regard to emissions of PM_{10} $PM_{2.5,}$ NO_X, and/or VOCs, would also have a significant cumulatively considerable net increase.

    b. Construction Phase (Cumulative): In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern, are in excess of the County guidelines identified in Subsection 2.2.2.2.

    c. Operational Phase: A project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of PM_{10} $PM_{2.5}$, NO_X, and/or VOCs, would also have a significant cumulatively considerable net increase.

    d. Operational Phase: Projects that cause road intersections to operate at or below LOS E (analysis only required when the addition of peak-hour trips from the proposed project and the surrounding projects exceeds 2,000) and create a CO "hot spot" create a cumulatively considerable net increase of CO.

Guideline Source

Guideline No. 3 is taken from the County Guidelines for Determining Significance – Air Quality (March 19, 2007).

Analysis

The SDAB is considered a non-attainment area for the NAAQS for ozone and the CAAQS for ozone, PM_{10} and $PM_{2.5}$. For the non-attainment pollutants, including the ozone precursors (NO_X and VOCs), if emissions exceed the thresholds shown in Table 2.2-3, the Project could have a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

Project Construction

As discussed in Section 2.2.2.2, Project emissions of VOCs, NO_X, CO, PM_{10} and $PM_{2.5}$ during construction would be below the screening level thresholds. Direct construction impacts would be **less than significant**.

Reviews of the air quality data for the proposed Campus Park and Meadowood Draft EIRs show that air quality impacts were found to result in cumulatively considerable net increases in emissions. For Meadowood, diesel emissions during construction and on-site operations related to PM_{10} and VOC were both identified as cumulatively significant. Net increases in PM_{10} and $PM_{2.5}$, as well as NO_X also were found to constitute a cumulatively considerable contribution for Campus Park. With the potential for construction activities occurring concurrently at the Proposed Project as well as neighboring Campus Park and Meadowood, cumulative construction projects in the area would result in a cumulatively considerable net increase in VOCs, NO_X, PM_{10} and $PM_{2.5}$. The cumulative construction impact would be **significant. (Impact AQ-4)**

Project Operations

The Project would be designed to exceed current Title 24 energy efficiency standards and would thus result in lower emissions than non-energy efficient developments. The Project, along with all other planned and reasonably foreseeable projects within the Fallbrook Subregional Area, was evaluated as not exceeding the growth projections in the SANDAG growth forecasts for the area and being consistent with the RAQS and SIP (Section 2.2.2.1). The emissions resulting from the combined construction and operation scenarios were projected to exceed the screening level thresholds for VOCs and PM_{10}, however. Also, emissions of VOCs and PM_{10} would exceed the significance thresholds for Project operations at full build-out. The Project cumulative impacts with regard to operational emissions of VOCs and PM_{10} would be **significant. (Impact AQ-5)**

Although total operational CO emissions would exceed the thresholds, CO "hot spots" modeling discussed in Section 2.2.2.2 indicated that traffic congestion at those intersections experiencing a direct Project impact would not result in exceedance of the CO standard. As demonstrated through CALINE modeling conducted on the Existing + Project + Cumulative Projects condition, the predicted cumulative CO concentrations would be substantially below the 1-hour and 8-hour NAAQS and CAAQS as shown in Attachment A of Appendix C and, therefore, the Project's contribution to cumulative CO hot spots impacts would be **less than significant**.

2.2.2.4 *Impacts to Sensitive Receptors*

Guidelines for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if it would:

4. Expose sensitive receptors to substantial pollutant concentrations as follows:

    a. The project places sensitive receptors near CO "hot spots" or creates CO "hot spots" near sensitive receptors.
    b. Project implementation would result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of Toxics-Best Available Control Technology (T-BACT) or a health hazard index greater than one.

Guideline Source

Guideline No. 4 is taken from the County Guidelines for Determining Significance – Air Quality (March 19, 2007). (The County's significance thresholds are consistent with the SDAPCD's Rule 1210 requirements for stationary sources.)

Analysis

The risks associated with exposure to substances with carcinogenic effects are typically evaluated based on a lifetime of chronic exposure, which is defined in the *California Office of Environmental Health Hazard Assessment* (OEHHA) guidelines, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (2003), as 24 hours per day, 7 days per week, 365 days per year, for 70 years.

Unlike carcinogens, it is believed that there is a threshold level of exposure to most noncarcinogens below which they will not pose a health risk. CalEPA and OEHHA have developed reference exposure levels (RELs) for noncarcinogenic TACs that are health-conservative estimates of the levels of exposure at or below which health effects are not expected. The noncancer health risk due to exposure to a TAC is assessed by comparing the estimated level of exposure to the REL. The comparison is expressed as the ratio of the estimated exposure level to the REL, called the hazard index (HI).

Air quality regulators typically define "sensitive receptors" as schools, hospitals, resident care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. For the purpose of CEQA analysis, the County definition of "sensitive receptors" includes residences (County 2007).

CO Hot Spots

As discussed in Section 2.2.2.2, operational impacts would not result in CO "hot spots" because all intersections would be mitigated to LOS D or better at the conservatively modeled buildout year of 2025, and this impact would be **less than significant**.

Toxic Air Contaminants

There are three carcinogenic TACs that constitute the majority of the known health risk from motor vehicle traffic: diesel particulate matter (DPM) from trucks, and benzene and 1,3-butadiene from passenger vehicles. On a typical urban freeway (truck traffic of 10,000 to 20,000 per day), DPM represents about 70 percent of the potential cancer risk from the vehicle traffic. Therefore, DPM was the focus of the health risk evaluation conducted for the Project, the details of which are presented in Appendix C.

Project Construction

Diesel exhaust particulate matter would be emitted during construction due to the operation of heavy equipment at the site. Because diesel exhaust particulate matter is considered to be carcinogenic, long-term exposure to diesel exhaust emissions has the potential to result in adverse health impacts. The amount of diesel particulate varies with the Project schedule and construction phasing. As noted above, detailed information regarding the construction schedule is not available at this time; therefore, it was conservatively assumed that all construction phases using heavy equipment would be completed within a ten-year period during Project modeling.

Maximum diesel particulate concentration was calculated by the SCREEN3 computer program. The construction vehicle mix modeled used CalEEMod default assumptions. Because the unit risk factor is based on 70 years (25,550 days) of exposure for 24 hours per day, 365 days per year, the results of the analysis were scaled to account for exposure for the phase-by-phase construction duration, as shown in the calculation below.

Risk = Excess cancer risk for 70 years x (days of construction/25,550 days)

The assessment resulted in a cancer risk of 0.253 in one million, or less than one in one million. Construction impacts from exposure to TACs would be **less than significant**.

Project Operations

A health risk evaluation was conducted to assess the potential for illness due to exposure to diesel exhaust particulate matter based on Part IV of the *Air Toxics Hot Spots Program Risk Assessment Guidelines.* Maximum diesel particulate concentration was calculated by the SCREEN3 computer program. Vehicular traffic may result in minor amounts of TACs. The high-end excess cancer risk was calculated based on guidance from the OEHHA (2003), using the 80th percentile exposure assumptions for inhalation risks (CARB 2003). The risks were calculated based on 70 years of exposure. The maximum excess cancer risk associated with exposure to diesel particulates from Project-generated trips was estimated to be 0.259 in one million. Operational impacts from exposure to TACs from Project-related traffic would be **less than significant**.

The issue of proximity of residential land use to heavily traveled roadways (I-15 in the case of the Project) is also of concern. CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides CARB recommendations for the siting of new sensitive land

uses (including schools and residences) near freeways. A comparison of total cancer risk and cancer risk from DPM emissions in rural and urban areas shows that cancer risk associated with elevated levels of diesel particulates decreases rapidly within the first 300 feet to 450 feet from the edge of a roadway. Consequently, CARB recommended new sensitive land uses (including schools and residential units) be sited at least 500 feet from freeways. Since most of the Project area adjacent to the freeway is proposed to be limited impact industrial and community shopping center uses, it is highly unlikely that sensitive receptors (residential units), which would be located more than 500 feet downwind, would experience any significant cancer risk directly associated with vehicle emissions from the I-15 freeway. The operational impacts of land use in relation to generation of TACs would be **less than significant**.

2.2.2.5 *Odor Impacts*

Guideline for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact if it would:

5. Not be an agricultural, commercial or an industrial activity subject to SDAPCD standards, and as a result of implementation would either generate objectionable odors or place sensitive receptors next to existing objectionable odors, which would affect a considerable number of persons or the public.

Guideline Source

Guideline No. 5 is taken from the County Guidelines for Determining Significance – Air Quality (March 19, 2007).

Analysis

Project Construction

Project construction could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust. Because the construction equipment would be operating at various locations throughout the construction site, and because any operation that would occur in the vicinity of existing receptors would be temporary, impacts associated with odors during construction would be **less than significant**.

Project Operations

According to the County's Zoning Ordinance, Section 6318, "all commercial and industrial uses shall be so operated as to not emit matter causing unpleasant odors which are perceptible by the average person at or beyond any lot line of the lot containing said uses." In general, this ordinance applies to commercial and industrial land uses following development. The residential development itself would not be a source of odor impacts. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities,

refineries, landfills, dairies, and fiberglass molding operations. None of these land uses is proposed for the Project. While neighborhood commercial uses could have operations that result in odor emissions such as dry cleaners, restaurants, and manicure facilities, these facilities are not considered land uses that are sources of nuisance odors (SCAQMD 1993).

The only potential objectionable odor source for the Project would be the potential sewage pump stations. Pump stations are small facilities with controlled piping. Routine construction controls any odor associated with the facility. Specific to the larger pump station located at SR-76 and Pankey Road, the 10 percent design report specified an odor control mechanism. The sewage pump station is designed to pump out wastewater several times per hour. The system would also include chemical feed addition at the pump station to minimize odors. A back-up chemical injection system would be included for further odor control redundancy. The system would be equipped with two redundant pumps that would allow for backup operation of the pumps in the event that one pump is out of service. The combination of chemical treatment coupled with pumps to keep sewage moving rather than sitting in the pipes would result in adequate attenuation of localized odor. The 2011 certified Final EIR for Campus Park found less than significant impacts. No change is proposed to that finding. The much smaller facility located adjacent to I-15 and Old Highway 395 would have similar, but lesser, effect.

The Project is therefore not anticipated to generate any objectionable odors affecting a substantial number of people from its overall operations. The odor impact for Project operations would be **less than significant**.

2.2.3 Cumulative Impact Analysis

With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the APCD, measures the concentrations of pollutants from existing sources. Past and present Project impacts are, therefore, included in the background ambient air quality data. The projects listed in Table 1-4, Cumulative Projects, are planned or reasonably foreseeable, and, as such, are subject to CEQA. The locations of all cumulative projects are provided in Figure 1-28. For the purpose of nonattainment pollutants, the cumulative study area would be the entire air basin; however, contributions from individual projects on basin-wide nonattainment pollutants cannot be determined through modeling analyses.

In analyzing cumulative impacts for air quality, specific evaluation must occur regarding a project's contribution to the cumulative increase in pollutants for which the SDAB is listed as "non-attainment" for the CAAQS and/or NAAQS. A project that has a significant impact on air quality with regard to emissions of PM_{10}, $PM_{2.5}$, NO_X, and/or VOCs, as determined by the screening criteria outlined above, would have a significant cumulative effect. In the event direct impacts from the project are less than significant, a project still may have a cumulatively considerable impact on air quality if the construction-period emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable, future projects are in excess of screening levels identified above. The text below addresses each of the thresholds relative to cumulative contribution.

Cumulative growth would be within the range projected by SANDAG, and the Project was found to be consistent with the RAQS and SIP. Growth projected for the proposed plus cumulative projects would not result in a cumulatively considerable contribution and these impacts would be **less than significant**.

The planned or reasonably foreseeable projects were accounted for in the Traffic Impact Analysis (LLG 2014). As such, cumulative projects were considered in the evaluation of CO hot spots. Based on the CO hot spots evaluation, cumulative impacts associated with CO would be **less than significant**.

As discussed in Section 2.2.2.2, the near-term emissions of VOCs and PM_{10} due to Project construction when it would overlap with Project operations were identified as significant (**Impact AQ-1**). These emissions would add cumulatively to emissions from other projects, and this cumulative impact would be **significant**. **(Impacts AQ-4 and 6)**

Operational emissions would be phased in over time; however, operational emissions for one of the mixed-use/commercial development in PA 2 would exceed the thresholds for VOC and PM_{10}. The combination of these emissions with the operational emissions of the other projects in the area has the potential to cause a cumulative impact that would be considered **significant**. (**Impact AQ-2**)

Also as discussed in Section 2.2.2.2, the long-term emissions of VOCs and PM_{10} due to Project-related traffic in 2030 and accelerated to 2025 as part of the conservative air quality impacts assessment were identified as significant (**Impact AQ-3**). These emissions would add cumulatively to vehicle emissions from other projects, and this cumulative impact would be **significant**. (**Impacts AQ-5 and 7**)

The effects of objectionable odors are typically localized to the immediate surrounding area specific to each Project site. The Project's odor contributions were found to be less than significant. Certified Final EIRs for Campus Park and Meadowood document that odor impacts from those adjacent projects also would be less than significant. Contributions to odor impacts would not be considerable and impacts would be **less than significant**.

2.2.4 Significance of Impacts Prior to Mitigation

The following significant impacts related to air quality would occur under Project implementation:

Impact AQ-1 Near-term Project operational emissions of VOCs, CO, and PM_{10} for PA 2 would exceed the significance thresholds.

Impact AQ-2 Near-term Project emissions of VOCs, CO, and PM_{10} for the combined construction and operational phases would exceed the significance thresholds.

Impact AQ-3 Long-term total Project operational emissions of VOCs, CO, and PM_{10} from traffic in 2025 would exceed the significance thresholds.

Impact AQ-4 With the potential of construction activities occurring concurrently at the proposed Project as well as neighboring Campus Park and Meadowood, cumulative construction projects in the area would result in a cumulatively considerable net increase in VOCs, NO_X, PM_{10} and $PM_{2.5}$.

Impact AQ-5 The cumulatively considerable net increases of the non-attainment criteria pollutants VOCs and PM_{10} during the near-term when construction and operation emissions are assumed to combine would exceed the significance thresholds. Emissions of VOCs and PM_{10} would exceed the significance thresholds for Project operations at full build-out in 2025, and therefore be cumulatively considerable.

Impact AQ-6 Near-term Project emissions of the non-attainment criteria pollutants VOCs, NO_X, PM_{10} and $PM_{2.5}$ for the combined construction and operational phases added cumulatively to emissions from other projects would exceed the significance thresholds.

Impact AQ-7 Long-term Project operational emissions of the non-attainment criteria pollutants VOCs, NO_X, CO, PM_{10} and $PM_{2.5}$ from traffic in 2025 added cumulatively to emissions from other projects would exceed the significance thresholds. Because the Project would result in a direct impact associated with VOC and PM_{10} emissions, the Project's contribution to impacts associated with these pollutants would be cumulatively considerable.

2.2.5 Mitigation

2.2.5.1 *Mitigation for Direct Significant Impacts*

Measures to reduce construction emissions are required by the SDAPCD Rule 55 - Fugitive Dust Control and, as discussed in Section 2.2.2.2 and listed in Table 1-3, are included as Project Design Features. These measures constitute BMPs for dust control, diesel particulates, and construction equipment emissions. With the implementation of the fugitive dust control measures, the Project construction impacts alone are less than significant.

The Project's operational emissions are mainly associated with vehicular traffic from Project-related vehicle trips, and although the project has been designed to capture 30 percent of its trips through the co-location of uses and to minimize its use of energy and water through implementing project design features that exceed the Title 24 standards, there are no feasible mitigation measures to reduce these emissions since their major source is traffic. Vehicular emissions would decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, so future vehicle emissions would continue to decrease over time, but Project impacts on air quality that involve operational traffic emissions would remain significant. Impacts associated with vehicle emissions would be unmitigable.

As described in Section 1.2.3 (Table 1-3), the Project would implement a number of design features that would reduce emissions of criteria air pollutants during operation. The following

mitigation measure shall be implemented to further reduce area source emissions of VOCs during project operation:

M-AQ-1 Future tenants shall implement a Low-VOC Consumer Products Educational Program through the provision of educational materials (such as a display case, kiosk, or brochures) regarding the use of Low-VOC paints and consumer products in a prominent area accessible to residents and employees.

2.2.5.2 *Mitigation for Cumulative Significant Impacts*

In addition to design measures noted above for direct impacts (which would also help to reduce associated cumulative impacts), the following mitigation measures shall be implemented to further reduce Project contributions to construction emissions to the extent feasible (with the following measures to be placed as notes on all construction plans and implemented during construction of each Project phase):

M-AQ-4a All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT documentation, and CARB operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/ specifications shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:

- A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;
- A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or
- A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease.

M-AQ-4b All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on site or to transport materials to and from the site shall comply with 2010 emission standards, where available. In addition, all on-road trucks shall be outfitted with BACT devices certified by CARB. Any

emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified USEPA rating, BACT documentation, and CARB or SDAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/ specifications shall be met unless the contractor is able to provide proof that any of these circumstances exists:

- A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;
- A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or
- A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease.

M-AQ-4c The following measures, at minimum, shall be part of the contractor dust control plan:

- Contractors shall apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas;
- Construction contractors shall provide temporary wind fencing around sites being graded or cleared;
- Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code;
- During wet conditions, construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off tires of vehicles and any equipment leaving the construction site; and
- Trucks hauling materials such as debris or fill shall be fully covered while operating off the property site.

M-AQ-4d The following types of measures shall be required on construction equipment (including on-road trucks):

- Use diesel oxidation catalysts and catalyzed diesel particulate traps.
- Maintain equipment according to manufacturers' specifications.
- Restrict idling of construction equipment to a maximum of five minutes when not in use.
- Install high-pressure fuel injectors on construction equipment vehicles.

2.2.6 Conclusion

Emissions of criteria pollutants were found to exceed significance thresholds for various Project scenarios. In all of the significant Project construction and operational impact scenarios, the thresholds for criteria pollutants VOCs and PM_{10}, for which the SDAB is in non-attainment, and CO, for which the SDAB is in attainment, were exceeded.

Measures that would be incorporated into the Project description to reduce emissions associated with construction are listed in Table 1-3. A number of additional requirements to reduce cumulative construction emissions are identified above as Mitigation Measures AQ-4a through AQ-4d. Although Project-related contributions to Impact AQ-4 would cease when Project construction is completed, it is considered significant and unmitigated in the near-term.

Mitigation measure AQ-1 was identified to help reduce operation VOC emissions. The measure requires posting of educational materials relative to low-VOC consumer products in publicly accessible areas. These educational materials are readily available from CARB. Commercial lessees would be required as part of their lease agreements to obtain them and post them in employee lunch rooms and/or work areas. The on-site residential area (mixed uses within PA 2) also would post such information in an accessible common space area (e.g., mail delivery location). These requirements are specified in the Specific Plan, which applies to all development in the Project. The noted operational emissions from vehicles and the use of aerosols and paints (over which the Project has no control) would constitute a temporary but significant and unmitigable impact after initial occupation of PA 2. Over the long-term, impacts related to operational emissions from vehicles would reduce due to the phase-out of older vehicles and increasingly stringent vehicle emission standards. Nonetheless, these effects would remain significant and unmitigable in the near-term for Impact AQ-1 in PA 2 because no other mitigation is available and because personal use of low-VOC products cannot be enforced.

The primary sources of criteria pollutant impacts are automobile trips associated with near-term and long-term operations of the Proposed Project, and Project construction (when it would overlap with Project operations). Although the Project incorporates design features to reduce Project trips and minimize operational emissions associated with energy and water usage, there are no feasible mitigation measures to reduce emissions associated with the remaining near-term Project-related traffic. Vehicular emissions would decrease over time with phase-out of older vehicles and implementation of increasingly stringent emission controls, so future vehicle emissions would continue to decrease over time, but Project impacts on air quality that involve operational traffic emissions would remain significant.

Cumulatively considerable net increases of criteria pollutant emissions for which the SDAB is in non-attainment (VOCs, NO_X, PM_{10} and $PM_{2.5}$) during Project construction, when combined with emissions associated with construction of the nearby Campus Park and Meadowood projects, would result in significant cumulative air quality impacts. Similarly, cumulatively considerable net increases in these same criteria pollutants would occur both during the combined construction and operations scenarios; and for the pollutants VOC and PM_{10} during Project operations at full buildout, resulting in significant cumulative air quality impacts.

In addition, air quality operational Impacts AQ-2, AQ-3, AQ-5, AQ-6, and AQ-7 also would be unmitigable, as described below.

No feasible mitigation measures are currently available beyond mitigation measures and Project design features already incorporated into the Project to address: (1) the Project combined construction and operational emissions; (2) the construction and operational emissions of the Project in combination with construction emissions of adjacent cumulative projects; or (3) identified long-term cumulative operational phase pollutant emissions. Following completion of construction activities, daily operational emissions would reduce over time due to the phase-out of older vehicles and increasingly stringent vehicle emission standards. Even with implementation of Project design features and Mitigation Measures AQ-1 and AQ-4a through AQ-4d, however, combined construction and operational effects would remain significant and unmitigated in both the near- and long-term.

This is because the emissions are primarily related to vehicle use. Project-related vehicle volumes are primarily determined by the limited industrial and commercial uses proposed for the site, which have been specifically identified for the Project site in the County General Plan. Consistent with smart growth principles, the location of these uses adjacent to the I-15 and SR-76 interchange and these busy travelways support consolidation of work and commercial opportunities next to primary roadways and existing population rather than allowing for continued expansion of such services into undeveloped portions of the County. It has also allowed the Project to assume a 30 percent on-site capture rate (i.e., 30 percent of trips associated with the Project are anticipated to stay within the quadrant rather than flowing to off-site destinations to the north, west and south). Although the Project-specific analyses focus on trips associated with proposed uses (number of trips drawn to Project uses) rather than modification of existing travel patterns (number of trips rendered shorter or unnecessary by provision of Project uses at this interchange); it is anticipated that the Project would provide limited impact industrial and general commercial uses to the community as a whole. The location of these uses at this interchange may eliminate need to work or shop at further distances from area residences. The Project would therefore be expected to shorten existing trips made by off-site users that currently travel to Escondido, Temecula, and other points north, south and west for similar work opportunities or services. This would constitute an improvement relative to reductions in vehicle-related emissions associated with those longer trips.

Table 2.2-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		-	-	-
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemilumi-nescence
	1-Hour	0.18 ppm (470 µg/m^3)		0.100 ppm (see footnote 8)	None	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	-	Spectro-photometry (Pararo-saniline Method
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	-	
	3-Hour	-		-	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		-	-	-
Lead	30-Day Average	1.5 µg/m^3	Atomic Absorption	-	-	-
	Calendar Quarter	-		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Average	-		0.15 µg/m^3		
Visibility Reducing Particles	8-Hour	Extinction coefficient of 0.23 kilometers – visibility of ten miles or more (0.7 – 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape		No Federal Standards		
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Notes for Table 2.2-1:

[1] California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact USEPA for further clarification and current federal policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[8] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[9] Reference method as described by the USEPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the USEPA.

[10] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

[11] The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[12] National lead standard, rolling 3-month average: final rule signed October 15, 2008.

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter
Source: CARB June 4, 2013

Table 2.2-2
AMBIENT BACKGROUND CONCENTRATIONS
SAN DIEGO MONITORING STATIONS

Air Pollutant	2007	2008	2009	2010	2011
Ozone – Escondido East Valley Parkway					
Max 1 Hour (ppm)	0.094	0.116	0.093	0.105	0.098
Days > CAAQS (0.09 ppm)	0	9	0	2	1
Max 8 Hour (ppm)	0.077	0.098	0.080	0.084	0.089
Days > NAAQS (0.075 ppm)	3	13	1	3	2
Days > CAAQS (0.070 ppm)	5	23	9	5	2
Particulate Matter (PM_{10}) – Escondido East Valley Parkway					
Max Daily ($\mu g/m^3$)	68.0	84.0	74.0	42	40
Days > NAAQS (150 $\mu g/m^3$)	0	0	0	0	0
Days > CAAQS (50 $\mu g/m^3$)	2	1	1	0	0
Nitrogen Dioxide (NO_2) – Escondido East Valley Parkway					
Annual Max ($\mu g/m^3$)	26.8	24.6	24.6	20.9	18.8
Days > NAAQS (20 $\mu g/m^3$)	1	1	1	1	0
Particulate Matter ($PM_{2.5}$) – Escondido East Valley Parkway					
Max Daily ($\mu g/m^3$)	151.0	44.0	78.4	48.4	67.7
Days > NAAQS (35 $\mu g/m^3$)	11	0	0	2	3
Annual Max ($\mu g/m^3$)	13.3	12.4	10.5	12.2	12.2
Days > NAAQS (12 $\mu g/m^3$)	0	0	0	0	0
Days > CAAQS (15 $\mu g/m^3$)	0	0	0	1	1
Max 1 Hour (ppm)	0.072	0.081	0.073	0.064	0.062
Days > CAAQS (0.18 ppm)	0	0	0	0	0
				0	0
Annual Max (ppm)	0.016	0.018	0.016	0.014	0.013
Days > NAAQS (0.053 ppm)	0	0	0	0	0
Days > CAAQS (0.030 ppm)	0	0	0	0	0
Carbon Monoxide (CO) – Escondido East Valley Parkway					
Max 8 Hour (ppm)	3.19	2.81	3.24	2.46	2.20
Days > NAAQS (9 ppm)	0	0	0	0	0
Days > CAAQS (9.0 ppm)	0	0	0	0	0
Max 1 Hour (ppm)	5.7	5.2	4.6	3.9	3.5
Days > NAAQS (35 ppm)	0	0	0	0	0
Days > CAAQS (20 ppm)	0	0	0	0	0
Sulfur Dioxide (SO_2) – Downtown San Diego Beardsley Street					
Max Daily Measurement (ppm)	0.006	0.007	0.006	0.002	0.003
Days > NAAQS (0.14 ppm)	0	0	0	0	0
Days > NAAQS (0.04 ppm)	0	0	0	0	0

Source: www.arb.ca.gov (all pollutants except 1-hour CO and annual maximum for PM_{10}, $PM_{2.5}$, and NO_2)
www.epa.gov/air/data/monvals.html (1-hour CO, and annual maximums for PM_{10}, $PM_{2.5}$, and NO_2)
Abbreviations: > = exceed; ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality; Standard Mean = Annual Arithmetic Mean
* No Data / Insufficient Data

Table 2.2-3
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Total Emissions		
Construction Emissions			
	lbs/day		
Respirable Particulate Matter (PM_{10})	100		
Fine Particulate Matter ($PM_{2.5}$)	55		
Oxides of Nitrogen (NO_X)	250		
Oxides of Sulfur (SO_X)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	75		
Operational Emissions			
	lbs/hour	**lbs/day**	**tons per year**
Respirable Particulate Matter (PM_{10})	---	100	15
Fine Particulate Matter ($PM_{2.5}$)	---	55	10
Oxides of Nitrogen (NO_X)	25	250	40
Oxides of Sulfur (SO_X)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOCs)	---	75	13.7
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-cancer Hazard	1.0		

Source: SDACPD Rule 20.2 and Rule 1210

Table 2.2-4
GRADING (OPTION 1) AND BACKBONE INFRASTRUCTURE CONSTRUCTION EMISSIONS (lbs/day)

Analysis Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2015	1	20.36	43.35	330.05	0.71	17.88	8.93
2015	2	20.36	43.35	330.05	0.71	17.88	8.93
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

Source: HELIX 2013b

Table 2-2.5
GRADING (OPTION 2) AND BACKBONE INFRASTRUCTURE CONSTRUCTION EMISSIONS (lbs/day)

Analysis Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2015	1	20.42	43.63	336.30	0.72	26.88	14.07
2015	2	20.42	43.63	336.30	0.72	26.88	14.07
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No
OPTION 2 – ESTIMATED CONSTRUCTION EMISSIONS MASS GRADING							
2020	1 and 2	6.69	14.97	114.13	0.23	3.53	1.64
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

Source: HELIX 2013b

Table 2.2-6
COMMERCIAL DEVELOPMENT (PAs 4 AND 5) CONSTRUCTION EMISSIONS (lbs/day)

Analysis Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2016	1	40.08	24.88	21.76	0.04	2.07	1.74
2016	2	41.04	24.88	21.76	0.04	2.07	1.74
2017	1	40.05	2.23	2.26	0.00	0.28	0.18
2017	2	41.00	2.23	2.26	0.00	0.28	0.18
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

Source: HELIX 2013b

Table 2.2-7
MIXED-USE AND COMMERCIAL DEVELOPMENT (PA 2)
CONSTRUCTION EMISSIONS (lbs/day)

Analysis Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2017	1 & 2	15.53	66.37	151.58	0.32	13.21	3.55
2018	1 & 2	15.18	64.22	148.34	0.32	13.15	3.09
2019	1 & 2	37.55	62.39	145.58	0.32	13.10	3.04
2020	1 & 2	37.53	3.68	16.49	0.03	1.67	0.12
2021	1 & 2	37.51	10.66	92.69	0.18	2.07	0.45
2022	1 & 2	6.12	10.63	92.14	0.18	2.07	0.45
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

Source: HELIX 2013b

Table 2.2-8
RESIDENTIAL DEVELOPMENT (PA 3)
CONSTRUCTION EMISSIONS (lbs/day)

Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2021	1 & 2	4.30	14.87	65.29	0.13	3.03	0.47
2022	1 & 2	24.64	14.73	64.85	0.13	3.03	0.47
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM_{10} and $PM_{2.5}$ dust emissions.

Source: HELIX 2013b

Table 2.2-9
LIMITED IMPACT INDUSTRIAL DEVELOPMENT (PA 1)
CONSTRUCTION EMISSIONS (lbs/day)

Year	Scenario	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
		lbs/day					
2023	1 & 2	71.18	20.42	31.74	0.08	3.67	1.21
2024	1 & 2	71.16	1.32	2.92	0.01	0.52	0.08
Screening-Level Thresholds		75	250	550	250	100	55
Exceedance?		No	No	No	No	No	No

Notes:
1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. USEPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM10 and PM2.5 dust emissions.

Source: HELIX 2013b

Table 2.2-10
COMMERCIAL DEVELOPMENT (PAs 4 AND 5)
OPERATIONAL EMISSIONS (lbs/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario 1						
Area	2.09	0.00	0.00	0.00	0.00	0.00
Energy	0.04	0.34	0.28	0.00	0.03	0.03
Mobile	19.07	31.65	146.52	0.20	21.63	1.41
TOTAL	**21.20**	**31.99**	**146.80**	**0.20**	**21.66**	**1.44**
Screening-Level Thresholds	75	250	550	250	100	55
Scenario 1 Exceedance?	No	No	No	No	No	No
Scenario 2						
Area	2.14	0.00	0.00	0.00	0.00	0.00
Energy	0.04	0.34	0.29	0.00	0.03	0.03
Mobile	24.74	40.59	188.65	0.25	26.81	1.76
TOTAL	**26.92**	**40.93**	**188.94**	**0.25**	**26.84**	**1.79**
Screening-Level Thresholds	75	250	550	250	100	55
Scenario 2 Exceedance?	No	No	No	No	No	No

Notes: Emissions were calculated for both summer and winter months, and the highest value is shown here.
Source: HELIX 2013b

Table 2.2-11
MIXED-USE CORE AND COMMERCIAL DEVELOPMENT (PA 2)
OPERATIONAL EMISSIONS (lbs/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenarios 1 and 2						
Area	34.10	0.03	2.93	0.00	0.04	0.04
Energy	0.05	0.45	0.30	0.00	0.03	0.03
Mobile	76.12	137.68	605.51	1.29	146.21	8.55
TOTAL	**110.27**	**138.16**	**608.74**	**1.29**	**146.28**	**8.62**
Screening-Level Thresholds	75	250	550	250	100	55
Exceedance?	**Yes**	No	**Yes**	No	**Yes**	No

Notes: Emissions were calculated for both summer and winter months, and the highest value is shown here.
Source: HELIX 2013b

Table 2.2-12
RESIDENTIAL DEVELOPMENT (PA 3)
OPERATIONAL EMISSIONS (lbs/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenarios 1 and 2						
Area	6.65	0.24	20.72	0.00	0.30	0.30
Energy	0.15	1.26	0.54	0.01	0.10	0.10
Mobile	8.03	14.73	65.36	0.17	19.60	1.10
TOTAL	**14.83**	**16.23**	**86.62**	**0.18**	**20.00**	**1.50**
Screening-Level Thresholds	75	250	550	250	100	55
Exceedance?	No	No	No	No	No	No

Notes: Emissions were calculated for both summer and winter months, and the highest value is shown here.
Source: HELIX 2013b

Table 2.2-13
LIMITED IMPACT INDUSTRIAL DEVELOPMENT (PA 1)
OPERATIONAL EMISSIONS (lbs/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenarios 1 and 2						
Area	9.90	0.00	0.00	0.00	0.00	0.00
Energy	0.07	0.60	0.50	0.00	0.05	0.05
Mobile	8.40	15.23	67.94	0.19	21.77	1.22
TOTAL	**18.37**	**15.83**	**68.44**	**0.19**	**21.82**	**1.27**
Screening-Level Thresholds	75	250	550	250	100	55
Exceedance?	No	No	No	No	No	No

Notes: Emissions were calculated for both summer and winter months, and the highest value is shown here.
Source: HELIX 2013b

Table 2.2-14
COMBINED COMMERCIAL OPERATIONS PLUS
MIXED-USE CORE/COMMERCIAL CONSTRUCTION EMISSIONS (lbs/day)

			VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario 1								
Planning Area(s)	**Year**	**Category**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**
PA 4 & 5	2018	Operational	21.20	31.99	146.80	0.20	21.66	1.44
PA 2	2018	Construction	15.18	64.22	148.34	0.32	13.15	3.09
		TOTAL	**36.38**	**96.21**	**295.14**	**0.52**	**34.81**	**4.53**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 1 Exceedance?			No	No	No	No	No	No
Scenario 2								
Planning Area(s)	**Year**	**Category**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**
PA 4 & 5	2018	Operational	26.92	40.93	188.94	0.25	26.84	1.79
PA 2	2018	Construction	15.18	64.22	148.34	0.32	13.15	3.09
		TOTAL	**42.10**	**105.15**	**337.28**	**0.57**	**39.99**	**4.88**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 2 Exceedance?			No	No	No	No	No	No

Notes:
1. Peak Daily Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. Total for Peak Daily Operational Emissions includes Area, Energy and Mobile sources (see Attachment A in Appendix C for details).

Source: HELIX 2013b

Table 2.2-15
COMBINED MIXED-USE CORE/COMMERCIAL, COMMERCIAL OPERATIONS PLUS RESIDENTIAL CONSTRUCTION EMISSIONS (lbs/day)

Planning Area (s)	Year	Category	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
			lbs/day					
Scenario 1								
PA 4 & 5	2018	Operational	21.20	31.99	146.80	0.20	21.66	1.44
PA 2	2021	Operational	110.27	138.16	608.74	1.29	146.28	8.62
PA 3	2021	Construction	4.30	14.87	65.29	0.13	3.03	0.47
		TOTAL	**135.77**	**185.02**	**820.83**	**1.62**	**170.97**	**10.53**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 1 Exceedance?			**Yes**	No	**Yes**	No	**Yes**	No
Scenario 2								
PA 4 & 5	2018	Operational	26.92	40.93	188.94	0.25	26.84	1.79
PA 2	2021	Operational	110.27	138.16	608.74	1.29	146.28	8.62
PA 3	2021	Construction	4.30	14.87	65.29	0.13	3.03	0.47
		TOTAL	**141.49**	**193.96**	**862.97**	**1.67**	**176.15**	**10.88**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 2 Exceedance?			**Yes**	No	**Yes**	No	**Yes**	No

Notes:
1. Peak Daily Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. Total for Peak Daily Operational Emissions includes Area, Energy and Mobile sources.

Source: HELIX 2013b

Table 2.2-16
COMBINED MIXED-USE CORE/COMMERCIAL, COMMERCIAL AND LIMITED IMPACT INDUSTRIAL OPERATIONS PLUS RESIDENTIAL CONSTRUCTION EMISSIONS (lbs/day)

Planning Area(s)	Year	Category	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
			lbs/day					
Scenario 1								
PA 4 & 5	2018	Operational	21.20	31.99	146.80	0.20	21.66	1.44
PA 2	2021	Operational	110.27	138.16	608.74	1.29	146.28	8.62
PA 3	2023	Operational	14.83	16.23	86.62	0.18	20.00	1.50
PA 1	2023	Construction	86.81	10.33	34.14	0.08	3.21	0.38
		TOTAL	**233.11**	**196.71**	**876.30**	**1.75**	**191.15**	**11.94**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 1 Exceedance?			**Yes**	No	**Yes**	No	**Yes**	No

Table 2.2-16 (cont.)
COMBINED MIXED-USE CORE/COMMERCIAL, COMMERCIAL AND LIMITED IMPACT INDUSTRIAL OPERATIONS PLUS RESIDENTIAL CONSTRUCTION EMISSIONS (lbs/day)

Planning Area(s)	Year	Category	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
			lbs/day					
Scenario 2								
PA 4 & 5	2018	Operational	26.92	40.93	188.94	0.25	26.84	1.79
PA 2	2021	Operational	110.27	138.16	608.74	1.29	146.28	8.62
PA 3	2023	Operational	14.83	16.23	86.62	0.18	20.00	1.50
PA 1	2023	Construction	86.81	10.33	34.14	0.08	3.21	0.38
		TOTAL	**238.83**	**205.65**	**918.44**	**1.80**	**196.33**	**12.29**
Screening-Level Thresholds			75.00	250.00	550.00	250.00	100.00	55.00
Scenario 2 Exceedance?			**Yes**	No	**Yes**	No	**Yes**	No

Notes:
1. Peak Daily Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. Total for Peak Daily Operational Emissions includes Area, Energy and Mobile sources.

Source: HELIX 2013b

Table 2.2-17
TOTAL OPERATIONAL EMISSIONS 2025 (lbs/day)

Source	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Scenario 1						
Area	52.94	0.27	23.65	0.00	0.81	0.81
Energy	0.30	2.64	1.62	0.02	0.21	0.21
Mobile	93.25	163.44	710.30	1.78	199.76	11.46
TOTAL	**146.49**	**166.35**	**735.57**	**1.80**	**200.78**	**12.48**
Screening-Level Thresholds	75	250	550	250	100	55
Scenario 1 Exceedance?	**Yes**	No	**Yes**	No	**Yes**	No
Scenario 2						
Area	54.25	0.27	23.65	0.00	0.81	0.81
Energy	0.30	2.65	1.63	0.02	0.21	0.21
Mobile	97.45	170.25	764.05	1.82	204.66	11.78
TOTAL	**152.00**	**170.25**	**738.91**	**1.84**	**205.68**	**12.80**
Screening-Level Thresholds	75	250	550	250	100	55
Scenario 2 Exceedance?	**Yes**	No	**Yes**	No	**Yes**	No

Note: Emissions were calculated for both summer and winter months, and the highest value is shown here.

Source: HELIX 2013b

SUBCHAPTER 2.3

TRANSPORTATION/TRAFFIC

2.3 Transportation/Traffic

Traffic was addressed in Subchapters 3.14 and 7.9 in the 1981 EIR. That document assumed 9,072 ADT and concluded that project-generated traffic would have a less than significant impact. The 1981 EIR concluded that the existing roadway would be capable of handling this additional traffic, assuming that SR-76/Pala Road, west of the intersection of Pankey Road, would be widened to provide two travel lanes, left-turn lanes and paved shoulders. Although not identified as mitigation measures, the EIR recommended one travel lane in each direction along with left-turn, right-turn and acceleration lanes at SR-76/Pala Road and Pankey Road.

The 1983 EIR identified traffic concerns as significant but mitigable. It analyzed trips generated by employees associated with the Hewlett-Packard facility, as well as trips related to the mobile home park, condominiums, golf course, and commercial uses. Combined, these uses were projected to total 22,486 ADT at buildout. The 1983 EIR concluded that the project would have significant impacts to Pankey Road, SR-76/Pala Road, and the intersection of SR-76/Pala Road and Pala Mesa Drive.

Traffic volumes on area roads have changed since completion of the traffic technical studies for the previous EIRs. Overall development density in the area surrounding the Project (although not within the Project) has increased. (As an example, in 1982 there were 2,300 ADT on SR-76 east of I-15. Based on existing traffic counts, the current TIA reports 10,300 ADT for the same segment.) In addition, some internal capture is assumed, the geographic extent of Proposed Project effects is currently assessed as wider, and significant impacts are assessed and mitigation measures are proposed at additional locations. More detailed information is available by both segment and intersection/interchange. Cumulative conditions incorporating traffic generated by off-site conditions through 2030 also are included.

In addition, the County has adopted an ordinance to help finance the roadway network needed to serve future development within the unincorporated area. A Traffic Impact Fee (TIF) Program was adopted in 2005 and updated in 2008 and again in October 2012 to mitigate potential cumulative impacts caused by traffic from future development through funding of roadway improvements. This program is based on a summary of projections method contained in an adopted planning document, as referenced in the state CEQA Guidelines Section 15130(b)(1)(B), which evaluates regional or area-wide conditions contributing to cumulative transportation impacts. Based on SANDAG regional growth and land use forecasts, the SANDAG Regional Transportation Model was utilized to analyze projected Year 2030 development conditions on the existing Mobility Element roadway network throughout the unincorporated area of the County. Based on the results of the traffic modeling, funding necessary to construct transportation facilities that will mitigate cumulative impacts from new development was identified. Existing roadway deficiencies will be corrected through improvement projects funded by other public funding sources, such as TransNet, gas tax and grants. Potential cumulative impacts to the region's freeways have been addressed in SANDAG's Regional Transportation Plan (RTP). This plan, which considers freeway buildout over the next 40 years, will use funds from TransNet, state and federal funding to improve freeways to projected LOS objectives in the RTP.

These considerations lead to the need for new subsequent analysis based on substantial changes having occurred with respect to the circumstances under which the Project would be undertaken, as well as the fact that there is new information of substantial importance which would result in significant effects not previously discussed. The reader is referred to text below for new and/or revised evaluation of all issues related to traffic for the Project.

The following summary of transportation and circulation impacts is based on the TIA for Campus Park West prepared by LLG (2014). The Project study area evaluated in the TIA captures 15 roadway segments, 14 state route segments, 3 freeway segments, and 38 intersections, including future roadways and intersections. The TIA can be found in its entirety in Appendix D, including all supporting tables, figures, and traffic modeling results.

2.3.1 Existing Conditions

2.3.1.1 *Existing Setting*

To be consistent with traffic analyses completed for adjacent proposed projects (Campus Park and Meadowood), the Project TIA utilized the Campus Park project's select zone assignment prepared for the site in addition to the County's 25-peak period trip threshold for projects generating over 1,000 ADT.

Figure 2.3-1, Existing Roadway Segment Conditions, shows the existing roadway network and Figure 2.3-2, Existing Intersection Conditions, shows those intersections that were included in the traffic analysis. A brief description of the existing Project area roadways is below. Roadway widths in this description are approximate. It is noted that all roadway classifications identified below are cited from the August 2011 County Mobility Element map.

Existing Roadway Characteristics

I-15 in the vicinity of the Project is classified as a Freeway. I-15 from Rainbow Valley Boulevard to Old Highway 395 is constructed as an eight-lane Freeway with a center divider. The travel lanes are 12 feet in width and the shoulders are 10 to 12 feet in width. The posted speed limit is 70 mph along I-15 in the vicinity of the Project.

SR-76 (Pala Road) from Oceanside city limits to South Mission Road is classified as a 6.2 Prime Arterial. From South Mission Road to Couser Canyon Road, SR-76 is classified as a 4.1A Major Road with bike lanes. From Couser Canyon Road to the Pala/Pauma Subregion boundary, SR-76 is classified as a 2.1D Community Collector with improvement options (passing lanes) and bike lanes. It should be noted that the Mobility Element cites "special circumstances" for the segment of SR-76 between Old Highway 395 and I-15 as "*Accepted at LOS E,*" based on requirements to obtain increased right-of-way to provide for additional turn lanes in this area.

SR-76 from Melrose Drive to South Mission Road is generally constructed as a two-lane undivided roadway (one travel lane of approximately 12 feet in each direction) with shoulder widths ranging from one to five feet (total pavement width ranges from approximately 26 feet to approximately 34 feet). SR-76 from Via Monserate to Old Highway 395 is generally constructed

as a two-lane un-divided roadway (one travel lane of approximately 12 feet in each direction) with a shoulder width ranging from two to eight feet (total pavement width ranges from approximately 28 feet to approximately 40 feet). From Old Highway 395 to the I-15 southbound ramps, SR-76 is constructed within approximately 76 feet of pavement with a center two way left-turn lane of approximately 12 feet, two travel lanes in each direction for approximately 24 feet, and a paved shoulder in each direction of approximately eight feet. From the I-15 southbound ramps to the I-15 northbound ramps, SR-76 is constructed within approximately 56 feet of pavement with one travel lane of approximately 13 feet in each direction, a back-to-back left turn lane of approximately 14 feet, and a shoulder of approximately eight feet for each travel direction. From the I-15 northbound ramps to Pala Mission Road, SR-76 is constructed within approximately 28 feet with one travel lane of approximately 12 feet in each direction and a shoulder of approximately two feet in each direction. Speed limit signs of 55 MPH were observed on the segments between Melrose Drive and North River Road. Additionally, several horizontal alignment signs (arrows warning drivers of turns in the road) are posted along SR-76.

Two additional SR-76 widening projects have been proposed by Caltrans west of the Project site: the SR-76 Middle Project (from approximately Melrose Drive to South Mission Road) and the SR-76 East Project (from approximately South Mission Road to the SR-76/I-15 interchange). On October 24, 2008, the SANDAG Board approved the redistribution of funds between SR-76 corridor projects to fully fund the construction phase of the Caltrans SR-76 Middle Project. Construction of the SR-76 Middle Project began in early 2010 and the estimated completion date of construction is late 2012, with project close out estimated for fall 2014. The Caltrans SR-76 East Project has identified TransNet as a funding source. Construction of the SR-76 East Project began in 2012 and the current estimate for completion of construction is fall 2015, with project close out estimated for late 2017.

Horse Ranch Creek Road is currently being constructed by Palomar College to Mobility Element "Boulevard" standards. Horse Ranch Creek Road will connect to the existing portion of Pankey Road south of Stewart Canyon Road to SR-76, along a new alignment.

Old Highway 395 is classified as a 2.1D Community Collector from the Rainbow Community Plan Area (CPA) boundary to the I-15 interchange (northbound [NB] ramps). Old Highway 395 is classified as a 2.1A Community Collector from the I-15 interchange (southbound [SB] ramps) to Pala Mesa Drive. From Pala Mesa Drive to SR-76, Old Highway 395 is classified as a 4.2B Boulevard with intermittent turn lanes. From SR-76 to the Bonsall CPA boundary, Old Highway 395 is classified as a 2.1D Community Collector with "unspecified" improvement options.

It should be noted that the Mobility Element identifies two segments of Old Highway 395 (Rainbow CPA boundary to Stewart Canyon Road, and Dulin Road West to SR-76/Pala Road) as "*Accepted at LOS E/F,*" based on community input during the General Plan Update evaluations for the 2011-approved General Plan. This segment of roadway was not cleared as a General Plan override, however, and any exceedance of LOS standards is the responsibility of individual projects to either: (1) justify the exceedance with a statement of overriding considerations or (2) propose an increased classification to carry expected volumes.

Currently, Old Highway 395 between Mission Road and Dulin Road is generally constructed as a two-lane undivided roadway (one travel lane of approximately 12 feet in each direction) with a shoulder width ranging from two to eight feet (total pavement width ranges from approximately 28 feet to approximately 40 feet). The posted speed limit on Old Highway 395 from Mission Road to SR-76 is 55 mph. Between Dulin Road and West Lilac Road, Old Highway 395 is generally constructed as a two-lane undivided roadway (one travel lane of approximately 12 feet in each direction) with a shoulder width ranging from two to six feet (total pavement width ranges from approximately 28 feet to approximately 36 feet). A posted speed limit was not observed on this segment of Old Highway 395 south of Dulin Road.

Pankey Road from Pala Mesa Drive to SR-76 is classified as a 2.1A Community Collector. From Stewart Canyon Road to a terminus cul-de-sac approximately 0.7 mile to the south, Pankey Road is constructed with approximately 32 feet of pavement with a NB travel lane of approximately 20 feet and SB travel lane of approximately 12 feet.

The on-site portion of Pankey Road extends north from SR-76 and is currently a dirt road. The Campus Park West Project proposes to reclassify and construct Pankey Road to 4.2A Boulevard standards from Pala Mesa Drive to SR-76 prior to approval of the final map and/or provide security that such improvements will be made. Pankey Road includes a bridge segment and would need a reduction in classification to 2.1A Community Collector for this section. The 4.2A Boulevard classification would not continue south of SR-76, but this section would be built to a similar four-lane boulevard standard.

The Project would construct six total driveways on Pankey Road: one stop controlled "tee intersection" driveway north of Pala Mesa Drive, one two-way stop-controlled driveway south of Pala Mesa Drive, two signalized driveways between Pala Mesa Drive and Pankey Place, one right-in/right-out unsignalized driveway north of Pankey Place, and one signalized driveway south of SR-76.

From SR-76 south to Shearer Crossing (connects to Dulin Road), Pankey Road is constructed with approximately 40 feet of pavement and one travel lane in each direction. No posted speed limits were observed.

Pala Mesa Drive is classified as a 2.2F Light Collector on the Mobility Element network, and is an unclassified roadway from Old Highway 395 to Pankey Road. Pala Mesa Drive east of Old Highway 395 exists as a bridge over I-15 that is closed to traffic. From Old Highway 395 to Pankey Road, the Pala Mesa Drive alignment is proposed to be changed in order to avoid a biological wetland. The proposed alignment is shown throughout the various figures located within this section and would be a two lane roadway designed per County Standards to the satisfaction of the PDS staff in the Land Development Division.

The Campus Park West Project would be responsible for constructing this segment of Pala Mesa Drive before obtaining occupancy permits, should Campus Park West be constructed prior to Campus Park or Meadowood.

Stewart Canyon Road from Old Highway 395 to Horse Ranch Creek Road is classified as a 4.1B Major Road. Stewart Canyon Road from Old Highway 395 to Pankey Road is generally constructed as a two-lane undivided roadway within approximately 40 feet of pavement. A posted speed limit was not observed on this segment.

Reche Road is classified as a 2.2B Light Collector (continuous turn lane) from Stage Coach Lane to Green Canyon Road. From Green Canyon Road to Old Highway 395, Reche Road is classified as a 2.2C Light Collector (intermittent turn lane). Reche Road currently provides one lane in each direction within the Project study area. Turn lanes are located at several intersections along Reche Road between Green Canyon Road and Old Highway 395. Curbside parking is prohibited and bike lanes are not provided.

Existing Levels of Service

LOS designations comprise a professional industry standard by which the operating condition of a given roadway, state route, freeway segment, or intersection is measured. LOS designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments. LOS is defined using letter designations from "A" to "F," wherein LOS A represents the best operating conditions and LOS F represents the worst operating conditions (Table 2.3-1, Level of Service Thresholds for Roadway Segments, Table 2.3-2, Level of Service Thresholds for State Routes, Table 2.3-3, Level of Service Thresholds for Freeways, and Table 2.3-4, Level of Service Thresholds for Intersections). LOS A facilities are characterized as having free-flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having highly unstable, congested conditions and low operating speeds. LOS E and F generally are considered not acceptable for urban design purposes.

The volume-to-capacity ratio (V/C) is a measure of traffic demand on state and local facilities (expressed as volume) compared to its traffic-carrying capacity. In evaluating the performance of roadway segments under the existing conditions, V/C is considered together with LOS. Existing traffic volumes are based on peak period counts and ADT volume counts conducted in May 2012. Figure 2.3-3, Existing Average Daily Traffic – Roadway Segments, shows existing ADT for the roadway segments in the study area. Existing roadway, state route, freeway, and intersection operations are provided in Table 2.3-5, Roadway Segment Operations Under Existing and Existing Plus Project Conditions; Table 2.3-6, State Route Segment Operations Under Existing and Existing Plus Project Conditions; Table 2.3-7, Freeway Segment Operations Under Existing and Existing Plus Project Conditions; Table 2.3-8, ILV Operations Under Existing and Existing Plus Project Conditions; and Table 2.3-9, Intersection Operations Under Existing and Existing Plus Project Conditions, respectively.

Existing Roadway Segments

Twenty-three total roadway segments were evaluated. All of the analyzed local roadway segments currently operate at LOS D or better (Table 2.3-5).

Existing State Route Segments

Fourteen state route segments along SR-76 were evaluated. The peak period segment analyses were conducted assuming two lanes along SR-76 from Melrose Drive to Pala Mission Road. SR-76 has recently been widened for approximately 1.4 miles east of the I-15 NB ramps from two to four lanes. For purposes of this analysis, the four-lane configuration is assumed to be complete.

A total of five analyzed state route segments currently operate at LOS E and/or F during peak periods, which is considered unacceptable (Table 2.3-6). These five segments are represented by stretches itemized below and include SR-76 between:

- Olive Hill Road to South Mission Road (LOS E)
- South Mission Road to Via Monserate (LOS E)
- Via Monserate to Gird Road (LOS F)
- Gird Road to Sage Road (LOS E)
- Sage Road to Old Highway 395 (LOS E)

All other state route segments currently operate at acceptable LOS D or better.

Existing Freeway Segments

All three I-15 freeway segments in the Project study area (between Old Highway 395 and Rainbow Valley Road) currently operate at an acceptable LOS C or better during the a.m. and p.m. peak periods (Table 2.3-7).

Existing Intersection Lane Vehicles (ILV) Operations

Figure 2.3-4, Existing Peak Period Traffic Volumes – Intersections, illustrates the ADT at the two signalized freeway ramps within the study area. Table 2.3-8 shows existing a.m. and p.m. peak period ILV traffic volumes in the study area. As shown in the table, the two studied ILV locations (SR-76 at 1-15 SB ramps and SR-76 at I-15 NB ramps) currently operate under or near capacity in the a.m. and p.m. peak periods.

Existing Signalized Intersections

Figure 2.3-4 also illustrates the ADT at intersections within the study area. Table 2.3-9 shows existing a.m. and p.m. peak period intersection traffic volumes in the study area. As shown in the table, all signalized intersections within the study area operate at an acceptable LOS (A through D), with the exception of the following:

- East Mission Road/Old Highway 395, which operates at LOS E during the p.m. peak period
- SR-76/Olive Hill Road, which operates at LOS E during the p.m. peak period

Existing Unsignalized Intersections

As shown in Table 2.3-8, the following two unsignalized intersections within the study area operate at an unacceptable LOS during the a.m. and/or p.m. peak periods:

- Old Highway 395/Reche Road (LOS F during the p.m. peak period)
- SR-76/Via Monserate (LOS E during a.m. peak periods and LOS F during p.m. peak periods)

The remaining 14 unsignalized intersections that currently exist within the study area operate at acceptable LOS D or better during the peak periods.

Regulatory Framework

Transportation and circulation for the Proposed Project are directed by guidance from the federal government, regional transportation programs, and the County General Plan Mobility Element. Applicable federal, regional, and County programs and regulations are discussed below.

Federal

2000 Highway Capacity Manual

Prepared by the Transportation Research Board, the 2000 Highway Capacity Manual is a collaborative effort between the Transportation Research Board, FHWA, and American Association of State Highway and Transportation Officials to provide concepts, guidelines, and computational procedures for calculating capacity and quality of service for highway facilities, including freeways, intersections (signalized and unsignalized), and rural highways. In addition, the 2000 Highway Capacity Manual addresses the effects of transit, pedestrians, and bicycles on transportation system performance.

Regional

Regional Transportation Plan

The RTP was created and approved by SANDAG on March 23, 2003 and last updated in October 2011, with the intent of addressing challenges to mobility in the San Diego region due to population growth. The 2050 RTP outlines projects for transit, rail, and bus services; express or managed lanes; highways; local streets; bicycling; and walking. It also aims to maintain, manage, and improve the existing transportation system in the region as it shifts towards an integrated, multi-modal system.

State Transportation Improvement Program

The 2002 State Transportation Improvement Program (STIP) is a multi-year program of federally and state-funded projects that are developed locally and approved by the California Transportation Commission. Once approved, the STIP is incorporated into the Regional

Transportation Improvement Program (RTIP), which includes all other locally funded transportation projects.

Regional Transportation Improvement Program

The RTIP is also a multi-year program that includes all proposed major highway, arterial, transit, and non-motorized projects in the region, including TransNet projects. The 2010 RTIP was adopted in September 2010, for Fiscal Years 2010 through 2015. The projects listed in the initial years of the 2050 RTP are the same as those either already programmed in the current RTIP or are expected to be included in future neat-term RTIP updates.

Regional Growth Management Strategy

The Regional Growth Management Strategy, as originally adopted in 1993 by SANDAG, is a comprehensive framework for dealing with regional growth impacts in order to preserve and improve the regional quality of life. One facet of quality of life considered in the Regional Growth Management Strategy is transportation and congestion management. The Regional Growth Management Strategy was amended in July 1999, at which time the new growth strategy was titled REGION2020.

Guide for the Preparation of Traffic Impact Studies

The Caltrans Guide for the Preparation of Traffic Impact Studies (2002) outlines recommended procedures for traffic study contents. While thresholds are not identified in this guide, Caltrans staff have indicated that freeway operations at or above LOS D are considered acceptable. For the San Diego region, Caltrans' staff have previously indicated that an impact to a freeway is generally identified when project traffic causes the operations to drop one letter grade (e.g., from LOS E to LOS F).

County

The Mobility Element of the adopted County General Plan identifies the general location and extent of existing and proposed major roads and bicycle routes.

The County of San Diego has developed LOS threshold tables based on the different functional street classifications and their ability to carry traffic. In addition, on August 2, 2006, the County Board of Supervisors approved the proposed Year 2020 road standards. Year 2020 road standards, identified as "GP Update" in this subchapter, evaluate road segments on the basis of capacity. A statement of "Under Capacity" (Un) is shown in the LOS threshold tables (no roadways were "Over Capacity"). These capacity statements are used in place of LOS where a proposed road would be implemented that is not part of the current Mobility Element (e.g., the "Light Collector" classification proposed for Pankey Place).[1]

[1] Actual capacity on some segments may be higher due to intersection widening, restricted access, and/or lane widening.

The study area for the Existing Plus Project condition was defined based on the County's criterion of including all segments to which the Project would add 25 or more peak-period trips to existing roadway traffic.

The County General Plan states that new development shall provide improvements adequate to maintain LOS C on on-site Mobility Element roads during peak periods. New development shall provide improvements sufficient to contribute to the overall achievement of an LOS D on off-site Mobility Element roads.

2.3.2 Analysis of Project Effects and Determination as to Significance

As noted in Chapter 1 of this EIR, two design scenarios are evaluated in this document. **Scenario 1** assumes that Caltrans right-of-way abutting the southern edge of PA 2 and the northern edge of PA 5 would remain in its current condition. **Scenario 2** assumes that these properties are incorporated into the Project. Although no use is proposed for the property north of SR-76 (excluding a Project monument sign), in PA 5 an additional 10,000 s.f. of general commercial uses are assumed. In order to identify worst-case traffic generation, this use is assumed to be 16-fueling spaces gas station. These uses are projected to result in a fairly small change to **Scenario 1** numbers (2558 overall trips) relative to the overall Project. Of these trips, 537 would be daily primary trips, 1,305 would be daily diverted trips, and 716 would be daily pass-by trips. These trips are only anticipated to show notable changes to traffic loading on the SR-76/I-15 NB and SB ramps and on the segment of SR-76 between Old Highway 395 and I-15 SB ramps. All other Project uses, traffic generation, and travel patterns remain identical between the two scenarios. Variation between **Scenarios 1** and **2** is described in text below, as applicable.

2.3.2.1 *Project Traffic Generation*

The Proposed Project would generate 36,206 ADT. This includes 1,991 total a.m. peak period trips and 3,263 total p.m. peak period trips. These represent new trips at the Project's driveways, but these are not all new trips to the region, as further explained below. Table 2.3-10, Proposed Project Trip Generation, provides the trip generation rates for each land use, the projected volumes, and the a.m. and p.m. peak period volumes. Figure 2.3-5, Project Average Daily Traffic – Roadway Segments, and Figure 2.3-6, Project Peak Period Traffic Volumes – Intersections, depict the traffic volumes from the Proposed Project on study area roadway segments and intersections, respectively. The Project's traffic generation rates are based on SANDAG's most current (2002) trip generation rates for the various types of land uses proposed.

2.3.2.2 *Project Traffic Distribution*

The Proposed Project trips were distributed on the study area roadways based on the Campus Park Traffic Impact Study (LOS Engineering, Inc. 2009, as amended). Since the timing of the Proposed Project in conjunction with surrounding developments is currently unknown, a worst-case distribution was analyzed in the Existing Plus Project (near-term) condition, which assumes no interaction of vehicle trips among the Proposed Project and the surrounding Campus Park and Meadowood developments. This puts all Project-related off-site trips onto area

roadways, thereby providing a conservative analysis. The other near-term analysis (Existing Plus Cumulative Plus Project scenario) and the long-term analysis (Year 2030 Plus Project scenario) assumes that the surrounding developments (i.e., Campus Park and Meadowood) would be in place and that inter-project trips would occur. The potential impacts under the Existing Plus Project condition are discussed within this section and the cumulative and long-term (Year 2030) impacts are discussed in Section 2.3.3.

Based on discussions with County of San Diego and Caltrans staff, a 30-percent total "internal capture" rate was used in the Existing plus Project plus Cumulative and Horizon Year (Year 2030) analyses based on the mixed-use nature of the Proposed Project, which would include residential, general commercial, and office/limited impact industrial uses, and the resulting variety and complementary nature of the proposed land uses. "Internal capture" refers to the percentage of vehicle trips generated by the Proposed Project that would remain within the collective study area of the Campus Park West, Campus Park, and Meadowood projects. These trips would not include travel on external roadways since motorists would be traveling to internal Proposed Project or Campus Park or Meadowood uses instead of uses located outside of these three project sites. The internal capture reduction for the Proposed Project was applied only to the land uses north of SR-76. The use of a 30-percent internal capture rate for the Proposed Project is considered conservative given that: (1) Institute of Transportation Engineers (ITE) sources with similar land uses documented internal capture rates from 28 to 51 percent, with an average of 38 percent; (2) local internal capture rates in Fallbrook have been calculated at 58 percent; and (3) the Project is a walkable community, with residential uses adjacent to retail and employers. As noted above, the 30-percent internal capture rate was approved by both the County and Caltrans (refer to Appendix D of the TIA [EIR Appendix D]).

External trips, in contrast, would consist of three types of motorists: primary, pass-by, and diverted-linked. Primary trips are point A to point B round trips (new trips to the region). The traveler is assumed to be focused on Campus Park West as their primary destination and such trips would be distributed throughout the Campus Park West study area. Pass-by trips are point A to point B to point C and consist of travelers that are already passing through the area (i.e., existing trips largely on SR-76 or Pankey Road) but stop at the Project site (i.e., not new trips to the region). Diverted-linked trips are trips that are attracted from the existing traffic volume on roadways within the vicinity of the generator (i.e., largely on I-15) but that require a diversion, or exit, from that roadway to another to gain access to the Project site. Pass-by trips and diverted-linked trips are not new trips to the region.

2.3.2.3 *Roadway Network Improvements*

The following roadway improvements would be constructed as part of the Proposed Project:

1. The Project Applicant would install a traffic signal at SR-76/Pankey Road and widen/improve the intersection to the following configuration:

    - SB: Pankey Road north of SR-76 would be widened to add two WB right-turn lanes and one EB left-turn lane. The SB segment of Pankey Road south of SR-76 would be widened to add an additional SB lane, for a total of two SB lanes.

- WB: SR-76 east of Pankey Road would be widened to add an additional NB right-turn lane and a single SB left-turn lane; the existing bridge over Horse Ranch Creek would be widened by one lane on the north (WB).
- NB: Pankey Road south of SR-76 would be widened to add two WB left-turn lanes and one EB right-turn lane. The NB segment of Pankey Road north of SR-76 would be widened to add an additional NB lane, for a total of two NB lanes.
- EB: SR-76 west of Pankey Road would be widened to add an additional NB left-turn lane (for a total of two left-turn lanes) and a single SB right-turn lane.

2. The Proposed Project would include construction of signalized intersections at Pala Mesa Drive/Pankey Road, Pankey Road/Pankey Place, and Pankey Road South/Shearer Crossing, as well as numerous internal stop-controlled intersections at driveways along Pankey Road.

3. The intersection of Old Highway 395 and Pala Mesa Drive, on the west side of I-15, would be widened and improved to provide additional turn capacity. Minor grading and drainage improvements are required to improve this intersection to the following configuration:

   - The NB segment of 395 south of Pala Mesa Drive currently has an adequate hardscape. The road would be re-striped to include an 80-foot long, 11-foot-wide EB right-turn lane onto Pala Mesa Drive.
   - The SB segment of 395 north of Pala Mesa Drive would be widened from a roadway surface width of approximately 40 to 50 feet to 47 feet for a distance of approximately 1,000 feet. An EB left-turn lane onto Pala Mesa Drive would be added.
   - The EB segment of Pala Mesa Drive west of Old Highway 395 would be widened from a roadway surface width of approximately 38 feet to 46 feet for a distance of approximately 600 feet. The right and left turn movements would be retained, and a through lane would be added.

4. If the Proposed Project is constructed prior to the adjacent recently approved projects (i.e., Campus Park and Meadowood), the Project Applicant would construct Pankey Road from Pala Mesa Drive to south of SR-76 as a four-lane Boulevard roadway. If construction of the Proposed Project follows the adjacent recently approved projects, the Project Applicant would widen the existing roadway from two to four lanes per Mobility Element Boulevard road standards. Any portion of this roadway for secondary access for adjoining properties is the responsibility of the other project(s).

5. If the Proposed Project is constructed prior to the adjacent recently approved projects (i.e., Campus Park and Meadowood), the Project Applicant would construct Pala Mesa Drive from Old Highway 395 to Pankey Road as a two-lane roadway. If construction of the Proposed Project follows the adjacent recently approved projects, the Project Applicant would not be required to construct this roadway segment.

2.3.2.4 *Roadway and State Route Segments*

Guidelines for the Determination of Significance

A significant traffic impact would occur if:

1. The additional or redistributed ADT generated by the Proposed Project would cause on-site Mobility Element roads to operate below LOS C during peak traffic hours.

2. The additional or redistributed ADT generated by the Proposed Project would significantly increase congestion on a Mobility Element road or state highway currently operating at LOS E or F, or would cause a Mobility Element road or state highway to operate at a LOS E or F as a result of the Proposed Project as identified in Matrix 1, below.

Matrix 1
MEASURES OF SIGNIFICANT PROJECT IMPACTS TO CONGESTION ON MOBILITY ELEMENT ROAD SEGMENTS

Allowable Increases on Congested Road Segments			
LOS	**Two-lane Road**	**Four-lane Road**	**Six-lane Road**
E	200 ADT	400 ADT	600 ADT
F	100 ADT	200 ADT	300 ADT

Notes:

1. By adding Proposed Project trips to all other trips from a list of projects, this same table is used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes additional trips must mitigate a share of the cumulative impacts.
2. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable LOS, when such traffic uses a significant amount of remaining road capacity.

3. The Proposed Project would cause a Mobility Element road to exceed the thresholds presented in Matrix 2, below.

4. The additional or redistributed ADT generated by the Proposed Project would cause a residential street to exceed its design capacity.

Matrix 2
MEASURE OF SIGNIFICANT PROJECT TRAFFIC IMPACTS FOR MOBILITY ELEMENT ROADS, SIGNALIZED INTERSECTIONS, AND RAMPS

LOS with Project	Allowable Change Due to Project Impact						
	Freeways*		Roadway Segments[1]		Signalized Intersections	Ramps	Ramps with >15 min. delay
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)[2]	Delay (min.)[2]	Delay (min.)[2]
E and F	0.01	1	0.02	1	2	-	2

[1] For County arterials that are not identified in SANDAG's RTP as regionally significant arterials, significance may be measured based upon an increase in ADT. The allowable change in ADT due to Project impacts in this instance would be identified in Threshold Matrix 1.

[2] Delay = Average stopped delay per vehicle measured in seconds (sec.) or minutes (min.)

> = greater than

* It is noted that SANDAG does not have jurisdiction over freeways. Caltrans, the agency with jurisdiction over freeways within the study area, considers impacts to freeways significant if additional traffic causes the operations to drop one letter grade. The Caltrans thresholds are used in the analysis below.

Guideline Sources

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Analysis

Construction Impacts

Construction traffic is anticipated to primarily access the site via I-15, with minor numbers of workers or delivery trucks using SR-76. As noted in Subchapter 1.2, Project grading is projected to be balanced and no import or export of earthwork is expected, thus minimizing the number of truck trips to and/or from the site during the construction phase.

Construction traffic associated with the Proposed Project may contribute to temporary congestion and/or traffic delays in the Project vicinity. Due to the length of the construction period and the fact that various components of construction would overlap, projecting the delays on specific road segments and intersections (including off site) for the full construction period would be speculative and would not result in a modification to the planned implementation of standard traffic control measures. Off-site roadway improvements would be limited to adding turn/through lanes and traffic signals to existing intersections. The Proposed Project would include the preparation and approval of a Traffic Control Plan (TCP), identified on Table 1-3, which would include measures to reduce traffic delays and minimize public safety impacts both on and off site. The TCP would include measures such as the use of flag persons; traffic cones; k-rails; lane-shifting; small, isolated detours and advanced notification signage; pedestrian/ equestrian detours; and movement restrictions, as necessary. Because the Project site is located

immediately north and south of SR-76, no temporary road closures are anticipated. In addition, the construction contractor would provide a means for public liaison/contact information for public inquiries and concerns. The TCP would be part of the Project and is included in the list of discretionary Project approvals, Project design considerations enumerated on Table 1-3, and Chapter 7.0, List of Mitigation Measures and Environmental Design Considerations. The plan would have to be approved by the Director of the Land Development Division of PDS. While construction traffic would be a nuisance to motorists in the Project vicinity and could result in adverse short-term traffic impacts, these short-term effects would be lowered to a **less than significant** level via Project-mandated implementation of the TCP.

Although the precise location within roadbeds of off-site utilities associated with potable water and sewage conveyance facilities would be ultimately determined as part of final Project design, these utilities would be located within existing or planned roadways (e.g., Horse Ranch Creek Road, SR-76, Pankey Road, Pala Mesa Drive). Associated impacts to traffic would be temporary in nature, and would be addressed through preparation, approval and implementation of a TCP, as described above. As a result, impacts would be **less than significant**.

Existing Plus Project Roadway Segment Impacts

Roadway conditions under Existing Plus Project conditions are illustrated in Figure 2.3-7, Existing Plus Project Roadway Segment Conditions. Figure 2.3-8, Existing Plus Project Average Daily Traffic – Roadway Segments, illustrates the Existing Plus Project roadway ADT distribution. Under Existing Plus Project conditions, none of the analyzed roadway segments would operate at LOS E (Table 2.3-5). As a result, **no impact** to roadway segments under Existing Plus Project conditions would occur.

Existing Plus Project State Route Segment Impacts

Under Existing Plus Project conditions, seven analyzed state route segments would operate at LOS E or F (Table 2.3-6). Because the Proposed Project would contribute a significant amount of traffic to two-lane roadways (200 ADT for two-lane roadways currently operating at LOS E), and the V/C would be greater than 0.02, the Proposed Project would result in **significant impacts** to the following four roadway segments:

- Four segments of SR-76 from South Mission Road to Old Highway 395 **(Impact TR-1)**

As discussed under Existing Levels of Service above, five segments of SR-76 currently operate at an unacceptable LOS (E or F). Refer to Figures 2.3-7 and 2.3-8 for the state route segment Existing Plus Project conditions and ADT distribution, respectively. Under Existing Plus Project conditions, seven state route segments would continue to operate at LOS E or F, or would decrease from an acceptable LOS to LOS E or F (Table 2.3-6). Because the change in V/C along four of these seven segments between Existing and Existing Plus Project conditions would be greater than 0.02, impacts would be considered significant. These four SR-76 segments include:

- South Mission Road to Via Monserate (LOS F)
- Via Monserate to Gird Road (LOS F)

- Gird Road to Sage Road (LOS F)
- Sage Road to Old Highway 395 (LOS F)

Construction of the SR-76 Middle Project that is currently widening SR-76 to four lanes in this vicinity and will further improve segment operations is anticipated to be completed in 2014, prior to occupancy of the first residential or commercial unit that would be built as part of the Proposed Project. The remaining three SR-76 segments that would operate at LOS E or F under the Existing Plus Project condition (East Vista Way to North River Road, North River Road to Olive Hill Road, and Olive Hill Road to South Mission Road) are part of the SR-76 Middle Project. During widening associated with the Middle Project, minor street access in the vicinity is limited with signalized intersections spacing maximized to enhance flow. A secondary, peak hour segment analysis was conducted to calculate arterial operations during the peak commute times while construction associated with SR-76 widening is underway. (The peak hour segment analysis is based on signal timing input, lane geometrics, peak hour volumes, similar to signalized intersection parameters; whereas the daily segment analysis utilizes only the two parameters of 24-hour volume and generalized capacity.) As the peak hour arterial analysis for the remaining segments showed arterial operations of LOS D or better in both directions during the peak hours, this is considered to supersede the V/C method daily segment analysis. Therefore, based on the operations of LOS D or better during peak hours, the Proposed Project would result in **less than significant** impacts to the remaining three SR-76 segments.

As shown in Table 2.3-11, Scenario 2 Street Segment Operations, **Scenario 2** would affect three state route segments along SR-76 and one roadway segment along Pankey Road. The addition of **Scenario 2** trips would constitute an incremental change that would result in no change to the CEQA identification of significant impacts to these segments under **Scenario 1**. Consistent with conclusions drawn for **Scenario 1**, **Scenario 2** also would result in **less than significant impacts** to these segments.

The balance of roadway and state route segments in the study area would remain at LOS D or better with the addition of **Scenario 2** traffic and no new impacts would occur.

2.3.2.5 *Freeway Segments*

Guideline for the Determination of Significance

A significant traffic impact would occur if:

5. The Proposed Project would cause a freeway segment to exceed the thresholds presented in Matrix 2, above.

Guideline Source

This guideline is based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Analysis

As shown in Table 2.3-7, all three analyzed freeway segments would continue to operate at an acceptable LOS (A through C) during the a.m. and p.m. peak periods under Existing Plus Project conditions. The Proposed Project would therefore result in **less than significant** impacts to freeway segments.

2.3.2.6 *Signalized Intersections*

Guidelines for the Determination of Significance

A significant traffic impact would occur if:

6. The additional or redistributed ADT generated by the proposed project would significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F, or would cause a signalized intersection to operate at a LOS E or LOS F as identified in Matrix 3, below.

7. Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, the project would significantly impact the operations of the intersection.

Matrix 3
MEASURES OF SIGNIFICANT PROJECT IMPACTS TO CONGESTION ON INTERSECTIONS: ALLOWABLE INCREASES ON CONGESTED INTERSECTIONS

LOS	Signalized	Unsignalized
E	Delay of 2 seconds or less	20 or less peak period trips on a critical movement
F	Either a delay of 1 second, or 5 or less peak period trips on a critical movement	5 or less peak period trips on a critical movement

Notes:
1. A critical movement is an intersection movement (right-turn, left-turn, through movement) that experiences excessive queues, which typically operate at LOS F. Also if a project adds significant volume to a minor roadway approach, a gap study should be provided that details the headways between vehicles on the major roadway.
2. By adding Proposed Project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project is responsible for mitigating its share of the cumulative impact.
3. The County may also determine impacts have occurred on roads even when a project's direct or cumulative impacts do not trigger an unacceptable LOS, when such traffic uses a significant amount of remaining road capacity.
4. For determining significance at signalized intersections with LOS F conditions, the analysis must evaluate both the delay and the number of trips on a critical movement, exceedance of either criteria result in a significant impact.

Guideline Source

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Because Caltrans currently does not have significance criteria for ILV analysis, the ILV impact analysis for the SR-76/I-15 freeway ramps is presented in this signalized intersections discussion, below.

Analysis

Intersection conditions under Existing Plus Project conditions are illustrated in Figure 2.3 9, Existing Plus Project Intersection Conditions. Figure 2.3-10, Existing Plus Project Peak Period Traffic Volumes – Intersections, shows the distribution of all Project trips at each of the analyzed intersections. Under Existing conditions, all of the signalized intersections within the study area operate at an acceptable LOS, with the exception of the intersections of Old Highway 395/East Mission Road and SR-76/Olive Hill Road, which both operate at an unacceptable LOS (E) during the p.m. peak period (Table 2.3-9). Under Existing Plus Project conditions, these two intersections would continue to operate at unacceptable LOS (E) during the p.m. peak period; because the increase in delay would be less than two seconds, impacts to these signalized intersections would be **less than significant**.

In the case of ILV freeway ramps under Existing Conditions, the two ramps within the study area operate under or near capacity. The Proposed Project would, however, cause the two signalized freeway ramp intersections to operate at LOS F during the p.m. peak period. Because these intersections experience an increase in delay of greater than two seconds under Existing Plus Project conditions when compared to Existing conditions, impacts to these two signalized intersections would be **significant**:

- SR-76/I-15 SB ramps (LOS F during the p.m. peak period) **(Impact TR-2)**
- SR-76/I-15 NB ramps (LOS F during the p.m. peak period) **(Impact TR-3)**

As shown in Table 2.3-12, Scenario 2 Intersection Operations, **Scenario 2** would affect four intersections. The addition of **Scenario 2** trips would constitute an incremental change that would result in no change to the CEQA identification of significant impacts to two of the four intersections under **Scenario 1**. Consistent with conclusions drawn for **Scenario 1** for the following two intersections, **Scenario 2** also would result in **significant impacts** to these intersections:

- SR-76/I-15 SB ramps (LOS F during the p.m. peak period) **(Impact TR-2a)**
- SR-76/I-15 NB ramps (LOS F during the p.m. peak period) **(Impact TR-3a)**

The balance of intersections in the study area would remain at LOS D or better with the addition of **Scenario 2** traffic and no new impacts would occur.

2.3.2.7 *Unsignalized Intersections*

Guidelines for the Determination of Significance

A significant traffic impact would occur if:

8. The additional or redistributed ADT generated by the Proposed Project would add 21 or more peak hour trips to a critical movement of an unsignalized intersection, and cause an unsignalized intersection to operate below LOS D.

9. The additional or redistributed ADT generated by the Proposed Project would add 21 or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS E.

10. The additional or redistributed ADT generated by the Proposed Project would add six or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate at LOS F.

11. The additional or redistributed ADT generated by the Proposed Project would add six or more peak hour trips to a critical movement of an unsignalized intersection currently operating at LOS F.

12. Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance or other factors, the Project would significantly impact the operations of the intersection.

Guideline Source

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Analysis

One unsignalized intersection within the study area (Old Highway 395/Reche Road) currently operates at an unacceptable LOS (F) during the p.m. peak period (Table 2.3-9). Under Existing Plus Project conditions, the Proposed Project would cause this intersection to decrease in LOS from D to F during the a.m. peak period and continue to operate at F during the p.m. peak period. The intersection of SR-76/Pankey Road, which currently operates at LOS B during a.m. and p.m. peak periods, would be reduced to LOS F during the a.m. and p.m. peak periods. Because the Proposed Project would result in an increase in delay for more than one second, impacts to Reche Road/Old Highway 395 and SR-76/Pankey Road would be **significant**. **(Impacts TR-4 and TR-5)**

Although Project traffic would decrease the LOS of SR-76/Via Monserate Road to LOS F during the a.m. and p.m. peak periods, because the Project would not add critical movement trips to the SB left-turn lane, impacts to this intersection would be **less than significant**.

2.3.2.8 *Traffic Hazards Due to an Existing Transportation Design Feature*

Guidelines for the Determination of Significance

The determination of significant hazards to an existing transportation design feature would be on a case-by-case basis, considering the following factors:

13. Design features/physical configurations of access roads may adversely affect the safe movement of all users along the roadway.

14. The percentage or magnitude of increased traffic on the road due to the proposed project may affect the safety of the roadway.

15. The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, may result in conflicts with other users or stationary objects.

16. Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

Guideline Source

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Analysis

The Proposed Project circulation system, including driveway corner sight distances, was designed in conformance with applicable County standards and requirements and would not significantly impact the safe movement of users along the area roadways. The main access to the Project site would be from Pankey Road, which would be extended north from SR-76. As part of the Project, improvements to the SR-76/Pankey Road intersection would be made, including installation of a traffic signal (if not previously constructed by the adjacent planned projects). The Proposed Project also would include the construction of numerous internal intersections, with the appropriate traffic control at each intersection (either stop signs or traffic signals dependent upon signal warrants). Therefore, although the Proposed Project would result in increased traffic on new and existing roadways, impacts associated with safety of those roadways would be **less than significant**.

East of the Granite Construction driveway (located east of the Project site), SR-76 currently is a two-lane conventional highway passing through hilly terrain and characterized by a number of curves and lack of passing opportunities. This area has experienced increased traffic due to development of a number of tribal gaming facilities on Native American reservations near SR-76.

In 2006/2007, LLG worked with Caltrans and the Reservation Transportation Authority (RTA) to investigate current roadway issues, as well as projected cumulative traffic effects related to existing and proposed developments along SR-76 between I-15 and Valley Center Road. The report identified near- and long-term essential operational and safety improvements along this section of SR-76, such as curve correction, left-turn channelization, etc., thus supporting efforts to improve mobility and foster economic development within the corridor area. The improvements identified in the RTA study would enhance roadway operations in this area.

Specific to the Proposed Project, the Project would add a maximum of 100 trips in the WB direction and 95 trips in the EB direction on SR-76 during the p.m. peak period (with p.m. peak period volumes constituting the higher peak period volumes). This translates to approximately two to three cars per minute that would be added as a result of the Proposed Project. Therefore, based on the low Project traffic volumes that would be added to this roadway segment, the magnitude of Project-related traffic would not affect existing roadway safety and impacts would be **less than significant**.

2.3.2.9 *Traffic Hazard to Pedestrians or Bicyclists*

Guidelines for the Determination of Significance

The determination of significant hazards to pedestrians or bicyclists would be on a case-by-case basis, considering the following factors:

17. Design features/physical configurations on a road segment or at an intersection that may adversely affect the visibility of pedestrians or bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.

18. The amount of pedestrian activity at the project access points that may adversely affect pedestrian safety.

19. The preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.

20. The percentage or magnitude of increased traffic on the road due to the proposed project that may adversely affect pedestrian and bicycle safety.

21. The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers that may result in vehicle/pedestrian or vehicle/bicycle conflicts.

22. Conformance of existing and proposed roads to the requirements of the private or public road standards, as applicable.

23. The potential for a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.

Guideline Source

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011).

Analysis

New sidewalks and pathways for pedestrians and/or bicyclists are proposed within the Project. North of Pala Mesa Drive, two six-foot bike lanes and a five-foot wide sidewalk on the west side of the road are proposed. Between SR-76 and Pala Mesa Drive, two eight-foot wide Class II bike lanes are proposed on both sides of Pankey Road. South of SR-76, two eight-foot wide paved shoulders for Class II bike lanes are proposed; the bike lanes would continue along both sides of Pankey Road where it would trend west from Shearer Crossing. An eight-foot-wide soft-surface pathway for non-motorized users is proposed along the east side of Pankey Road north of SR-76 and along both sides of Pankey Road south of SR-76; the pathway would allow for a connection to the San Luis Rey River Park. Another eight-foot wide pathway is proposed along the north side of Pankey Place. These pathways would be used by both pedestrians and other non-motorized users. Five-foot-wide pedestrian sidewalks are proposed along the west side of Pankey Road north of SR-76, both sides of Pankey Road where it trends west from Shearer Crossing, the south side of Pala Mesa Drive, and the west side of Shearer Crossing. In light of these improvements, the increased traffic on the roads due to the Proposed Project would not adversely affect pedestrian and bicycle safety. Additionally, the proposed transportation improvements would be constructed in accordance with County standards and would not include design features or physical configurations on a road segment or at an intersection that would adversely affect the visibility of pedestrians, bicyclists, or other non-motorized users to drivers entering and exiting the site, and the visibility of cars to pedestrians, bicyclists, and other non-motorized users. The Proposed Project also would not preclude or substantially hinder the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the Project site. For these reasons, impacts to pedestrian and bicyclist safety would be **less than significant**.

2.3.2.10 *Alternative Transportation*

Guideline for the Determination of Significance

A significant impact to alternative transportation would occur if:

24. The Proposed Project would not comply with the County's General Plan PFE Objective 4, which states, "Reduction in the demand on the road system through increased public use of alternate forms of transportation and other means." This is consistent with current Conservation and Open Space Element Goal COS-16 pertaining to sustainable mobility. Goal COS-16 states, "Transportation and mobility systems that contribute to environmental and human sustainability and minimize GHG and other air pollutant emissions."

Guideline Source

These guidelines are based on the County Guidelines for Determining Significance – Transportation and Traffic (August 24, 2011). The PFE objective would be implemented through specific policies of the COS Element, as enumerated below.

Analysis

There are four policies under Goal 16, Sustainable Mobility, of the Conservation and Open Space Element that would be applicable to the Project, including:

- COS-16.1: Alternative Transportation Modes. Work with SANDAG and local transportation agencies to expand opportunities for transit use. Support the development of alternative transportation modes, as provided by Mobility Element policies.

- COS-16.2: Single-Occupancy Vehicles. Support transportation management programs that reduce the use of single-occupancy vehicles.

- COS-16.3: Low-Emissions Vehicles and Equipment. Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions. (Refer also to Policy M-9.3 [Preferred Parking] in the Mobility Element.)

- COS-16.5: Transit-Center Development. Encourage compact development patterns along major transit routes.

The Project site is located within a Special Use Center smart growth area designated by the SANDAG Smart Growth Concept Map. The area is identified as an area where employment opportunities consist primarily of medical or educational facilities; that features low-, mid- and high-rise buildings; is dominated by one non-residential land use; and that draws from throughout the region/subregion. While this does not characterize the Proposed Project, the Project does comply with smart growth concepts. For example, the Project would consist of a mixed-use development, resulting in a favorable internal trip capture to reduce trips to areas outside the Project site. In addition, the Project is part of a development suite being considered for this location, specifically designed to provide a mix of uses when combined together. The Project location adjacent to other projects (i.e., Palomar College, Campus Park, and Meadowood) would result in additional capture in the immediate area by locating housing closer to retail, services, schools, and jobs, thereby further reducing regional vehicle trips.

Regarding Policies 16.1, 16.2, and 16.5, the Project site is located near a future transit node to be built within the I-15/SR-76 quadrant, towards which Campus Park West would provide a fair share contribution. Minimum transit service characteristics associated with a Special Use Center is light rail/rapid bus. According to the 2050 RTP, the northeastern quadrant of I-15 and SR-76 is planned for Bus Rapid Transit and High Frequency Local bus service, both to be phased in by 2020. In addition, the mixed-use development proposed on site inherently is aimed at reducing

automobile trips (single-occupancy or otherwise) and being pedestrian and bicycle friendly. While not specific to the Proposed Project, the County recently updated the County-wide bikeway system as part of the update to the General Plan. Consistent with the County-wide bikeway system, appropriate bike opportunities (bike lanes and bike parking facilities) have been incorporated into the Project design. Class II or III bike lanes are proposed along all of the proposed internal roads, including Pankey Road. The Project also would provide bicycle racks throughout the development to help promote the use of bicycles. The Project Applicant would work with applicable transit authorities to promote transit service with bus turnouts serving the Proposed Project. In addition, Project pathways and sidewalks proposed throughout much of the Campus Park West development would provide easy accessibility to public transportation. Regarding Policy 16.3, the Project Applicant would not develop specific business uses within the development. As a result, the Project cannot commit to provisions of incentives for the use of zero- and low-emission vehicles and equipment upon site buildout. Because the Project anticipates that larger businesses would occupy some of the commercial space, however, it is likely that future on-site businesses could provide such programs and opportunities for their employees. The potential for such programs would be consistent with anticipated buildout and would not be prohibited by site design.

In summary, the Proposed Project incorporates and would facilitate smart growth principles and alternative transportation, including bicycle paths and transit facilities. The Project would be located near and would contribute to a future transit node within the I-15/SR-76 quadrant. As a result, the Project would be consistent and not conflict with the policies of the County's General Plan Open Space and Conservation Element Goal 16, Sustainable Mobility, which requires "transportation and mobility systems that contribute to environmental and human sustainability and minimize GHG and other air pollutant emissions." For these reasons, impacts to alternative transportation would be **less than significant**.

2.3.3 Cumulative Impact Analysis

Other future development projects in the vicinity of the Proposed Project have the potential to contribute additional vehicle trips and traffic impacts to the same road segments and intersections as those evaluated in the Proposed Project traffic analysis. The impacts associated with the Proposed Project in combination with this cumulative traffic are addressed in two cumulative analysis scenarios: (1) Existing Plus Cumulative Plus Project, in which existing traffic plus cumulative traffic projected to occur through Project buildout are combined with Proposed Project traffic and the Project's contribution to the impacts assessed, and (2) Year 2030 Plus Project, in which long-range 2030 traffic forecasts (prepared at SANDAG using the Series 10 Year 2030 model) are combined with Proposed Project traffic and the Project's contribution to the impacts assessed.

Cumulative projects were accounted for through a General Plan summary approach where SANDAG provided a Series 10 Year 2030 model that included all cumulative projects that are consistent with the current land use plan, all cumulative projects that will require a variance, such as a GPA, and all casino projects that have been submitted to the County. This cumulative traffic model approach was utilized by the County for the 2011 General Plan.

The reader should note that the cumulative analysis presented below is a conservative analysis in that it likely overstates impacts because it includes all of the traffic projected to result from cumulative projects but it does not assume that the mitigation (i.e., roadway improvements) proposed by these other projects are in place. In other words, the analysis is conservative because the projected roadway conditions that provide the basis for analysis do not include all roadway improvements likely to be constructed during the intervening years. (The reader should also note that the development applications submitted to the County for approval, and included as part of the analysis as projected cumulative conditions, frequently assume higher densities [with higher associated traffic generation] than what is ultimately permitted during project approvals.)

2.3.3.1 *Existing Plus Cumulative Plus Project Impacts*

Roadway improvements, the Pala Mesa Drive extension from Old Highway 395 to SR-76 (by the Campus Park and Meadowood projects), the construction of Pankey Place between Pankey Road and Horse Ranch Creek Road (by the Campus Park and Meadowood projects), and the construction of Horse Ranch Creek Road between Stewart Canyon Road and SR-76 (by the Palomar College, Campus Park and Meadowood projects) were incorporated into the cumulative analysis. These configurations are shown on Figure 2.3-11, Existing Plus Cumulative Plus Project Roadway Segment Conditions, and Figure 2.3-12, Existing Plus Cumulative Plus Project Intersection Conditions. Other roadway improvements also are planned by the Pala Tribe and Caltrans; however, in order to be conservative (provide a "worst-case" analysis) these improvements were not assumed to be present.

Road Segments

As shown on Figure 2.3-13, Existing Plus Cumulative Plus Project Average Daily Traffic – Roadway Segments, as well as Table 2.3-13, Roadway Segment Operations Under Existing and Existing Plus Cumulative Plus Project Conditions, eight roadway segments would operate at an unacceptable LOS in the Existing Plus Cumulative Plus Project scenario. The Proposed Project traffic in conjunction with cumulative traffic would exceed the ADT limits above levels indicated in Matrix 1, above, at each of these roadway segments that would operate at unacceptable levels (LOS E or F), and exceed the 200 or 100 ADT contribution threshold for LOS E and F, respectively. Cumulative impacts to the following eight roadway segments would be significant **(Impact TR-6)**:

- Five segments of Old Highway 395 from East Mission Road to SR-76 (LOS E and F)
- Old Highway 395 from Dulin Road to West Lilac Road (LOS E)
- Reche Road from Live Oak Park Road to Gird Road (LOS E)
- Pala Mesa Drive from Wilt/Sage Road to Old Highway 395 (LOS E)

State Route Segments

As shown on Figure 2.3-13, as well as Table 2.3-14, State Route Segment Operations Under Existing and Existing Plus Cumulative Plus Project Conditions, 12 segments of SR-76 would operate at an unacceptable LOS in the Existing Plus Cumulative Plus Project scenario. The

Proposed Project traffic in conjunction with cumulative traffic would result in **significant** impacts to the following 12 segments of SR-76 **(Impact TR-7)**:

- Nine segments from Melrose Drive to I-15 SB ramps (LOS F)
- Two segments from Rice Canyon Road to Pala Mission Road (LOS F)

Under the Existing Plus Cumulative Plus Scenario 2 condition shown in Table 2.3-11, **Scenario 2** would affect three state route segments and one roadway segment. The addition of **Scenario 2** trips would constitute an incremental change that would result in no change to the CEQA identification of significant impacts to these four segments under **Scenario 1**. Consistent with the conclusion drawn for **Scenario 1** for the following segment of SR-76, **Scenario 2** also would result in a **significant impact** to the SR-76 segment from Old Highway 395 to I-15 SB Ramps **(Impact TR-7a).**

No additional cumulative impacts would occur in the study area with the addition of Scenario 2 traffic.

Freeway Segments

As shown on Figure 2.3-13, as well as Table 2.3-15, Freeway Segment Operations Under Existing and Existing Plus Cumulative Plus Project Conditions, all analyzed freeway segments would operate at LOS C or better (acceptable levels are LOS A through D) during peak periods in both directions with the addition of cumulative and Proposed Project traffic. Therefore, cumulative impacts to freeway segments would be **less than significant**.

Signalized Intersections

Figure 2.3-14, Existing Plus Cumulative Plus Project Peak Period Traffic Volumes – Intersections, illustrates the ADT for each intersection analyzed in the Existing Plus Cumulative Plus Project condition. Under this scenario, 11 signalized intersections (including the two ILV freeway ramps within the study area) would operate at an unacceptable LOS (E or F) with an increase in delay of greater than two seconds (Table 2.3-16, Intersection Operations Under Existing and Existing Plus Cumulative Plus Project conditions). The Proposed Project, along with other cumulative projects, would cause **significant** cumulative impacts to the following 11 signalized intersections **(Impact TR-8a)**:

- East Mission Road/Old Highway 395 (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- Mission Road/I-15 SB ramps (LOS F during the p.m. peak period)
- Mission Road/I-15 NB ramps (LOS F during the p.m. peak period)
- SR-76/East Vista Way (LOS F during the a.m. and p.m. peak periods)
- SR-76/North River Road (LOS E during the p.m. peak period)
- SR-76/Olive Hill Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/South Mission Road (LOS E during the p.m. peak period)
- SR-76/Gird Road (LOS E during the p.m. peak period)
- SR-76/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)

- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

Under the Existing Plus Cumulative Plus Scenario 2 condition shown in Table 2.3-12, **Scenario 2** would affect four intersections. The addition of **Scenario 2** trips would constitute an incremental change that would result in no change to the CEQA identification of significant impacts to these four intersections under **Scenario 1**. Consistent with the conclusion drawn for **Scenario 1** for the following two intersections, **Scenario 2** also would result in **significant impacts** to these intersections **(Impact TR-8b)**:

- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

No additional cumulative impacts would occur in the study area with the addition of Scenario 2 traffic.

Unsignalized Intersections

Under the Existing Plus Cumulative Plus Project scenario, nine unsignalized intersections would operate at an unacceptable LOS (E or F) with an increase in delay of greater than two seconds (Table 2.3-16). The Proposed Project, along with other cumulative projects, would cause **significant** cumulative impacts to the following unsignalized intersections **(Impact TR-9)**:

- Reche Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Stewart Canyon Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Pala Mesa Drive/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- SR-76/Via Monserate Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Sage Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Pankey Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Rice Canyon Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Couser Canyon Road (LOS F during the a.m. and p.m. peak periods)
- Dulin Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)

2.3.3.2 *Year 2030 Plus Project Impacts*

The Year 2030 traffic analysis evaluated long-term future traffic conditions in the Project area, wherein the Proposed Project land uses are more traffic-intense than the General Plan land uses approved for the Project site. As such, the 2030 analysis presented below is a "plan to plan" comparison of the existing General Plan operations to the Proposed Project operations. The analysis evaluated whether the increased traffic intensity associated with the proposed General Plan Amendment would prevent the planned General Plan Mobility Element road network from operating at its planned LOS.

It should be noted that the General Plan land uses and densities are generalized, and quantified in either dwelling units (units) or acres. The Proposed Project (General Plan Amendment) land uses have been further quantified into specific uses and square footages (Table 2.3-10) for the purposes of the specific near-term impact analyses. For this plan-to-plan comparison, the Proposed Project has been translated into the same general units as used in the General Plan in order to provide direct comparison.

The Year 2030 roadway conditions assumed in the analysis below are illustrated in Figure 2.3-15, Buildout (Year 2030) General Plan Roadway Segment Conditions, and Figure 2.3-16, Buildout (Year 2030) General Plan Amendment Roadway Segment Conditions. The traffic generation summary for the approved General Plan land uses and densities are shown in Table 2.3-17, General Plan Land Uses Trip Generation. Table 2.3-18, General Plan Amendment Trip Generation, shows the traffic generation summary for the Proposed Project, using the same units as described above for the General Plan.

A comparison of Tables 2.3-15 and 2.3-16 shows that the General Plan Amendment-related increase in traffic volume over the approved General Plan is 2,068 trips, with 380 additional a.m. peak period trips and 210 additional p.m. peak period trips. In this assessment, no differences in the Mobility Element roadway classifications or capacities were assumed between the two scenarios, except for Pankey Road, which is proposed to be reclassified to a Boulevard series roadway as part of the Proposed Project. A capacity of 30,000 ADT, therefore, was assumed for this roadway in both scenarios.

The volumes in the buildout Series 10 General Plan traffic model for the Fallbrook area reflect the approved General Plan, and this model is also used to inform the County's decision making on Mobility Element roadway classifications as well as the Traffic Impact Fee (TIF) calculations for the area. To determine the effects of the proposed General Plan Amendment (i.e., the increase in 2,068 ADT), the difference between the two projects was calculated for each road segment.

Year 2030 Segment Operations: Adopted General Plan versus Proposed General Plan Amendment Land Uses

Table 2.3-19, Year 2030 Street Segment Operations: General Plan and General Plan Amendment, shows a comparison of the street segment operations between the approved General Plan and proposed General Plan Amendment (Proposed Project) land uses and densities, assuming the same network. Any changes in LOS between the two are attributable directly to proposed changes in land use associated with the General Plan Amendment. As shown in the table, the proposed General Plan Amendment would not result in the degradation of any roadways to worse than LOS D.

2.3.4 Significance of Impacts Prior to Mitigation

Prior to mitigation and under roadway conditions that do not include future roadway improvements that would be made by cumulative development, the Proposed Project would

result in the following significant direct and cumulative impacts to a number of roadway and state route segments and intersections (both signalized and unsignalized):

Direct Impacts

Impact TR-1 Under Existing Plus Project conditions, potential significant direct temporary impacts could occur along four segments of SR-76 from South Mission Road to Old Highway 395. Caltrans' SR-76 East Project (TransNet SR-76 Widening) is currently under construction and will improve these four segments to four lanes by 2017. If the Proposed Project were to be occupied prior to completion of these improvements, a short-term, unmitigated impact would occur until Caltrans completes the SR-76 East Project.

Impact TR-2 Under Existing Plus Project conditions, significant direct impacts would occur at the SR-76/I-15 SB ramps signalized intersection (LOS F during the p.m. peak period).

Impact TR-2a Under Existing Plus Scenario 2 conditions, significant direct impacts would occur at the SR-76/I-15 SB ramps signalized intersection (LOS F during the p.m. peak period).

Impact TR-3 Under Existing Plus Project conditions, significant direct impacts would occur at the SR-76/I-15 NB ramps signalized intersection (LOS F during the p.m. peak period).

Impact TR-3a Under Existing Plus Scenario 2 conditions, significant direct impacts would occur at the SR-76/I-15 NB ramps signalized intersection (LOS F during the p.m. peak period).

Impact TR-4 Under Existing Plus Project conditions, significant direct impacts would occur at the Reche Road/Old Highway 395 unsignalized intersection (LOS F during the a.m. and p.m. peak period).

Impact TR-5 Under Existing Plus Project conditions, significant direct impacts would occur at the SR-76/Pankey Road unsignalized intersection (LOS F during the a.m. and p.m. peak period).

Cumulative Impacts

Impact TR-6 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts along eight analyzed roadway segments, including:

- Five segments of Old Highway 395 from East Mission Road to SR-76 (all LOS E, except the segment from Reche Road to Stewart Canyon Road which is LOS F)

- Old Highway 395 from Dulin Road to West Lilac Road (LOSE)
- Reche Road from Live Oak Park Road to Gird Road (LOS E)
- Pala Mesa Drive from Wilt/Sage Road to Old Highway 395 (LOS E)

Impact TR-7 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts along 11 segments of SR-76, including:

- Nine segments from Melrose Drive to I-15 SB ramps (LOS F)
- Rice Canyon Road to Couser Canyon Road (LOS F)
- Couser Canyon Road to Pala Mission Road (LOS F)

Impact TR-7a Under Existing Plus Cumulative Plus Scenario 2 conditions, the Proposed Project would contribute to significant cumulative impacts along the segment of SR-76 from Old Highway 395 to I-15 SB Ramps.

Impact TR-8a Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts at the following 11 signalized intersections:

- East Mission Road/Old Highway 395 (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- Mission Road/I-15 SB ramps (LOS F during the p.m. peak period)
- Mission Road/I-15 NB ramps (LOS F during the p.m. peak period)
- SR-76/East Vista Way (LOS F during the a.m. and p.m. peak periods)
- SR-76/North River Road (LOS E during the p.m. peak period)
- SR-76/Olive Hill Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/South Mission Road (LOS E during the p.m. peak period)
- SR-76/Gird Road (LOS E during the p.m. peak period)
- SR-76/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

Impact TR-8b Under Existing Plus Cumulative Plus Scenario 2 conditions, the Proposed Project would contribute to significant cumulative impacts at the following two signalized intersections:

- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

Impact TR-9 Under Existing Plus Cumulative Plus Project conditions, the Proposed Project would contribute to significant cumulative impacts at the following nine unsignalized intersections:

- Reche Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Stewart Canyon Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Pala Mesa Drive/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- SR-76/Via Monserate (LOS F during the a.m. and p.m. peak periods)
- SR-76/Sage Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Pankey Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Rice Canyon Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Couser Canyon Road (LOS F during the a.m. and p.m. peak periods)
- Dulin Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)

2.3.5 Mitigation

As enumerated in Section 2.3.4, the Proposed Project would result in significant direct and cumulative impacts to local roadway and state route segments, as well as intersections. Mitigation measures proposed to address Project-specific impacts, as well as the Project contribution to cumulative impacts are identified below.

The County has adopted a TIF Ordinance (April 2005, updated January 2008 and October 2012). The ordinance enables the County to implement TIF programs. The TIF Program requires payment of fees that constitute a proposed project's fair share contribution towards the construction costs of the planned transportation facilities that are affected by the proposed development. The TIF fees are collected as a condition of approval of a subdivision or prior to issuance of a development permit, including (and most typically) a building permit.

The TIF Program provides a mechanism for mitigating the impacts created by future growth within the unincorporated area. The TIF is offered to developers to facilitate compliance with the CEQA mandate that development projects mitigate their indirect, cumulative traffic impacts. The TIF Program assesses the fee on all new development that would result in new/added traffic. The primary purpose of the TIF is twofold: (1) to fund the construction of identified roadway facilities needed to reduce, or mitigate, projected cumulative traffic impacts resulting from future development within the County; and (2) to allocate the costs of these roadway facilities proportionally among future developing properties based upon their individual cumulative traffic impacts.

Cumulative impacts are those impacts caused collectively by all development within the community. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time (CEQA Guidelines §15355). The CEQA Guidelines

recognize that mitigation for cumulative impacts may involve the adoption of ordinances or regulations (CEQA Guidelines §15130) such as the County-adopted TIF Program.

TIF funds are collected into 23 local Community Planning Area accounts, three regional accounts, and three regional freeway ramp accounts. TIF funds are only used to pay for improvements to roadway facilities identified for inclusion in the TIF Program, which include both County roads and Caltrans highway facilities. TIF funds collected for a specific local or regional area must be spent in the same area. For example, the TIF collected in the North Region TIF account may only be used for improvements to TIF facilities in the North Region. By ensuring TIF funds are spent for the specific roadway improvements identified in the TIF Program, the CEQA mitigation requirement is satisfied and the Mitigation Fee Act nexus is met.

As part of the TIF Program process, the transportation infrastructure needs are characterized as one of the following: existing deficiencies; direct impacts of future development; or indirect (cumulative) impacts of future development. Existing roadway deficiencies are the responsibility of existing developed land uses and government agencies, and cannot be financed with impact fees. The TIF Program is not intended to mitigate direct impacts that will continue to be the responsibility of individual development projects. Therefore, the TIF Program is only designed to address the cumulative impacts associated with new growth.

Recognizing that an individual development project is not wholly responsible for cumulative traffic impacts, each development project is required to mitigate in proportion to the project's estimated traffic generation. The TIF Program enables projects to achieve CEQA compliance by paying a fair share toward the cost of improving roads in the future as the levels of service become unacceptable due to the increased traffic volume caused by the cumulative impacts of various developments. The County's TIF Program goes into great detail in identifying anticipated development, roads affected, roadway costs, and existing and projected levels of service on those roads. As sufficient funds become available, the County will implement the improvements for which it has committed.

2.3.5.1 *Mitigation for Direct Significant Impacts*

M-TR-1 Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening), which will improve these segments to four lanes by 2017 and mitigate the Project's direct impacts. In addition the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over build out of the Project.

M-TR-2 and 2a and M-TR-3 and 3a Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening) and has completed improvements to the SB and NB ramp intersections identified in these impacts. In addition the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over build out of the Project.

M-TR-4 A traffic signal warrant analysis will be performed prior to construction of the first unit to determine the need for a traffic signal. The Project Applicant shall install a

traffic signal at Reche Road/Old Highway 395 based on the warrant analysis and final engineering to the satisfaction of the Director of PDS.

M-TR-5 Development of the Project will require signalization, widening and improvement of the SR-76/Pankey Road intersection, as follows:

- NB approach: provide two left lanes, one through lane and one right lane
- SB approach: provide one left lane, one through lane and two right lanes (with overlap phase)
- EB approach: provide two left lanes, two through lanes and one right lane
- WB approach: provide one left lane, one through lane and one right lane

2.3.5.2 *Mitigation for Cumulative Significant Impacts*

M-TR-6 Payment of the TIF is the Proposed Project's mitigation responsibility to this road segments impact.

M-TR-7 and 7a Payment of the TIF is the Proposed Project's mitigation responsibility to this SR-76 segments impact.

M-TR-8a and 8b Payment of the TIF is the Proposed Project's mitigation responsibility to this signalized intersections impact.

M-TR-9 Payment of the TIF is the Proposed Project's mitigation responsibility to this unsignalized intersections impact.

2.3.6 Conclusion

Development of the Proposed Project would result in potentially significant direct and cumulative traffic impacts to a number of study area road segments and intersections. As mentioned above, the Project would have direct impacts to 4 roadway segments and 3 intersections, and cumulative impacts to 8 roadway segments, 12 state route segments, and 19 intersections.

Direct segment impacts addressed under TR-1 and direct intersection impacts TR-2, TR-2a, TR-3, TR-3a, TR-4, and TR-5 are associated with segments being addressed by the SR-76 East roadway widening project, which is currently under construction and scheduled for completion in 2017. If the residential, commercial, office or industrial components in Campus Park West are occupied before Caltrans completes the SR-76 East project, the Proposed Project would result in a temporary (short-term), unmitigated impact to certain segments of SR-76 until Caltrans completes the SR-76 East project. If the ongoing SR-76 East widening is completed prior to Project implementation, no significant direct temporary Project impacts would occur. The mitigation for impacts to SR-76 from South Mission Road to Old Highway 395 (widening SR-76) would improve the LOS along these segments to acceptable levels, thereby mitigating the impact to a less than significant level. The improvements to the SR-76/I-15 ramp signalized intersections would improve the operation of these intersections to acceptable levels, thereby

mitigating the impact to a less than significant level. The changes or alterations to SR-76 needed to mitigate the impacts are within the responsibility and jurisdiction of another government agency, Caltrans, and Caltrans is constructing them (SR-76 East project). These improvements to a state highway are outside the jurisdiction of the County.

Direct impacts to Reche Road/Old Highway 395 (TR-4) would require signalization of that intersection. Direct impacts to SR-76/Pankey Road (TR-5) would require signalization, widening, and additional improvements. These improvements would control vehicular movements, ensuring that traffic from minor roads such as Reche Road/all directions could enter the intersections. This would balance queuing on any one approach, reduce intersection overall delay (wait time), and result in improved intersection LOS. The proposed improvements would improve the intersections to operate at acceptable levels, thereby adequately mitigating the impacts.

With regard to the Proposed Project's cumulative impacts to roadway and state route segments and associated intersections (TR-6 through TR-9), the Project would mitigate impacts through payment to the County's TIF Program. The TIF Program is designed to address cumulative traffic impacts to roads throughout the unincorporated area that would result from development in accordance with the County General Plan. The Program covers roads that will be improved using TIF Program funds that the County collects from new development at the building permit stage, as well as describing roads that will be improved using other sources of funds, such as Gas Tax, TransNet, state and federal grants, and private development improvements. If a project, such as Campus Park West, includes amendments to the General Plan and that project is approved, the TIF Program should be updated to account for the changes to the General Plan. The update would include revising the TIF Program fees. Since the TIF Program was designed to address cumulative impacts and the associated appropriate payment for specified improvements, and the County will undertake a Program update to incorporate this Project, participation in the TIF Program constitutes effective and adequate mitigation for this issue. With participation in the TIF Program, the Proposed Project would reduce cumulative impacts to below a level of significance.

Table 2.3-1
LEVEL OF SERVICE THRESHOLDS FOR ROADWAY SEGMENTS

Street Classification	Lanes	Cross Sections (Approx.)[1]	LOS with ADT[2]				
			A	B	C	D	E
Expressway	6 lanes	102-160/122-200	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6 lanes	102-108/122-128	25,000	35,000	50,000	55,000	60,000
Major Arterial	6 lanes	102/122	20,000	28,000	40,000	45,000	50,000
Major Arterial	4 lanes	78-82/98-102	15,000	21,000	30,000	35,000	40,000
Secondary Arterial/Collector	4 lanes	64-72/84-92	10,000	14,000	20,000	25,000	30,000
Collector (no center lane) (continuous left-turn lane)	 4 lanes 2 lanes	 64/84 50/70	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 lanes	40/60	4,000	5,500	7,500	9,000	10,000
Collector (commercial-industrial fronting)	2 lanes	50/70	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 lanes	40/60	2,500	3,500	5,000	6,500	8,000
Collector (single-family)	2 lanes	36/56	--	--	2,200	--	--

Source: SANDAG 2006
[1] Curb to curb width/right of way width (feet); based upon the City of San Diego Street Manual and other jurisdictions within the San Diego region.
[2] Approximate recommended ADT based upon the City of San Diego Street Design Manual.

Table 2.3-2
LEVEL OF SERVICE THRESHOLDS FOR STATE ROUTES

Measure of Effectiveness	LOS A – C	LOS D	LOS E	LOS F
Volume/Capacity Ratio	0.00 – 0.70	0.71 – 0.85	0.86 – 0.99	> 1.00

Source: SANDAG 2006

Table 2.3-3
LEVEL OF SERVICE THRESHOLDS FOR FREEWAYS

Measure of Effectiveness	LOS A – C	LOS D	LOS E	LOS F
Volume/Capacity Ratio	0.00 – 0.79	0.80 – 0.92	0.93 – 1.00	> 1.00

Source: SANDAG 2006

Table 2.3-4
LEVEL OF SERVICE THRESHOLDS FOR INTERSECTIONS

Signalized Vehicles Total Control Delay Per Vehicle*	Unsignalized Intersections Average Control Delay per Vehicle*	LOS
0 – 10	0 – 10	A
10 – 20	10 – 15	B
20 – 35	15– 25	C
35– 55	25– 35	D
55 – 80	35– 50	E
more than 80	more than 50	F

Source: Highway Capacity Manual 2000
*Delay measured in seconds per vehicle

Table 2.3-5
ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project		Δ [d]	Sig?
		ADT [b]	LOS [c]	ADT	LOS		
Old Highway 395							
East Mission Road to Reche Road	22,900	5,500	B	8,020	C	2,520	No
Reche Road to Stewart Canyon Road	22,900	6,200	C	11,480	D	5,260	No
Stewart Canyon Road to Tecalote Lane	22,900	6,900	B	13,390	D	6,490	No
Tecalote Lane to Pala Mesa Drive	22,900	7,100	B	13,810	D	6,710	No
Pala Mesa Drive to SR-76 (Pala Road)	22,900	8,000	C	8,490	C	490	No
SR-76 (Pala Road) to Dulin Road	22,900	5,000	B	5,080	B	80	No
Dulin Road to W. Lilac Road	22,900	4,900	B	7,080	C	2,180	No
Reche Road							
Green Canyon Norte to Live Oak Park Road	19,000	10,900	D	12,480	D	1,560	No
Live Oak Park Road to Gird Road	19,000	11,100	D	12,660	D	1,560	No
Gird Road to Wilt Road	19,000	9,100	C	11,260	D	2,160	No
Wilt Road to Tecalote Road	19,000	8,400	C	11,140	D	2,740	No
Tecalote Road to Old Hwy 395	19,000	8,100	C	10,850	D	2,750	No
Stewart Canyon Road							
Old Hwy 395 to Horse Ranch Creek Road	16,200	900	A	1,920	B	1,020	No
Pankey Road							
Pala Mesa Drive to Project Driveway # 2	16,200	*DNE*	–	7,600	A	7,600	No
Project Driveway # 2 to Project Driveway # 3	30,000	*DNE*	–	10,160	A	10,160	No
Project Driveway # 3 to Project Driveway # 4	30,000	*DNE*	–	13,450	A	13,450	No
Project Driveway # 4 to Project Driveway # 5	30,000	*DNE*	–	19,050	B	19,050	No
Project Driveway # 5 to Pankey Place	30,000	*DNE*	–	21,830	C	21,830	No
Pankey Place to SR-76 (Pala Road)	30,000	*DNE*	–	16,160	A	16,160	No
SR-76 (Pala Road) to Shearer Crossing	30,000	3,700	A	9,000	A	5,300	No
Shearer Crossing to Old Highway 395	16,200	3,700	B	5,880	A	2,180	No

Table 2.3-5 (cont.)
ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project		Δ [d]	Sig?
		ADT [b]	LOS [c]	ADT	LOS		
Pala Mesa Drive							
Wilt/Sage Road to Old Highway 395	9,700	600	A	2,440	A	1,840	No
Old Highway 395 to Pankey Road	16,200	*DNE*	–	6,370	C	6,370	No
Pankey Place							
Pankey Road to Horse Ranch Creek Road	16,200	*DNE*	–	*DNE*	–	–	No
Horse Ranch Creek Road							
North of SR-76 (Pala Road)	32,500	*DNE*	–	*DNE*	–	–	No

Source: LLG 2014
a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C).
b. Average Daily Traffic
c. Level of Service
d. Δ denotes an increase in ADT due to project traffic.
General Notes:
DNE – Does not exist

Table 2.3-6
STATE ROUTE SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project		Δ [d]	Sig?
		ADT [b]	LOS [c]	ADT	LOS		
SR-76 (Pala Road)							
Melrose Drive to E. Vista Way	37,000	28,800	C	29,950	D	1,150	No
E. Vista Way to N. River Road	37,000	32,500	D	34,080	E	1,580	No [e]
North River Road to Olive Hill Road	37,000	32,500	D	34,550	E	2,050	No [e]
Olive Hill Road to South Mission Road	37,000	36,100	E	38,400	F	2,300	No [e]
South Mission Road to Via Monserate	22,900	22,400	E	**26,070**	**F**	**3,670**	**Yes**
Via Monserate to Gird Road	22,900	25,600	F	**29,270**	**F**	**3,670**	**Yes**
Gird Road to Sage Road	22,900	22,900	E	**27,170**	**F**	**4,270**	**Yes**
Sage Road to Old Highway 395	22,900	22,700	E	**26,970**	**F**	**4,270**	**Yes**
Old Highway 395 to I-15 Southbound Ramps	37,000	26,500	C	30,710	D	4,210	No
I-15 Northbound Ramps to Pankey Road	37,000	10,600	A	33,230	D	22,630	No
Pankey Road to Horse Ranch Creek Road	37,000	10,300	A	12,470	A	2,170	No
Horse Ranch Creek Road to Rice Canyon Road	22,900	10,000	A	12,170	B	2,170	No
Rice Canyon Road to Couser Canyon Road	22,900	9,800	A	11,970	A	2,170	No
Couser Canyon Road to Pala Mission Road	22,900	9,400	A	10,710	A	1,310	No

Source: LLG 2014
a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C).
b. Average Daily Traffic
c. Level of Service
d. Δ denotes an increase in ADT due to project traffic.
e. This 4-lane segment is not considered to be significantly impacted due to acceptable arterial operations (LOS D or better) during the peak hours. See Appendix G for details.

Table 2.3-7
FREEWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Freeway Segment	Direction & Number of Lanes[a]	Capacity[b]	Existing						Existing + Project						Δ[c]		Significant?	
			Volume		V/C		LOS		Volume		V/C		LOS					
			AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Interstate 15																		
Rainbow Valley Blvd. to Mission Road	NB Mainlines 4M	9,400	2,062	5,948	0.219	0.633	A	C	2,149	6,199	0.229	0.659	A	C	0.010	0.026	No	No
	SB Mainlines 4M		5,841	3,139	0.621	0.334	C	A	5,987	3,330	0.637	0.354	C	A	0.016	0.020	No	No
Mission Road to SR-76	NB Mainlines 4M	9,400	1,705	5,621	0.181	0.598	A	B	1,758	5,798	0.187	0.617	A	B	0.006	0.019	No	No
	SB Mainlines 4M		5,310	2,898	0.565	0.308	B	A	5,370	3,023	0.571	0.322	B	B	0.006	0.014	No	No
SR-76 to Old Highway 395	NB Mainlines 4M	9,400	1,484	5,422	0.158	0.577	A	B	1,644	5,680	0.174	0.604	A	B	0.016	0.027	No	No
	SB Mainlines 4M		5,278	2,752	0.561	0.293	B	A	5,395	2,972	0.574	0.316	B	A	0.013	0.023	No	No

Source: LLG 2014
a. ADT Volumes, K, D and truck factors referenced from SR-76 East Project completed by *LLG Engineers for Caltrans* (March 2009).
b. Capacity based on 2,350 vehicles/hour/lane for mainlines and 1,200 vehicles/hour/lane for auxiliary lanes.
c. Δ denotes an increase in V/C due to project traffic volumes.
General Notes:
Bold typeface indicates segments calculated to operate at LOS E or F.

LOS	V/C
A	<0.41
B	0.62
C	0.8
D	0.92
E	1
F(0)	1.25
F(1)	1.35
F(2)	1.45
F(3)	>1.46

Table 2.3-8
ILV OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Intersection	Peak Hour	Existing		Existing + Project	
		Total Operating Level (ILV/Hr)	Capacity	Total Operating Level (ILV/Hr)	Capacity
SR-76 / I-15 Southbound Ramps	AM	937	Under	1,267	Near
	PM	1,247	Near	1,983	Over
SR-76 / I-15 Northbound Ramps	AM	733	Under	1,244	Near
	PM	1,276	Near	2,124	Over

Source: LLG 2014
General Notes:
1. ILV – Intersection Lane Volume

Status	
≤ 1,200 ILV/hr	Under Capacity
> 1,200 ≤ 1,500 ILV/hr	Near Capacity
> 1,500 ILV/hr	Over Capacity

Table 2.3-9
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
1. E. Mission Road/Old Hwy 395	Signal	AM	24.7	C	29.0	C	4.3	No
		PM	77.0	E	78.8	E	1.1	No
2. Mission Road/I-15 SB Ramps	Signal	AM	27.6	C	31.0	C	3.4	No
		PM	53.3	D	54.4	D	1.1	No
3. Mission Road/I-15 NB Ramps	Signal	AM	28.8	C	29.6	C	0.8	No
		PM	27.0	C	41.2	D	17.5	
4. Reche Road/Green Canyon Norte	Signal	AM	13.1	B	13.5	B	0.4	No
		PM	10.5	B	11.0	B	0.5	
5. Reche Road/Live Oak Park Road	TWSC[d]	AM	20.3	C	23.9	C	3.6	No
		PM	19.1	C	23.2	C	4.1	
6. Reche Road/Gird Road	Signal	AM	11.9	B	13.3	B	1.4	No
		PM	12.4	B	14.7	B	2.3	
7. Reche Road/Wilt Road	TWSC	AM	14.2	B	15.9	C	1.7	No
		PM	14.9	B	16.1	C	1.2	
8. Reche Road/Tecalote Road	TWSC	AM	13.4	B	15.6	C	2.2	No
		PM	15.3	C	20.0	C	4.7	
9. Reche Road/Old Hwy 395	TWSC	AM	33.0	D	**>100.1**	**F**	**>5.0**	**Yes**
		PM	60.0	F	**>100.1**	**F**	**>5.0**	
10. Stewart Canyon Road/Old Hwy 395	TWSC	AM	12.6	B	20.3	C	7.7	No
		PM	12.8	B	20.0	C	7.2	No
11. Stewart Canyon Road/ Horse Ranch Creek Road	TWSC	AM	8.6	A	8.8	A	0.2	No
		PM	5.7	A	7.3	A	1.6	
12. Pala Mesa Drive/Sage Road	TWSC	AM	8.9	A	8.9	A	0.0	No
		PM	8.9	A	8.9	A	0.0	
13. Pala Mesa Drive/Old Hwy 395	TWSC	AM	13.2	B	15.8	B	2.6	No
		PM	11.7	B	27.8	C	16.1	
14. SR-76/Melrose Drive	Signal	AM	22.4	C	22.7	C	0.3	No
		PM	12.4	B	12.7	B	0.3	
15. SR-76/E. Vista Way	Signal	AM	43.7	D	45.6	D	1.9	No
		PM	39.4	D	41.0	D	1.6	
16. SR-76/N. River Road	Signal	AM	14.9	B	18.1	B	3.2	No
		PM	19.0	B	22.8	C	3.8	
17. SR-76/Olive Hill Road	Signal	AM	32.3	C	33.4	D	1.1	No
		PM	62.4	E	62.4	E	1.6	No
18. SR-76/S. Mission Road	Signal	AM	11.5	B	13.0	B	1.5	No
		PM	10.8	B	13.4	B	2.6	
19. SR-76/Via Monserate Road	TWSC	AM	36.1	E	63.2	F	0	No[e]
		PM	50.9	F	111.0	F	0	
20. SR-76 Gird Road	Signal	AM	9.7	A	10.8	B	1.1	No
		PM	10.7	B	13.0	B	2.3	
21. SR-76/Sage Road	TWSC	AM	20.2	C	27.4	D	7.2	No
		PM	26.1	D	41.6	E	0	No[e]
22. SR-76/Old Hwy 395	Signal	AM	39.2	D	40.9	D	1.7	No
		PM	36.8	D	37.0	D	0.2	
23. SR-76/I-15 SB Ramps	Signal	AM	26.7	C	34.1	C	7.4	No
		PM	22.6	C	**>100.1**	**F**	**>80.1**	**Yes**

Table 2.3-9 (cont.)
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project		Δ[c]	Sig?
			Delay[a]	LOS[b]	Delay	LOS		
24. SR-76/I-15 NB Ramps	Signal	AM	29.1	C	34.5	C	2.8	No
		PM	50.1	D	**>100.1**	**F**	**>80.1**	**Yes**
25. Project Driveway #1/Pankey Road	TWSC	AM	*DNE*	–	8.4	A	–	No
		PM	*DNE*	–	9.4	A	–	
26. Pala Mesa Drive/Pankey Road	Signal	AM	*DNE*	–	10.2	B	–	No
		PM	*DNE*	–	13.7	B	–	
27. Project Driveway # 2/ Pankey Road	TWSC	AM	*DNE*	–	14.2	B	–	No
		PM	*DNE*	–	21.3	C	–	
28. Project Driveway # 3/Pankey Road	Signal	AM	*DNE*	–	12.8	B	–	No
		PM	*DNE*	–	19.0	B	–	
29. Project Driveway # 4/Pankey Road	Signal	AM	*DNE*	–	13.2	B	–	No
		PM	*DNE*	–	19.7	B	–	
30. Project Driveway # 5/Pankey Road	TWSC	AM	*DNE*	–	9.8	A	–	No
		PM	*DNE*	–	11.1	B	–	
31. Pankey Place/Pankey Road	TWSC	AM	*DNE*	–	*DNE*	–	–	No
		PM	*DNE*	–	*DNE*	–	–	
32. SR-76/Pankey Road	TWSC[f]	AM	12.2	B	**>100.1**	**F**	**>5.0**	**Yes**
		PM	11.8	B	**>100.1**	**F**	**>5.0**	
33. Project Driveway # 6/Pankey Road	Signal	AM	*DNE*	–	12.0	B	–	No
		PM	*DNE*	–	15.5	B	–	
34. SR-76/Horse Ranch Creek Road	Signal	AM	*DNE*	–	7.9	B	–	No
		PM	*DNE*	–	18.2	B	–	
35. SR-76/Rice Canyon Road	TWSC	AM	10.6	B	11.6	B	1.0	No
		PM	12.5	B	14.5	B	2.0	
36. SR-76/Couser Canyon Road	TWSC	AM	12.5	B	15.0	C	2.5	No
		PM	15.8	C	22.3	C	6.5	
37. SR-76/Pala Mission Road	Signal	AM	11.9	B	11.9	B	0.0	No
		PM	18.6	B	19.0	B	0.4	
38. Dulin Road/Old Highway 395	TWSC	AM	20.3	C	30.9	D	10.6	No
		PM	10.5	B	14.0	B	3.5	

Source: LLG 2014
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay due to project traffic volumes.
d. TWSC – Two-Way Stop Controlled Intersection. Project-related minor street vehicle totals reported.
e. The intersection is calculated to have no significant impacts as the project does not add trips to the critical movement.
f. Traffic Signal and intersection improvements are proposed in the Existing + Project scenarios. However, the intersection is analyzed as unsignalized to provide a conservative analysis.
General Notes:
Bold typeface indicates significant direct project impact.
DNE – Does not exist.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

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Table 2.3-10
PROPOSED PROJECT TRIP GENERATION

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
		Rate[a]	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
North of SR-76													
Area A – North of Pala Mesa Drive													
Office/Industrial	120,000 SF	20 /KSF	2,400	14%	9:1	302	34	336	13%	2:8	62	250	312
Internal Capture (30%)			720	14%	9:1	91	10	101	13%	2:8	19	75	94
Total External Trips			1,680	14%	9:1	211	24	235	13%	2:8	43	175	218
Primary External (100%)			**1,680**	0	9:1	**211**	**24**	235	0	2:8	**43**	**175**	218
Area B – Pala Mesa Drive to SR-76													
Retail – W. of Pankey Rd.	476,000 SF	50 /KSF	23,800	4%	7:3	666	286	952	9%	5:5	1,071	1,071	2,142
Internal Capture (30%)			7,140	4%	7:3	200	86	286	9%	5:5	322	321	643
Total External Trips			16,600	4%	7:3	466	200	666	9%	5:5	749	750	1,499
Primary External (100%)			**16,660**	0	7:3	**466**	**200**	666	0	5:5	**749**	**750**	1,499
Mixed Use Residential (Condominium) – W. of Pankey Rd.	35 Dwelling Units	8 /Dwelling	280	8%	2:8	5	18	23	10%	7:3	20	8	28
Internal Capture (30%)			84	8%	2:8	1	6	7	10%	7:3	6	3	9
Total External Trips			196	8%	2:8	3	13	16	10%	7:3	13	6	19
Primary External (100%)			**196**	8%	2:8	**3**	**13**	16	10%	7:3	**13**	**6**	19
Residential (Condominium) – E. of Pankey Rd.	252 Dwelling Units	8 /Dwelling	2,016	8%	2:8	32	130	162	10%	7:3	141	61	202
Internal Capture (30%)			605	8%	2:8	10	39	49	10%	7:3	43	18	61
Total External Trips (100%)			1,411	8%	2:8	23	90	113	10%	7:3	99	42	141
Primary External (100%)			**1,411**	8%	2:8	**23**	**90**	113	10%	7:3	**99**	**42**	141
South of SR-76													
Area C – South of SR-76													
Commercial – W. of Pankey Rd. Drive Through Restaurant	3,500 SF	650 /KSF	2,275	7%	5:5	80	80	160	7%	5:5	80	80	160
Internal Capture (30%)			0	7%	5:5	0	0	0	7%	5:5	0	0	0
Total External Trips			2,275	0	5:5	80	80	160	0	5:5	80	80	160
Primary External (51%)		**Primary (51%)**	1,159	0%	0	**41**	**41**	82	0	5:5	**41**	**41**	82
Diverted External (37%)		Diverted (37%)	841	7%	5:5	0	0	0	7%	5:5	30	29	59
Pass-By External (12%)		Pass-By (12%)	272	7%	5:5	0	0	0	7%	5:5	9	9	18

Table 2.3-10 (cont.)
PROPOSED PROJECT TRIP GENERATION

Land Use	Quantity	Daily Trip Ends (ADT)		AM Peak Hour					PM Peak Hour				
		Rate[a]	Volume	% of ADT	In:Out Split	Volume			% of ADT	In:Out Split	Volume		
						In	Out	Total			In	Out	Total
South of SR-76 (cont.)													
Retail – W. of Pankey Rd.	15,000 SF	40 / KSF	600	3%	6:4	11	7	18	9%	5:5	27	27	54
Internal Capture (30%)			0	3%	5:5	0	0	0	9%	5:5	0	0	0
Total External Trips			600	0	5:5	9	9	18	0	5:5	27	27	54
Primary External (45%)		**Primary (45%)**	269	0%	5:5	**9**	**9**	18	0	5:5	**13**	**12**	25
Diverted External (45%)		Diverted (45%)	239	3%	5:5	0	0	0	9%	5:5	11	11	22
Pass-By External (15%)		Pass-By (15%)	89	3%	5:5	0	0	0	9%	5:5	3	2	5
Commercial – E. of Pankey Rd. Drive Through Restaurant (est. based on GSF)	3,500 SF	650 /KSF	2,275	7%	5:5	80	80	160	7%	5:5	80	80	160
Internal Capture (30%)			0	7%	5:5	0	0	0	7%	5:5	0	0	0
Total External Trips			2,275	0	5:5	80	80	160	0	5:5	80	80	160
Primary External (51%)		**Primary (51%)**	**1,159**	0	5:5	80	80	160	0	5:5	**41**	**41**	82
Diverted External (37%)		Diverted (37%)	841	7%	5:5	0	0	0	7%	5:5	30	29	59
Pass-By External (12%)		Pass-By (12%)	272	7%	5:5	0	0	0	7%	5:5	9	9	18
Gas Station – E. of Pankey Rd.	16	160 /Fueling Space	2,560	7%	5:5	90	90	180	8%	5:5	103	102	205
Internal Capture (30%)			0	7%	5:5	0	0	0	8%	5:5	0	0	0
Total External Trips			2,560	0	5:5	108	72	180	0	5:5	103	102	205
Primary External (21%)		**Primary (21%)**	**537**	0	5:5	108	72	180	0	5:5	**22**	**21**	43
Diverted External (51%)		Diverted (51%)	1,305	7%	5:5	0	0	0	8%	5:5	53	52	105
Pass-By External (28%)		Pass-By (28%)	716	7%	5:5	0	0	0	8%	5:5	12	12	24
Trip Generation Summary													
Gross Trip Generation [c]			36,206	-	-	1,266	725	1,991	-	-	1,584	1,679	3,263
Average Internal Capture Reduction (average 30%)[d]			8,549	-	-	302	141	443	-	-	390	417	807
Total External Trips			27,657	-	-	980	568	1,548	-	-	1,194	1,262	2,456
Total Primary External Trips			**23,071**	**-**	**-**	**813**	**437**	**1,250**	**-**	**-**	**1,021**	**1,088**	**2,109**
Total Diverted External Trips			3,226	-	-	N/A	N/A	N/A	-	-	124	121	245
Total Pass-by External Trips			1,349	-	-	N/A	N/A	N/A	-	-	33	32	65

Source: LLG 2014
a. Trip Generation rates based on published SANDAG Trip Generation Rates (Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, 2002).
b. Pass-By trips only assumed for the Daily Trip Ends (ADT) and PM Peak Hour, for Parcels South of SR-76, per County/Caltrans 3-22-09 letter.
c. Total Trip Generation assumes no Pass-By or Diverted trip reductions.
d. A 30% Internal Capture reduction was applied to Gross Trip Generation for parcels located north of SR-76, per County/Caltrans 3-22-09 letter

Table 2.3-11
SCENARIO 2 STREET SEGMENT OPERATIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Scenario 2			Existing + Scenario 2 + Cumulative Projects			Sig?
		ADT [b]	LOS [c]	ADT	LOS	Δ [d]	ADT	LOS	Δ [e]	
SR-76 (Pala Road)										
Old Highway 395 to I-15 Southbound Ramps	37,000	26,500	C	30,860	D	4,360	**40,540**	**F**	**9,680**	**Yes**
I-15 Northbound Ramps to Pankey Road	37,000	10,600	A	28,369	C	17,769	30,559	D	2,190	No
Pankey Road to Horse Ranch Creek Road	37,000	10,300	A	12,526	A	2,226	30,226	D	17,700	No
Pankey Road										
Shearer Crossing to Old Highway 395	16,200	3,700	B	5,936	C	2,236	8,016	D	2,136	No

Source: LLG 2014
a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C).
b. Average Daily Traffic.
c. Level of Service.
d. Δ denotes an increase in ADT due to project traffic.
e. Δ denotes an increase in ADT due to cumulative project traffic.
General Notes:
Bold typeface indicates significant direct or cumulative project impact.

Table 2.3-12
SCENARIO 2 INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Scenario 2			Existing + Scenario 2 + Cumulative Projects			Sig?
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ[d]	
23. SR-76/ I-15 SB Ramps	Signal	AM	26.7	C	36.6	D	9.9	**79.5**	**E**	**42.9**	**Yes**
		PM	22.6	C	**114.3**	**F**	**>80.1**	**132.5**	**F**	**18.2**	**Yes**
24. SR-76/ I-15 NB Ramps	Signal	AM	29.1	C	43.7	D	14.6	**82.6**	**F**	**38.9**	**Yes**
		PM	50.1	D	**150.6**	**F**	**>80.1**	**167.1**	**F**	**16.5**	**Yes**
32. SR-76/ Pankey Road	Signal	AM	12.2	B	18.6	B	6.4	25.6	C	7.0	No
		PM	11.8	B	27.1	C	15.3	36.6	D	9.5	No
33. Pankey Road/ Driveway #4	Signal	AM	*DNE*	–	12.6	B	–	14.6	B	2.0	No
		PM	*DNE*	–	19.6	B	–	21.8	C	2.2	No

Source: LLG 2014

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay/vehicles due to project traffic.
d. Δ denotes an increase in delay/vehicles due to cumulative project traffic.
General Notes:
Bold typeface indicates significant direct or cumulative project impact.

SIGNALIZED

DELAY/LOS THRESHOLDS

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 20.0	B
20.1 to 35.0	C
35.1 to 55.0	D
55.1 to 80.0	E
≥ 80.1	F

Table 2.3-13
ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
		ADT [b]	LOS [c]	ADT	LOS	Δ [d]	ADT	LOS	Δ [e]	
Old Highway 395										
East Mission Road to Reche Road	22,900	5,500	B	8,020	C	2,520	**19,660**	**E**	**11,640**	**Yes**
Reche Road to Stewart Canyon Road	22,900	6,200	C	11,480	D	5,260	**33,940**	**F**	**22,460**	**Yes**
Stewart Canyon Road to Tecalote Lane	22,900	6,900	B	13,390	D	6,490	**17,060**	**E**	**3,670**	**Yes**
Tecalote Lane to Pala Mesa Drive	22,900	7,100	B	13,810	D	6,710	**18,820**	**E**	**5,010**	**Yes**
Pala Mesa Drive to SR-76 (Pala Road)	22,900	8,000	C	8,490	C	490	**19,520**	**E**	**11,030**	**Yes**
SR-76 (Pala Road) to Dulin Road	22,900	5,000	B	5,080	B	80	12,940	D	7,860	No
Dulin Road to W. Lilac Road	22,900	4,900	B	7,080	C	2,180	**17,600**	**E**	**10,520**	**Yes**
Reche Road										
Green Canyon Norte to Live Oak Park Road	19,000	10,900	D	12,480	D	1,560	13,480	D	1,000	No
Live Oak Park Road to Gird Road	19,000	11,100	D	12,660	D	1,560	**13,700**	**E**	**1,040**	**Yes**
Gird Road to Wilt Road	19,000	9,100	C	11,260	D	2,160	12,090	D	830	No
Wilt Road to Tecalote Road	19,000	8,400	C	11,140	D	2,740	11,930	D	790	No
Tecalote Road to Old Hwy 395	19,000	8,100	C	10,850	D	2,750	11,600	D	750	No
Stewart Canyon Road										
Old Hwy 395 to Horse Ranch Creek Road	16,200	900	A	1,920	B	1,020	8,240	D	6,320	No
Pankey Road										
Pala Mesa Drive to Project Driveway #2	16,200	*DNE*	–	7,600	A	7,600	11,330	A	3,730	No
Project Driveway #2 to Project Driveway #3	30,000	*DNE*	–	10,160	A	10,160	13,890	A	3,730	No
Project Driveway #3 to Project Driveway #4	30,000	*DNE*	–	13,450	A	13,450	17,180	A	3,730	No
Project Driveway #4 to Project Driveway #5	30,000	*DNE*	–	19,050	B	19,050	22,780	C	3,730	No
Project Driveway #5 to Pankey Place	30,000	*DNE*	–	21,830	B	21,830	25,560	D	3,730	No
Pankey Place to SR-76 (Pala Road)	30,000	*DNE*	–	16,160	B	16,160	17,030	A	870	No
SR-76 (Pala Road) to Shearer Crossing	30,000	3,700	A	9,000	A	5,300	13,960	A	4,960	No
Shearer Crossing to Old Highway 395	16,200	3,700	B	5,880	C	2,180	7,960	D	2,080	No

Table 2.3-13 (cont.)
ROADWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
Pala Mesa Drive										
Wilt/Sage Road to Old Highway 395	9,700	600	A	2,440	A	1,840	**11,270**	**E**	**9,430**	**Yes**
Old Highway 395 to Pankey Road	16,200	*DNE*	–	6,370	C	6,370	10,100	D	3,730	No
Pankey Place										
Pankey Road to Horse Ranch Creek Road	16,200	*DNE*	–	*DNE*	–	–	10,370	D	10,370	No
Horse Ranch Creek Road										
North of SR-76 (Pala Road)	32,500	*DNE*	–	*DNE*	–	–	21,920	D	21,920	No

Source: LLG 2014
a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C) with Project improvements.
b. Average Daily Traffic
c. Level of Service
d. Δ denotes an increase in ADT due to project traffic.
e. Δ denotes an increase in ADT due to cumulative project traffic.

Table 2.3-14
STATE ROUTE SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Street Segments	Existing Capacity (LOS E) [a]	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
		ADT [b]	LOS [c]	ADT	LOS	Δ [d]	ADT	LOS	Δ [e]	
SR-76 (Pala Road)										
Melrose Drive to E. Vista Way	37,000	28,800	C	29,950	D	1,150	**64,060**	**F**	**34,110**	**Yes**
E. Vista Way to N. River Road	37,000	32,500	D	34,080	E	1,580	**53,200**	**F**	**19,120**	**Yes**
North River Road to Olive Hill Road	37,000	32,500	D	34,550	E	2,050	**63,730**	**F**	**29,180**	**Yes**
Olive Hill Road to South Mission Road	37,000	36,100	E	38,400	F	2,300	**67,470**	**F**	**29,070**	**Yes**
South Mission Road to Via Monserate	22,900	22,400	E	26,070	F	3,670	**46,860**	**F**	**20,790**	**Yes**
Via Monserate to Gird Road	22,900	25,600	F	29,270	F	3,670	**46,760**	**F**	**17,490**	**Yes**
Gird Road to Sage Road	22,900	22,900	E	27,170	F	4,270	**37,450**	**F**	**10,280**	**Yes**
Sage Road to Old Highway 395	22,900	22,700	E	26,970	F	4,270	**39,790**	**F**	**12,820**	**Yes**
Old Highway 395 to I-15 Southbound Ramps	37,000	26,500	C	30,710	D	4,210	**40,390**	**F**	**9,680**	**Yes**
I-15 Northbound Ramps to Pankey Road	37,000	10,600	A	33,230	D	22,630	28,260	C	2,190	No
Pankey Road to Horse Ranch Creek Road	37,000	10,300	A	12,470	A	2,170	30,170	D	17,700	No
Horse Ranch Creek Road to Rice Canyon Road	22,900	10,000	A	12,170	B	2,170	**25,270**	**F**	**13,100**	**Yes**
Rice Canyon Road to Couser Canyon Road	22,900	9,800	A	11,970	A	2,170	**27,070**	**F**	**15,100**	**Yes**
Couser Canyon Road to Pala Mission Road	22,900	9,400	A	10,710	A	1,310	**23,600**	**F**	**12,890**	**Yes**

Source: LLG 2014
a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C).
b. Average Daily Traffic
c. Level of Service
d. Δ denotes an increase in ADT due to project traffic.
e. Δ denotes an increase in ADT due to cumulative project traffic.

Table 2.3-15
FREEWAY SEGMENT OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Freeway and Segment	Peak Hour	Direction/ Capacity[a]		Existing			Existing + Project			Existing + Project + Cumulative Projects			Δ[e]	Sig?
				PHV[b]	V/C[c]	LOS[d]	PHV	V/C	LOS	PHV	V/C	LOS		
I-15														
Rainbow Valley Blvd. to Mission Road	AM	NB	9,400	2,062	0.219	A	2,149	0.229	A	2,504	0.266	A	0.037	No
	PM	NB	9,400	5,948	0.633	C	6,199	0.659	C	6,376	0.678	C	0.019	No
	AM	SB	9,400	5,841	0.621	C	5,987	0.637	C	6,213	0.661	C	0.024	No
	PM	SB	9,400	3,139	0.334	A	3,330	0.354	A	3,753	0.399	A	0.042	No
Mission Road to SR-76	AM	NB	9,400	1,705	0.181	A	1,758	0.187	A	1,957	0.208	A	0.021	No
	PM	NB	9,400	5,621	0.598	B	5,798	0.617	B	5,922	0.630	C	0.013	No
	AM	SB	9,400	5,310	0.565	C	5,370	0.571	C	5,566	0.592	C	0.021	No
	PM	SB	9,400	2,898	0.308	A	3,023	0.322	A	3,229	0.344	A	0.022	No
SR-76 to Old Highway 395	AM	NB	9,400	1,484	0.158	A	1,644	0.174	A	2,756	0.293	A	0.119	No
	PM	NB	9,400	5,422	0.577	B	5,680	0.604	B	7,368	0.784	C	0.180	No
	AM	SB	9,400	5,278	0.561	B	5,395	0.574	B	6,361	0.678	B	0.104	No
	PM	SB	9,400	2,752	0.293	A	2,972	0.316	B	3,602	0.383	B	0.067	No

Source: LLG 2014
a. Capacity based on 2,350 vehicles/hour/lane for mainlines and 1,200 vehicles/hour/lane for auxiliary lanes
b. PHV = Peak Hour Volumes
c. V/C = Volume/ Capacity
d. LOS = Level of Service
e. Δ = Denotes an increase in the V/C with due to cumulative project traffic

LOS	V/C
A	<0.41
B	0.62
C	0.8
D	0.92
E	1
F(0)	1.25
F(1)	1.35
F(2)	1.45
F(3)	>1.46

Table 2.3-16
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ[d]	
1. E. Mission Road/Old Hwy 395	Signal	AM	24.7	C	29.1	C	4.4	**59.2**	**E**	**30.1**	**Yes**
		PM	77.0	E	78.8	E	1.1	**118.4**	**F**	**39.6**	**Yes**
2. Mission Road/I-15 SB Ramps	Signal	AM	27.6	C	31.0	C	3.4	48.3	D	17.3	None
		PM	53.3	D	54.4	D	1.1	**133.7**	**F**	**45.6**	**Yes**
3. Mission Road/I-15 NB Ramps	Signal	AM	28.8	C	29.6	C	0.8	31.3	C	1.7	No
		PM	27.0	C	41.2	D	14.2	**81.1**	**F**	**36.6**	**Yes**
4. Reche Road/Green Canyon Norte	Signal	AM	13.1	B	13.5	B	0.4	21.5	C	8.0	No
		PM	10.5	B	11.0	B	0.5	16.9	B	5.9	No
5. Reche Road/Live Oak Park Road	TWSC[e]	AM	20.3	C	23.9	C	3.6	33.6	D	9.7	No
		PM	19.1	C	23.2	C	4.1	29.5	D	6.3	No
6. Reche Road/Gird Road	Signal	AM	11.9	B	13.3	B	1.4	14.8	B	1.7	No
		PM	12.4	B	14.7	B	2.3	17.7	B	3.0	No
7. Reche Road/Wilt Road	TWSC	AM	14.2	B	15.9	C	1.7	16.5	C	0.6	No
		PM	14.9	B	16.1	C	1.2	16.7	C	0.6	No
8. Reche Road/Tecalote Road	TWSC	AM	13.4	B	15.6	C	2.2	16.5	C	0.9	No
		PM	15.3	C	20.0	C	4.7	20.6	C	0.6	No
9. Reche Road/Old Hwy 395	TWSC	AM	33.0	D	**>100.1**	**F**	**107**	**>200.1**	**F**	**>5.0**	**Yes**
		PM	60.0	F	**>100.1**	**F**	**115**	**>200.1**	**F**	**>5.0**	**Yes**
10. Stewart Canyon Road/Old Hwy 395	TWSC	AM	12.6	B	20.3	C	7.7	**>200.1**	**F**	**>5.0**	**Yes**
		PM	12.8	B	20.0	C	7.2	**>200.1**	**F**	**>5.0**	**Yes**
11. Stewart Canyon Road/Horse Ranch Creek Road	TWSC	AM	8.6	A	8.8	A	0.2	10.8	B	2.0	No
		PM	5.7	A	7.2	A	1.5	13.9	B	6.7	No

Table 2.3-16 (cont.)
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ[d]	
12. Pala Mesa Drive/Sage Road	TWSC	AM	8.9	A	9.7	A	0.8	10.0	A	1.1	No
		PM	8.9	A	10.1	B	1.2	10.2	B	1.3	No
13. Pala Mesa Drive/Old Hwy 395	TWSC	AM	13.2	B	15.8	B	2.6	**>200.1**	**F**	**>5.0**	**Yes**
		PM	11.7	B	27.8	C	16.1	**>200.1**	**F**	**>5.0**	**Yes**
14. SR-76/Melrose Drive	Signal	AM	22.4	C	22.7	C	0.3	49.4	D	26.7	No
		PM	12.4	B	12.7	B	0.3	27.9	C	15.2	No
15. SR-76/E. Vista Way	Signal	AM	43.7	D	45.6	D	1.9	**>200.1**	**F**	**>50.0**	**Yes**
		PM	39.4	D	41.0	D	1.6	**>200.1**	**F**	**>50.0**	**Yes**
16. SR-76/N. River Road	Signal	AM	14.9	B	18.1	B	3.2	22.8	C	4.7	No
		PM	19.0	B	22.8	C	3.8	**79.6**	**E**	**>50.0**	**Yes**
17. SR-76/Olive Hill Road	Signal	AM	32.3	C	33.4	D	1.1	**>100.1**	**F**	**>50.0**	**Yes**
		PM	62.4	E	63.9	E	1.5	**>200.1**	**F**	**>50.0**	**Yes**
18. SR-76/S Mission Road	Signal	AM	11.5	B	13.0	B	1.5	23.9	C	10.9	No
		PM	10.8	B	13.4	B	2.6	**59.7**	**E**	**46.3**	**Yes**
19. SR-76/Via Monserate Road	TWSC	AM	36.1	E	63.2	F	0	**>200.1**	**F**	**>5.0**	**Yes**
		PM	50.9	F	111.0	F	0	**>200.1**	**F**	**>5.0**	**Yes**
20. SR-76/Gird Road	Signal	AM	9.7	A	10.8	B	1.1	27.0	C	16.2	No
		PM	10.7	B	13.0	B	2.3	**77.5**	**E**	**>50.0**	**Yes**
21. SR-76/Sage Road	TWSC	AM	20.2	C	27.4	D	0	**>100.1**	**F**	**0**	**Yes**
		PM	26.1	D	41.6	E	0	**>200.1**	**F**	**0**	**Yes**
22. SR-76/Old Hwy 395	Signal	AM	39.2	D	40.9	D	1.7	**>100.1**	**F**	**>50.0**	**Yes**
		PM	36.8	D	37.0	D	0.2	**>100.1**	**F**	**>50.0**	**Yes**

Table 2.3-16 (cont.)
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ[d]	
23. SR-76/I-15 SB Ramps	Signal	AM	26.7	C	34.1	C	7.4	**74.4**	**E**	**40.3**	**Yes**
		PM	22.6	C	**>100.1**	**F**	**>80.1**	**>100.1**	**F**	**14.9**	**Yes**
24. SR-76/I-15 NB Ramps	Signal	AM	29.1	C	34.5	C	2.8	**78.8**	**E**	**44.3**	**Yes**
		PM	50.1	D	**>100.1**	**F**	**>80.1**	**>100.1**	**F**	**9.0**	**Yes**
25. Project Driveway #1/Pankey Road	TWSC	AM	*DNE*	–	8.4	A	–	8.4	A	0.0	No
		PM	*DNE*	–	9.4	A	–	9.4	A	0.0	No
26. Pala Mesa Drive/Pankey Road	Signal	AM	*DNE*	–	10.2	B	–	10.4	A	0.2	No
		PM	*DNE*	–	13.7	B	–	15.2	B	9.3	No
27. Project Driveway # 2/Pankey Road	TWSC	AM	*DNE*	–	14.2	B	–	18.5	C	4.3	No
		PM	*DNE*	–	21.3	C	–	34.8	D	13.5	No
28. Project Driveway # 3/Pankey Road	Signal	AM	*DNE*	–	12.8	B	–	13.6	B	0.6	No
		PM	*DNE*	–	19.0	B	–	19.9	B	0.8	No
29. Project Driveway # 4/Pankey Road	Signal	AM	*DNE*	–	13.2	B	–	14.0	B	6.0	No
		PM	*DNE*	–	19.7	B	–	20.6	C	1.0	No
30. Project Driveway # 5/Pankey Road	TWSC	AM	*DNE*	–	9.8	A	–	9.3	A	0.0	No
		PM	*DNE*	–	11.1	B	–	11.6	B	0.6	No
31. Pankey Place/Pankey Road	TWSC	AM	*DNE*	–	*DNE*	–	–	13.1	B	6.7	No
		PM	*DNE*	–	*DNE*	–	–	17.3	B	16.4	No
32. SR-76/Pankey Road	TWSC[f]	AM	12.2	B	**>100.1**	**F**	**>5.0**	**>100.1**	**F**	**>5.0**	**Yes**
		PM	11.8	B	**>100.1**	**F**	**>5.0**	**>100.1**	**F**	**>5.0**	**Yes**
33. Project Driveway # 6/Pankey Road	Signal	AM	*DNE*	–	12.0	B	–	13.6	B	1.6	No
		PM	*DNE*	–	15.5	B	–	20.9	C	5.4	No

Table 2.3-16 (cont.)
INTERSECTION OPERATIONS UNDER EXISTING AND EXISTING PLUS CUMULATIVE PLUS PROJECT CONDITIONS

Intersection	Control Type	Peak Hour	Existing		Existing + Project			Existing + Project + Cumulative Projects			Sig?
			Delay[a]	LOS[b]	Delay	LOS	Δ[c]	Delay	LOS	Δ[d]	
34. SR-76/Horse Ranch Creek Road	Signal	AM	*DNE*	–	7.9	B	–	15.6	B	7.7	No
		PM	*DNE*	–	8.0	A	–	31.9	C	23.9	No
35. SR-76/Rice Canyon Road	TWSC	AM	10.6	B	11.6	B	1.0	**>200.1**	**F**	**>5.0**	**Yes**
		PM	12.5	B	14.5	B	2.0	**>200.1**	**F**	**>5.0**	**Yes**
36. SR-76/Couser Canyon Road	TWSC	AM	12.5	B	15.0	C	2.5	**>100.1**	**F**	**>5.0**	**Yes**
		PM	15.8	C	22.3	C	6.5	**>200.1**	**F**	**>5.0**	**Yes**
37. SR-76/Pala Mission Road	Signal	AM	11.9	B	11.9	B	0.0	17.2	B	5.3	No
		PM	18.6	B	19.0	B	0.4	37.9	D	18.9	No
38. Dulin Road/Old Highway 395	TWSC	AM	20.3	C	30.9	D	10.6	**>200.1**	**F**	**>5.0**	**Yes**
		PM	10.5	B	14.0	B	3.5	**>200.1**	**F**	**>5.0**	**Yes**

Source: LLG 2014
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. Δ denotes an increase in delay/vehicles due to project traffic.
d. Δ denotes an increase in delay/vehicles due to cumulative project traffic.
e. TWSC – Two-Way Stop Controlled Intersection. Cumulative Project contribution to minor street critical movement reported.
f. Traffic Signal and intersection improvements are proposed by the Project, although the analysis is conducted as a TWSC to be conservative.
General Notes:
Bold typeface indicates significant cumulative project impact.
DNE – Does Not Exist

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

Table 2.3-17
GENERAL PLAN LAND USES TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
Light Industrial	3 Acres	200/ AC	600	12%	80:20	58	14	12%	20:80	14	58
Village Residential 7.3	91 Units	8/ DU	728	8%	20:80	12	46	10%	70:30	51	22
General Commercial	56 Acres	500/ DU	28,000	4%	70:30	784	336	9%	50:50	1,260	1,260
Specific Plan	7 Acres	–	0	–	–	0	0	–	–	0	0
TOTAL		**—**	**29,328**	**—**	**—**	**854**	**396**	**—**	**—**	**1,325**	**1,340**

Source: LLG 2014

Table 2.3-18
GENERAL PLAN AMENDMENT TRIP GENERATION

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out Split	Volume In	Volume Out	% of ADT	In:Out Split	Volume In	Volume Out
General Commercial	53 Ac	500/Ac	26,500	4%	70:30	742	318	9%	50:50	1,192	1,193
Light Industrial	13 Ac	200/Ac	2,600	12%	80:20	250	62	10%	20:80	52	208
Multi Family Residential	287 DU	8/DU	2,296	8%	20:80	37	221	10%	70:30	161	69
TOTAL		**—**	**31,396**	**—**	**—**	**1,029**	**601**	**—**	**—**	**1,405**	**1,470**

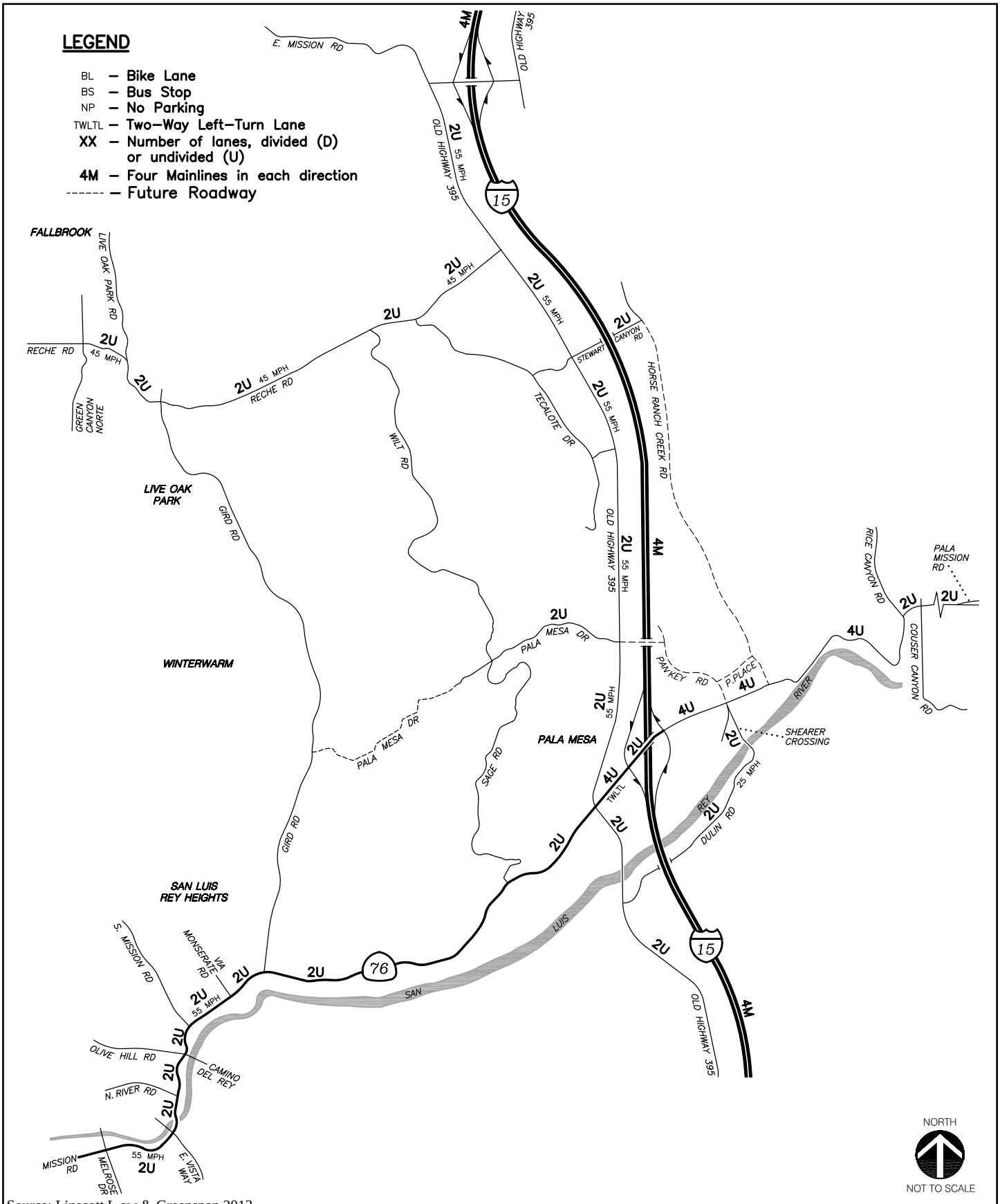
Source: LLG 2014

Table 2.3-19
YEAR 2030 STREET SEGMENT OPERATIONS: GENERAL PLAN AND GENERAL PLAN AMENDMENT

Street Segment	ME Capacity (LOS E) [a]	GPU		GPA	
		ADT [b]	LOS [c]	ADT	LOS
SR-76 (Pala Road)					
Melrose Drive to E. Vista Way	57,000	55,200	E	55,400	E
E. Vista Way to N. River Road	57,000	44,600	C	44,830	D
North River Road to Olive Hill Road	57,000	54,900	E	55,160	E
Olive Hill Road to South Mission Road	57,000	57,900	F	58,210	F
South Mission Road to Via Monserate	37,000	43,300	F	43,690	F
Via Monserate to Gird Road	37,000	42,800	F	43,190	F
Gird Road to Sage Road	37,000	34,400	E	34,770	E
Sage Road to Old Highway 395	37,000	35,600	E	35,970	E
Old Highway 395 to I-15 Southbound Ramps	37,000	40,400	F	40,720	F
I-15 Northbound Ramps to Pankey Road	37,000	29,900	D	31,260	D
Pankey Road to Horse Ranch Creek Road	37,000	32,400	E	32,450	E
Horse Ranch Creek Road to Rice Canyon Road	37,000	30,100	D	30,150	D
Rice Canyon Road to Couser Canyon Road	37,000	31,900	D	31,950	D
Couser Canyon Road to Pala Mission Road	22,900	25,800	C	25,820	C
Old Highway 395					
East Mission Road to Reche Road	22,900	21,060	E	21,220	E
Reche Road to Stewart Canyon Road	22,900	23,890	F	24,070	F
Stewart Canyon Road to Tecalote Lane	22,900	19,830	E	20,000	E
Tecalote Lane to Pala Mesa Drive	22,900	21,670	E	21,840	E
Pala Mesa Drive to SR-76 (Pala Road)	28,000	21,950	C	22,360	E
SR-76 (Pala Road) to Dulin Road	22,900	9,050	C	9,120	A
Dulin Road to W. Lilac Road	22,900	10,400	C	10,470	A
Reche Road					
Green Canyon Norte to Live Oak Park Road	19,000	19,270	F	19,340	F
Live Oak Park Road to Gird Road	19,000	16,770	E	16,840	E
Gird Road to Wilt Road	19,000	10,870	D	10,910	D
Wilt Road to Tecalote Road	19,000	11,270	D	11,270	D
Tecalote Road to Old Hwy 395	19,000	12,460	D	12,470	D
Stewart Canyon Road					
Old Hwy 395 to Horse Ranch Creek Road	34,200	8,700	A	8,680	A
Pankey Road					
Pala Mesa Drive to Project Driveway # 2	30,000	10,060	A	11,140	A
Project Driveway # 2 to Project Driveway # 3	30,000	11,070	A	12,310	A
Project Driveway # 3 to Project Driveway # 4	30,000	15,470	A	17,350	A
Project Driveway # 4 to Project Driveway # 5	30,000	22,650	C	23,800	C
Project Driveway # 5 to Pankey Place	30,000	25,870	D	26,850	D
Pankey Place to SR-76 (Pala Road)	30,000	15,210	A	16,050	A
SR-76 (Pala Road) to Shearer Crossing	30,000	9,240	A	9,270	A
Shearer Crossing to Old Highway 395	19,000	9,240	A	9,270	A
Pala Mesa Drive					
Wilt/Sage Road to Old Highway 395	9,700	7,610	C	7,590	C
Old Highway 395 to Pankey Road	9,700	11,950	F	12,010	F

Source: LLG 2014

a. Capacities based on County of San Diego Roadway Classification & LOS table (See Appendix C).
b. Average Daily Traffic
c. Level of Service



Source: Linscott,L aw & Greenspan 2013

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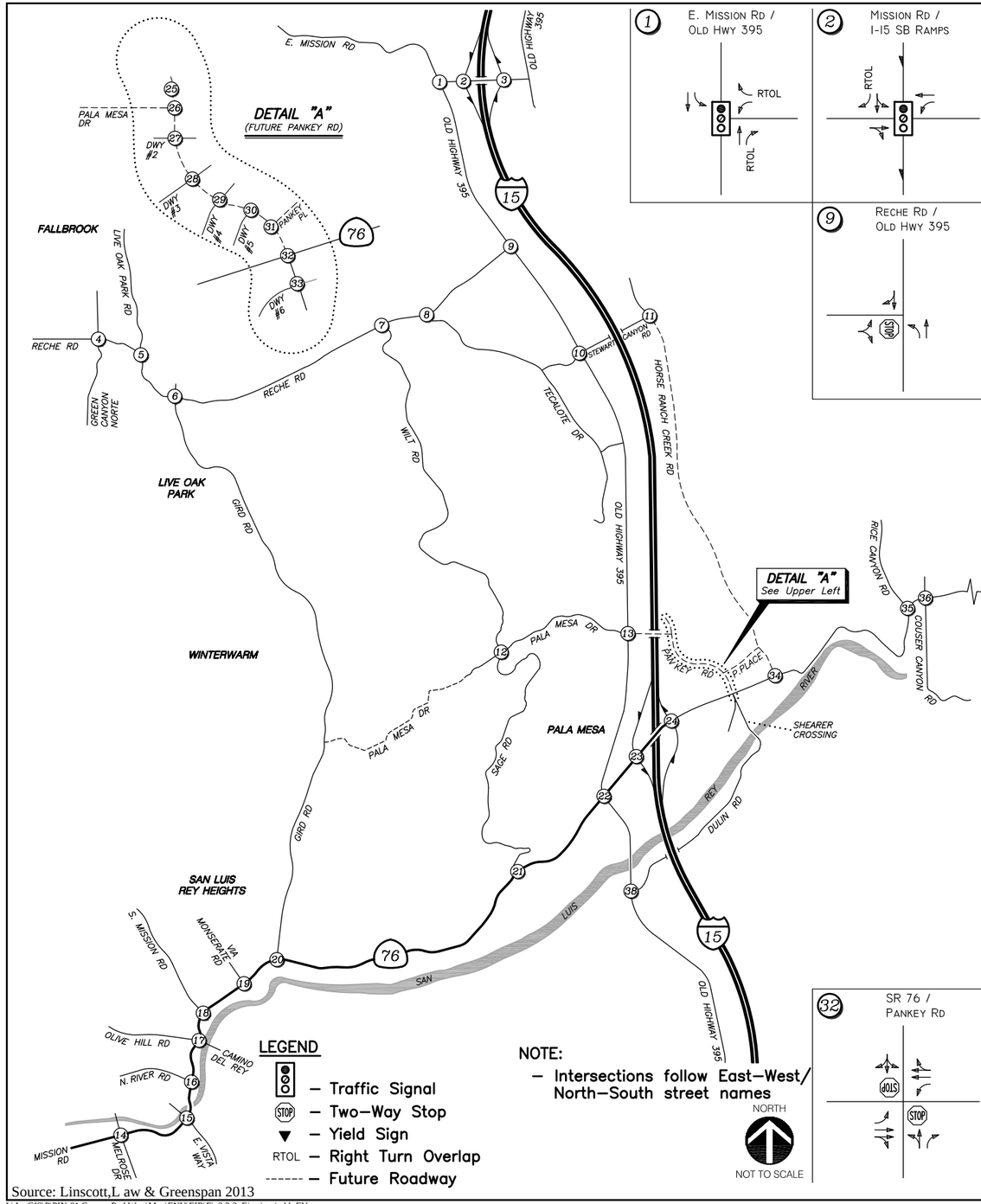
Existing Roadway Segment Conditions

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-1



Source: Linscott,L aw & Greenspan 2013

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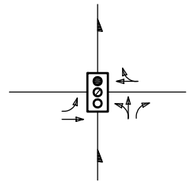
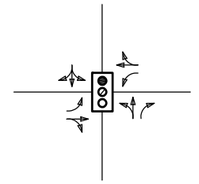
1 E. Mission Rd / Old Hwy 395

2 Mission Rd / I-15 SB Ramps

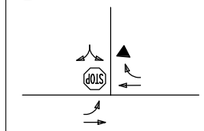
3 Mission Rd / I-15 NB ramps



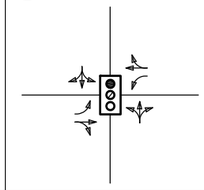
4 Reche Rd / Green Canyon Norte



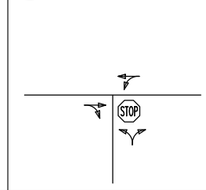
5 Reche Rd / Live Oak Park Rd



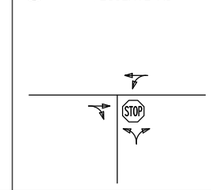
6 Reche Rd / Gird Rd



7 Reche Rd / Wilt Rd

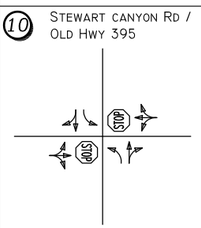


8 Reche Rd / Tecolate Rd

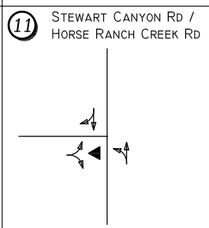


9 Reche Rd / Old Hwy 395

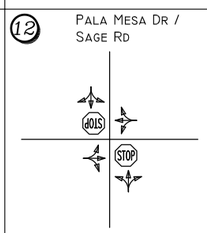
10 Stewart Canyon Rd / Old Hwy 395



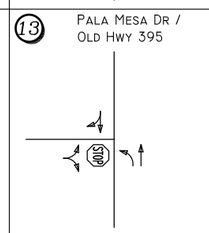
11 Stewart Canyon Rd / Horse Ranch Creek Rd



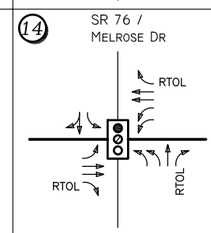
12 Pala Mesa Dr / Sage Rd



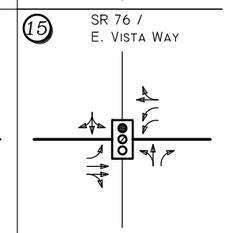
13 Pala Mesa Dr / Old Hwy 395



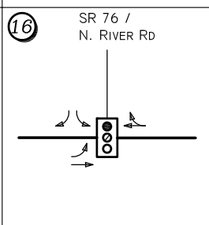
14 SR 76 / Melrose Dr



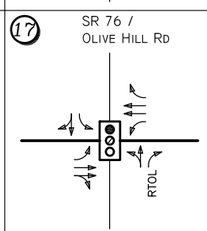
15 SR 76 / E. Vista Way



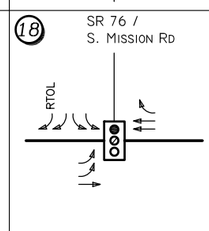
16 SR 76 / N. River Rd



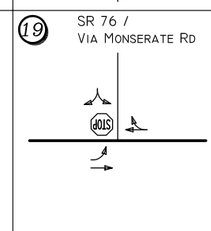
17 SR 76 / Olive Hill Rd



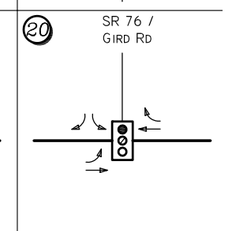
18 SR 76 / S. Mission Rd



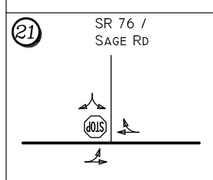
19 SR 76 / Via Monserate Rd



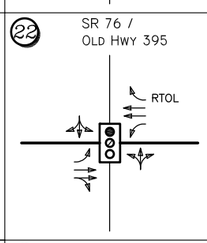
20 SR 76 / Gird Rd



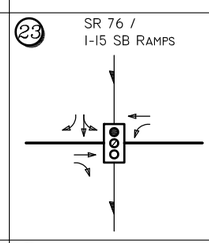
21 SR 76 / Sage Rd



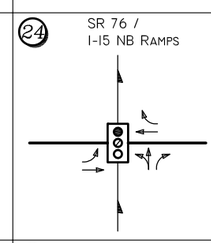
22 SR 76 / Old Hwy 395



23 SR 76 / I-15 SB Ramps



24 SR 76 / I-15 NB Ramps



25 Project Dwy #1 / Pankey Rd

FUTURE INTERSECTION

26 Pala Mesa Dr / Pankey Rd

FUTURE INTERSECTION

27 Project Dwy #2 / Pankey Rd

FUTURE INTERSECTION

28 Project Dwy #3 / Pankey Rd

FUTURE INTERSECTION

29 Project Dwy #4 / Pankey Rd

FUTURE INTERSECTION

30 Project Dwy #5 / Pankey Rd

FUTURE INTERSECTION

31 Pankey Place / Pankey Rd

FUTURE INTERSECTION

32 SR 76 / Pankey Rd

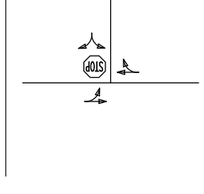
33 Project Dwy #6 / Pankey Rd

FUTURE INTERSECTION

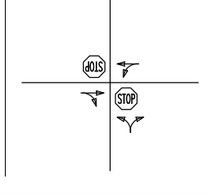
34 SR 76 / Horse Ranch Creek Rd

FUTURE INTERSECTION

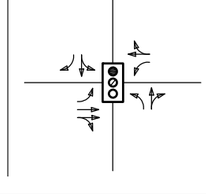
35 SR 76 / Rice Canyon Rd



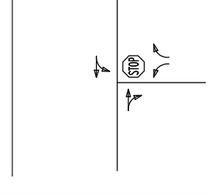
36 SR 76 / Couser Canyon Rd



37 SR 76 / Pala Mission Rd



38 Dulin Rd / Old Hwy 395

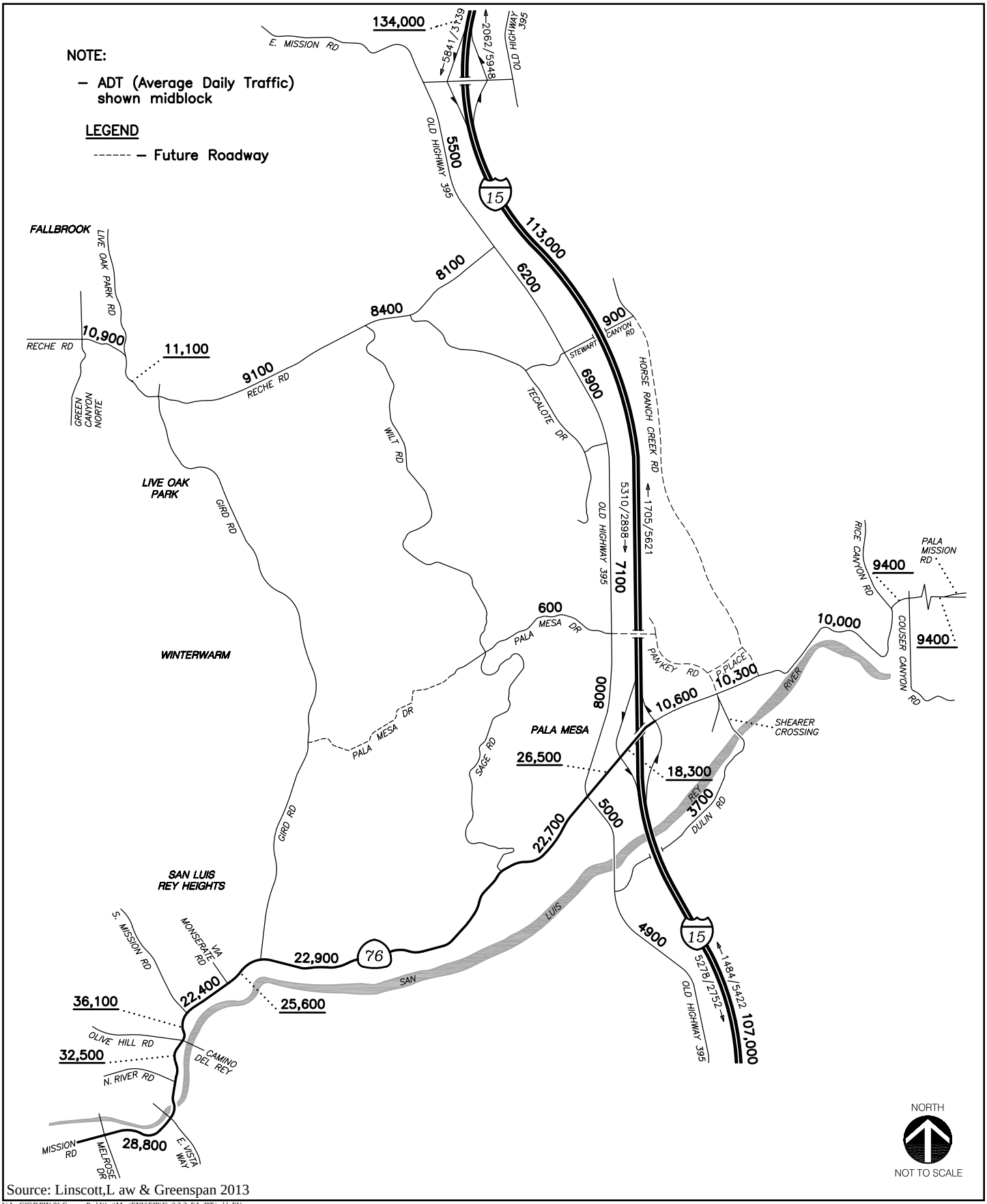


Existing Intersection Conditions

CAMPUS PARK WEST

Figure 2.3-2

HELIX Environmental Planning



Source: Linscott,L aw & Greenspan 2013

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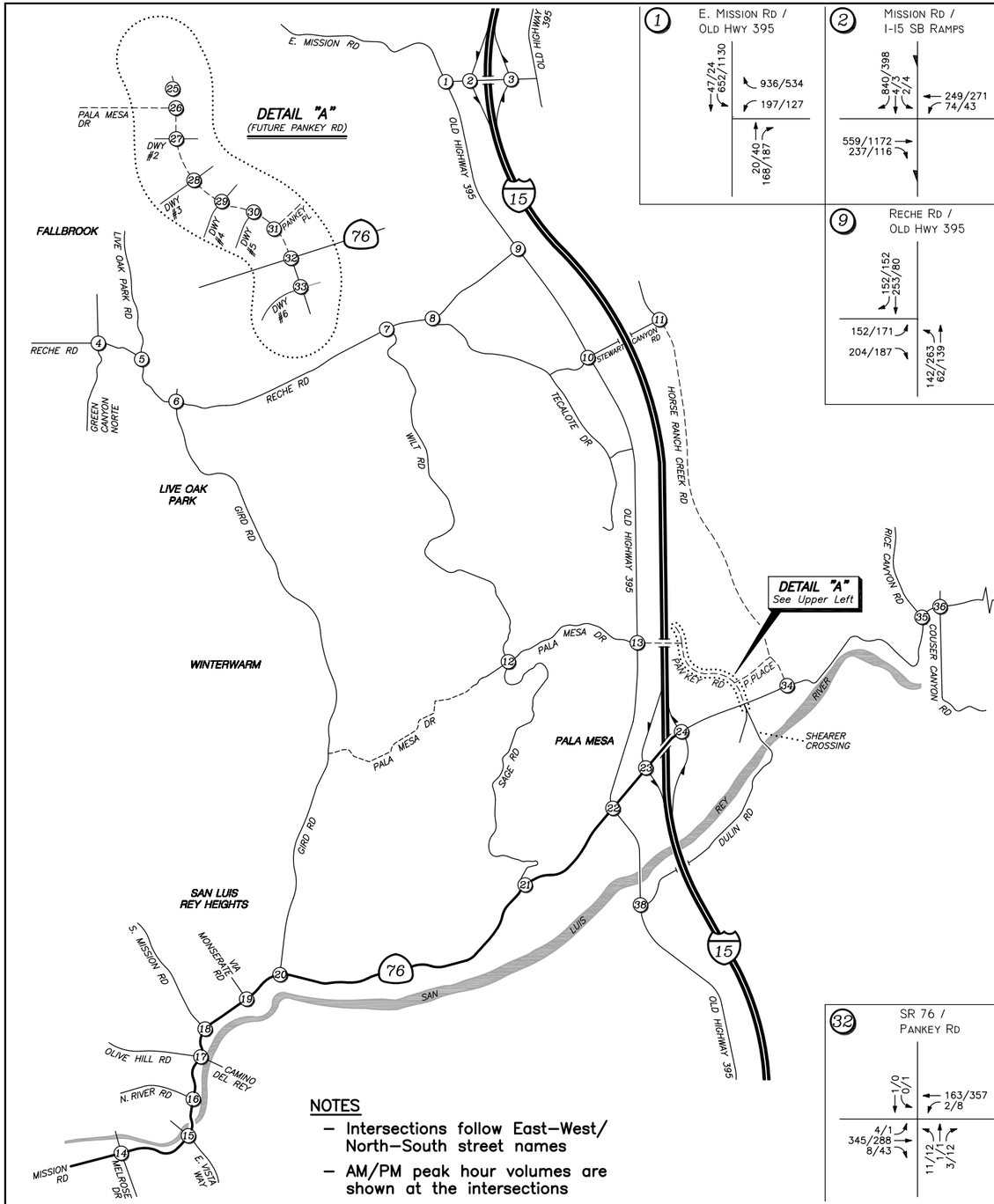
Existing . verage Daily Traffic – Roadway Segments

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-3



NOTES

- Intersections follow East–West/ North–South street names
- AM/PM peak hour volumes are shown at the intersections

Source: Linscott,L aw & Greenspan 2013

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1 E. Mission Rd / Old Hwy 395

47/24 652/1130 936/534 197/127 20/40 168/187

2 Mission Rd / I-15 SB Ramps

840/398 4/3 2/4 249/271 74/43 559/1172 237/116

3 Mission Rd / I-15 NB ramps

3/1 178/134 501/870 87/315 111/194 0/1 36/350

4 Reche Rd / Green Canyon Norte

4/5 7/4 4/7 451/387 49/77 1/5 323/410 33/32 120/33 0/1 107/48

5 Reche Rd / Live Oak Park Rd

123/34 78/52 53/49 377/431 48/33 386/430

6 Reche Rd / Gird Rd

1/4 1/1 0/1 1/2 324/379 30/32 0/4 339/370 115/121 102/98 0/1 28/29

7 Reche Rd / Wilt Rd

303/398 4/13 343/334 17/35 39/19 11/6

8 Reche Rd / Tecolate Rd

293/382 3/1 367/348 6/19 14/14 5/0

9 Reche Rd / Old Hwy 395

152/152 253/80 152/171 204/187 142/263 62/139

10 Stewart canyon Rd / Old Hwy 395

3/13 444/241 11/16 15/14 13/7 12/8 0/2 9/15 4/10 182/381 6/17

11 Stewart Canyon Rd / Horse Ranch Creek Rd

31/16 12/23 6/9 0/1 0/1

12 Pala Mesa Dr / Sage Rd

4/2 26/15 14/21 2/3 1/3 7/1 0/1 0/2 8/7 7/3

13 Pala Mesa Dr / Old Hwy 395

12/30 446/225 23/14 46/43 18/47 165/423

14 SR 76 / Melrose Dr

196/43 45/12 84/8 76/5 1028/758 64/51 343/32 583/1040 190/253 414/238 30/10 96/49

15 SR 76 / E. Vista Way

125/61 12/82 1/4 3/43 748/589 326/412 27/134 526/778 261/237 254/123 50/112 301/314

16 SR 76 / N. River Rd

113/81 818/860 109/150 82/215 98/83 698/990

17 SR 76 / Olive Hill Rd

29/279 216/110 46/100 62/96 819/840 294/377 50/120 702/970 73/132 45/105 92/61 238/285

18 SR 76 / S. Mission Rd

600/505 118/97 62/84 647/575 446/581 509/818

19 SR 76 / Via Monserate Rd

17/10 61/33 49/62 614/713 16/7 587/852

20 SR 76 / Gird Rd

85/57 61/32 37/92 575/719 61/87 567/770

21 SR 76 / Sage Rd

9/5 10/3 3/8 581/803 5/1 630/830

22 SR 76 / Old Hwy 395

43/135 154/74 237/187 71/238 408/606 69/47 38/60 581/690 102/51 56/53 77/117 31/40

23 SR 76 / I-15 SB Ramps

362/411 57/0 68/77 191/511 71/124 504/712 327/218

24 SR 76 / I-15 NB Ramps

53/77 157/276 430/634 158/195 116/363 1/3 146/149

25 Project Dwy #1 / Pankey Rd

FUTURE INTERSECTION

26 Pala Mesa Dr / Pankey Rd

FUTURE INTERSECTION

27 Project Dwy #2 / Pankey Rd

FUTURE INTERSECTION

28 Project Dwy #3 / Pankey Rd

FUTURE INTERSECTION

29 Project Dwy #4 / Pankey Rd

FUTURE INTERSECTION

30 Project Dwy #5 / Pankey Rd

FUTURE INTERSECTION

31 Pankey Place / Pankey Rd

FUTURE INTERSECTION

32 SR 76 / Pankey Rd

1/0 0/1 163/357 2/8 4/1 345/288 8/43 11/12 1/1 3/12

33 Project Dwy #6 / Pankey Rd

FUTURE INTERSECTION

34 SR 76 / Horse Ranch Creek Rd

FUTURE INTERSECTION

35 SR 76 / Rice Canyon Rd

16/12 8/10 8/12 219/361 10/22 283/265

36 SR 76 / Couser Canyon Rd

0/1 152/379 6/16 1/0 323/311 16/16 12/16 3/4

37 SR 76 / Pala Mission Rd

135/110 15/17 8/17 7/12 97/179 7/23 77/336 166/194 10/39 12/33 12/24 4/3

38 Dulin Rd / Old Hwy 395

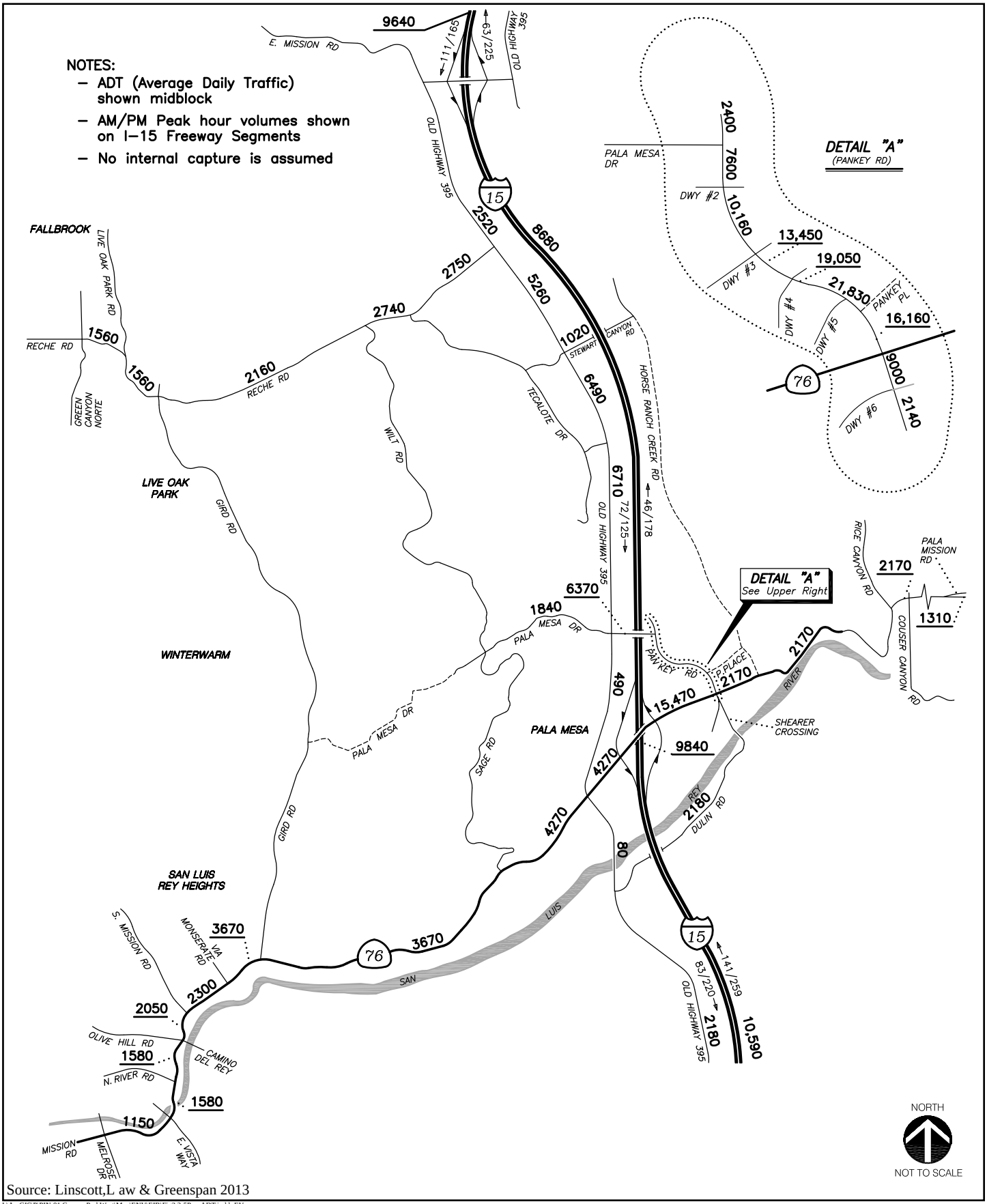
437/70 40/94 112/66 238/23 85/147 34/125

Existing Peak Period Traffic Volumes – Intersections

CAMPUS PARK WEST

Figure 2.3-4

HELIX Environmental Planning



Source: Linscott,L aw & Greenspan 2013

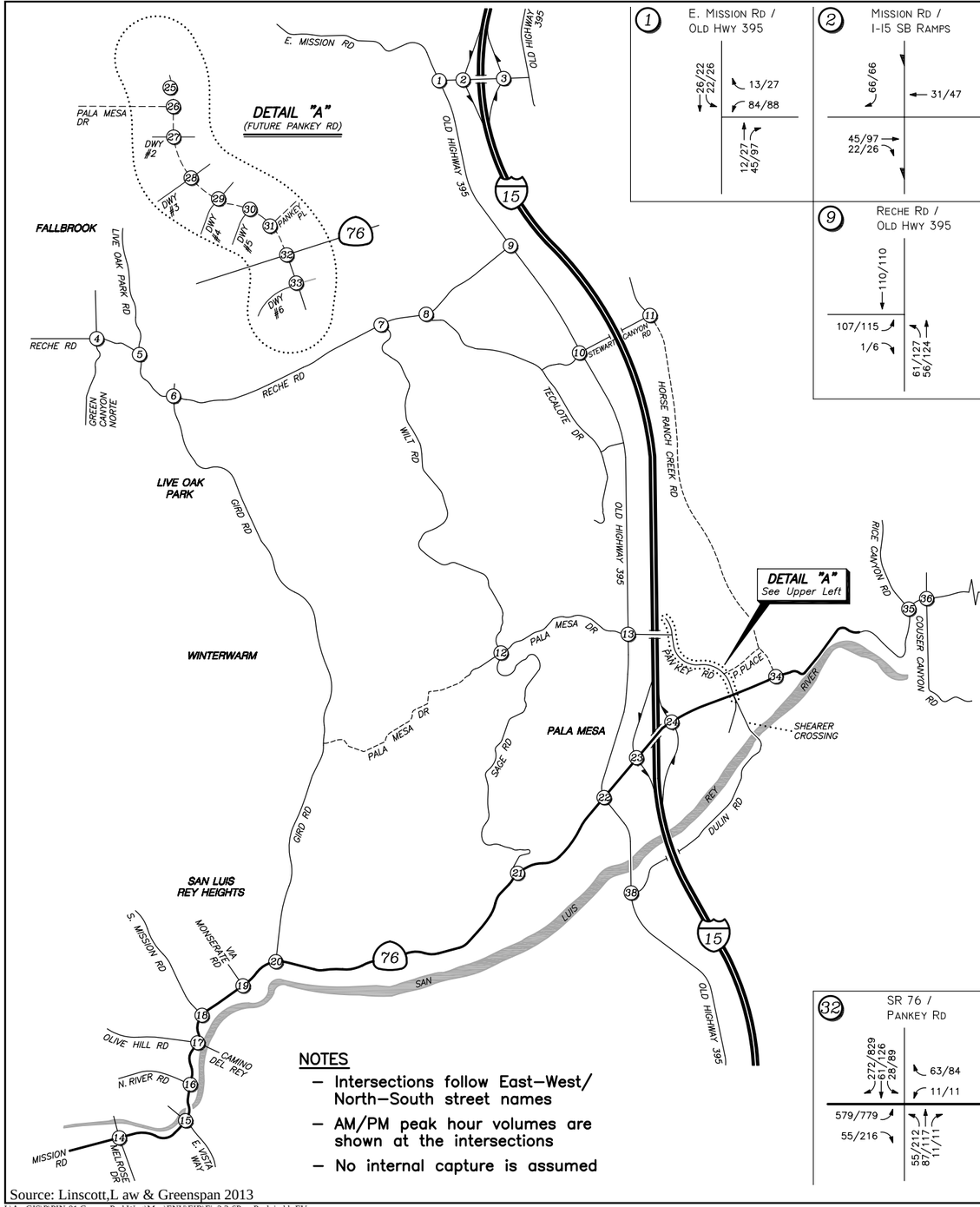
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-5P roADT.indd -EV

Project Average Daily Traffic – Roadway Segments

CAMPUS PARK WEST

Figure 2.3-5

HELIX Environmental Planning



NOTES

- Intersections follow East–West/ North–South street names
- AM/PM peak hour volumes are shown at the intersections
- No internal capture is assumed

Source: Linscott,L aw & Greenspan 2013

I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-6P roPeak.indd -EV

1 E. Mission Rd / Old Hwy 395
26/22 22/26 | 13/27 | 84/88 | 12/27 45/97

2 Mission Rd / I-15 SB Ramps
66/66 | 31/47 | 45/97 22/26

3 Mission Rd / I-15 NB ramps
34/74 10/22 | 18/20 | 13/27

4 Reche Rd / Green Canyon Norte
8/9 | 5/10 28/58 5/10 | 51/51 | 8/9

5 Reche Rd / Live Oak Park Rd
36/75 | 66/68

6 Reche Rd / Gird Rd
36/75 13/27 | 66/68 | 22/26

7 Reche Rd / Wilt Rd
47/100 13/27 | 87/94 | 22/26

8 Reche Rd / Tecolate Rd
60/127 | 108/120

9 Reche Rd / Old Hwy 395
110/110 | 107/115 1/6 | 61/127 56/124

10 Stewart canyon Rd / Old Hwy 395
216/232 | 39/44 | 115/251 21/48

11 Stewart Canyon Rd / Horse Ranch Creek Rd
21/48 | 39/44

12 Pala Mesa Dr / Sage Rd
24/26 | 13/29 9/21 13/29 | 18/19 | 24/26

13 Pala Mesa Dr / Old Hwy 395
56/69 218/225 | 114/250 31/70 5/37 | 61/63 14/17 | 8/17 32/69 61/12

14 SR 76 / Melrose Dr
23/30 10/22 | 25/34 | 18/20

15 SR 76 / E. Vista Way
33/52 10/22 | 45/55 | 18/20

16 SR 76 / N. River Rd
8/22 36/74 | 15/20 | 57/74

17 SR 76 / Olive Hill Rd
10/10 | 6/12 53/96 1/2 | 82/94 | 2/1

18 SR 76 / S. Mission Rd
60/58 | 29/67 62/110 | 95/107

19 SR 76 / Via Monserate Rd
91/176 | 155/165

20 SR 76 / Gird Rd
24/27 | 14/29 91/176 | 155/165

21 SR 76 / Sage Rd
103/206 | 178/193

22 SR 76 / Old Hwy 395
5/37 | 71/86 | 61/90 98/169 | 30/6 149/187 | 11/2

23 SR 76 / I-15 SB Ramps
21/4 191/275 | 139/255 140/398 | 219/274

24 SR 76 / I-15 NB Ramps
96/355 278/652 | 408/548 | 291/413

25 Project Dwy #1 / Pankey Rd
34/250 | 302/62

26 Pala Mesa Dr / Pankey Rd
12/89 22/161 | 124/25 214/277 | 137/267 178/37

27 Project Dwy #2 / Pankey Rd
47/75 188/356 1/7 | 8/3 | 4/15 29/107 | 67/107 303/286 6/25

28 Project Dwy #3 / Pankey Rd
23/39 193/419 1/7 | 8/3 12/20 27/13 | 28/98 6/20 48/178 | 187/301 342/319 7/30

29 Project Dwy #4 / Pankey Rd
47/76 242/534 1/7 | 8/3 6/10 27/13 | 31/114 3/10 71/248 | 255/417 496/532 7/30

30 Project Dwy #5 / Pankey Rd
23/37 317/759 | 81/286 | 759/979

31 Pankey Place / Pankey Rd
397/1044 | 759/979

32 SR 76 / Pankey Rd
272/829 61/126 28/89 | 63/84 11/11 | 579/779 55/216 | 55/212 87/117 1/11

33 Project Dwy #6 / Pankey Rd
45/102 28/91 54/161 | 54/159 6/6 | 45/100 5/5 | 5/5 54/82 6/6

34 SR 76 / Horse Ranch Creek Rd
87/95 | 48/100

35 SR 76 / Rice Canyon Rd
87/95 | 48/100

36 SR 76 / Couser Canyon Rd
62/68 | 36/72 13/31 | 26/27

37 SR 76 / Pala Mission Rd
49/59 | 31/59

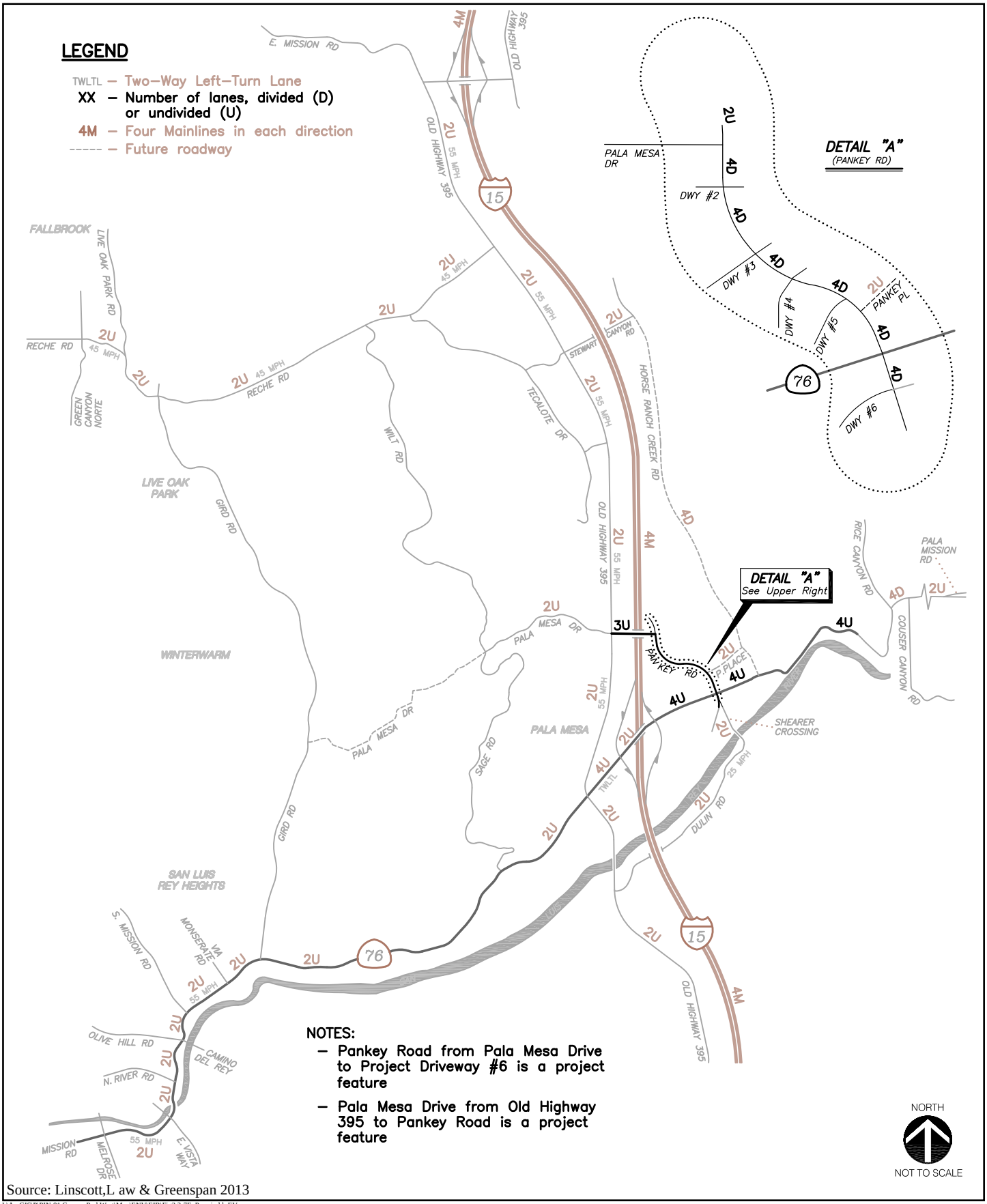
38 Dulin Rd / Old Hwy 395
48/102 | 11/2 78/93

Project Peak Period Traffic Volumes – Intersections

CAMPUS PARK WEST

Figure 2.3-6

HELIX Environmental Planning



Source: Linscott,L aw & Greenspan 2013

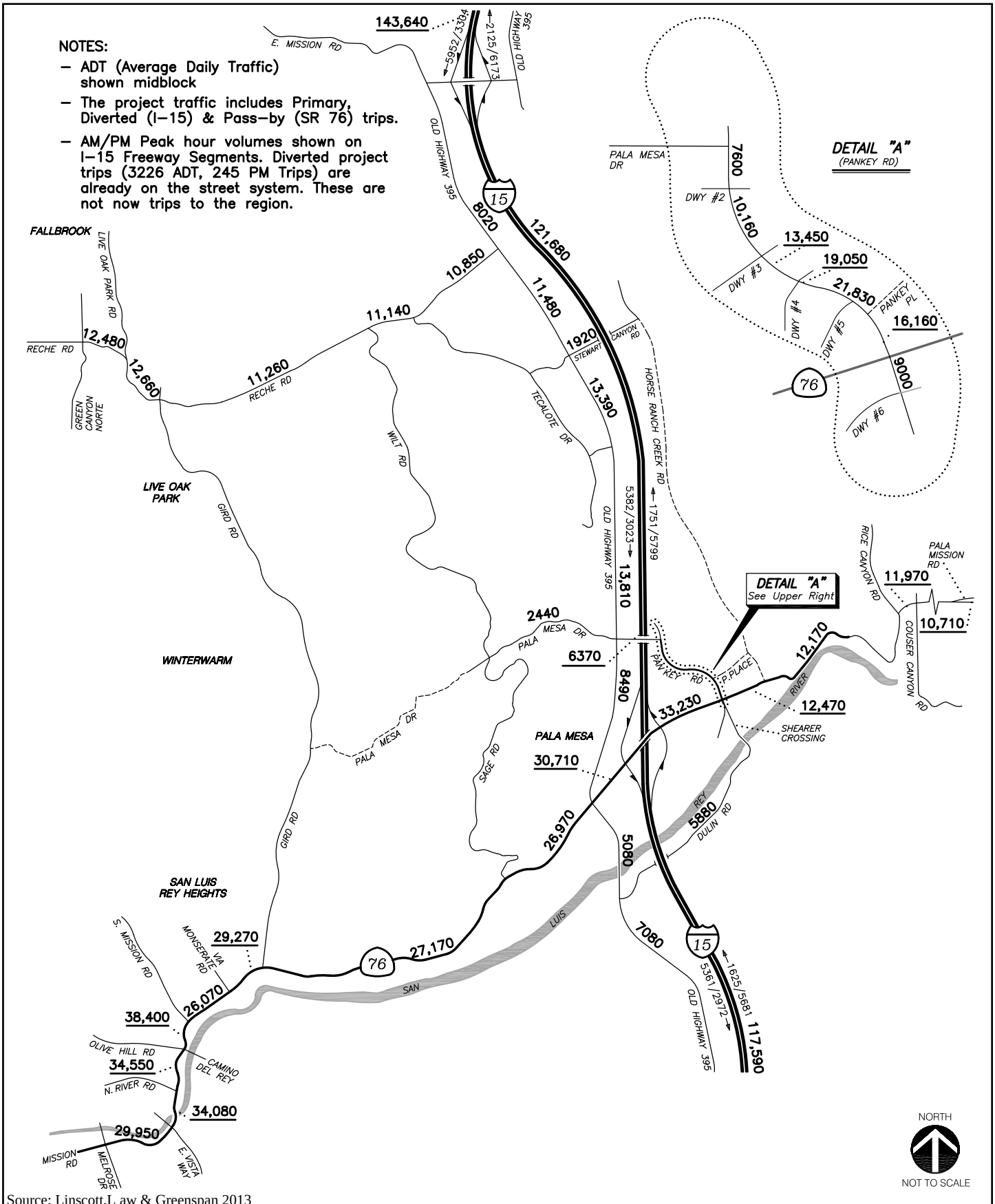
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-7E ro.indd -EV

Existing Plus Project Roadway Segment Conditions

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-7



Source: Linscott,L aw & Greenspan 2013

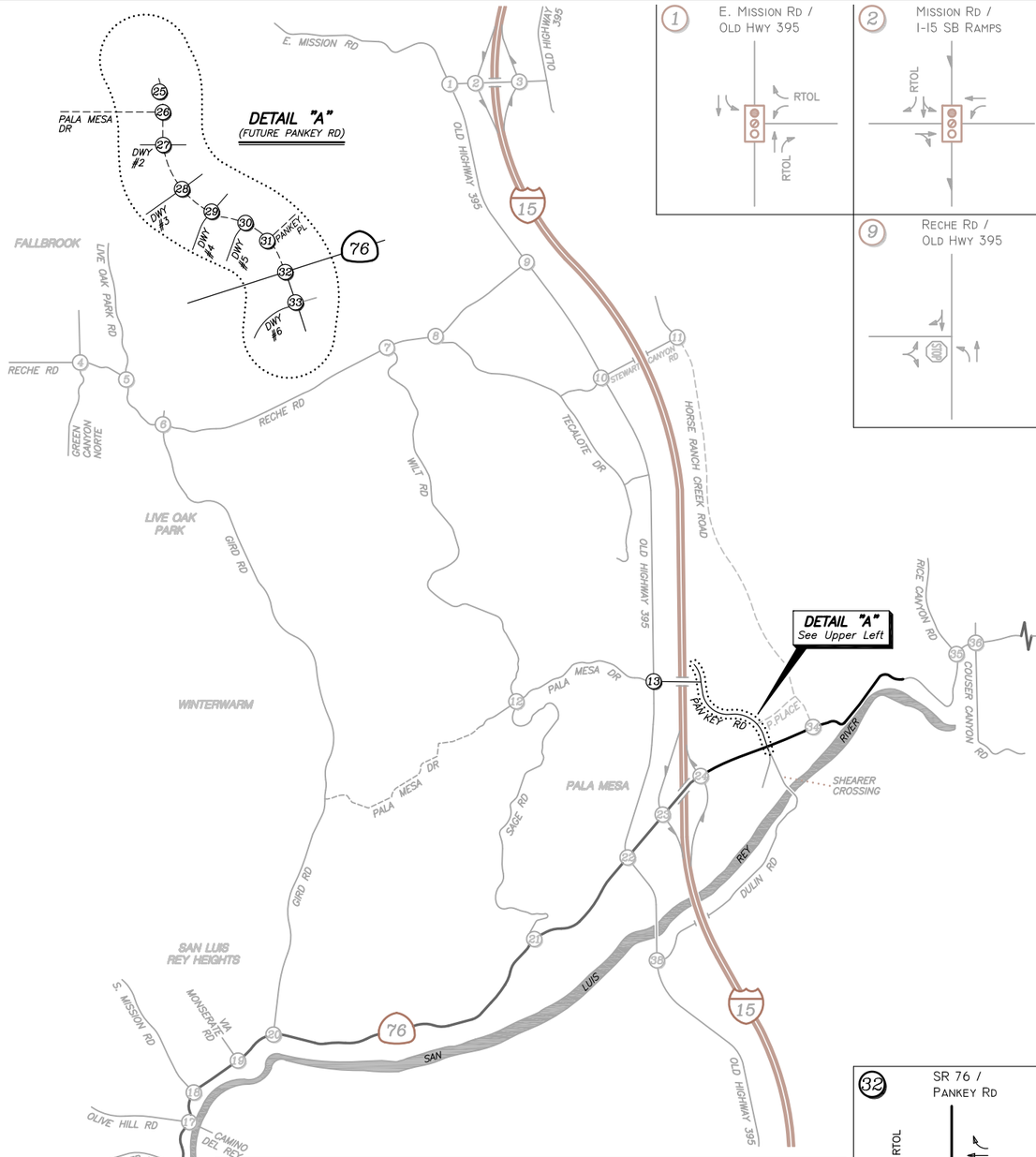
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-8E P ro.indd -EV

Existing Plus Project Average Daily Traffic – Roadway Segments

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-8



LEGEND

- Traffic Signal
- STOP — Two-Way Stop
- ▼ — Yield Sign
- RTOL — Right Turn Overlap
- ------ — Future Roadway

NOTES:

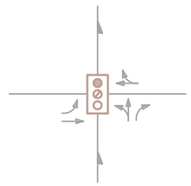
- Intersections follow East–West/ North–South street names
- Applicant to construct east leg of intersection #13 as a project feature
- Applicant to construct intersections 25–33 as a project feature

Source: Linscott,L aw & Greenspan 2013

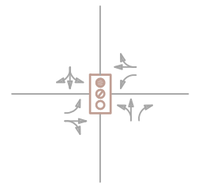
1 E. Mission Rd / Old Hwy 395

2 Mission Rd / I-15 SB Ramps

3 Mission Rd / I-15 NB ramps

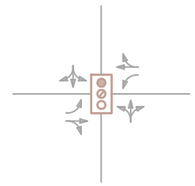


4 Reche Rd / Green Canyon Norte

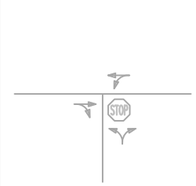


5 Reche Rd / Live Oak Park Rd

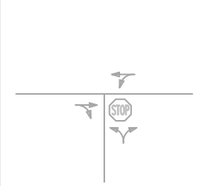
6 Reche Rd / Gird Rd



7 Reche Rd / Wilt Rd



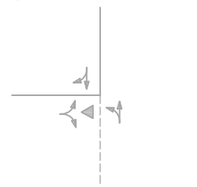
8 Reche Rd / Tecolate Rd



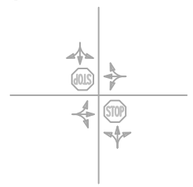
9 Reche Rd / Old Hwy 395

10 Stewart canyon Rd / Old Hwy 395

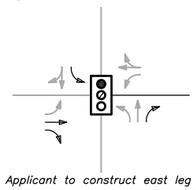
11 Stewart Canyon Rd / Horse Ranch Creek Rd



12 Pala Mesa Dr / Sage Rd

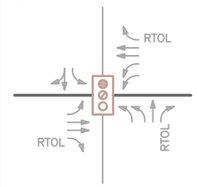


13 Pala Mesa Dr / Old Hwy 395

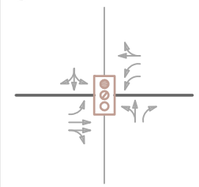


Applicant to construct east leg

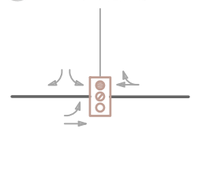
14 SR 76 / Melrose Dr



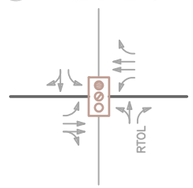
15 SR 76 / E. Vista Way



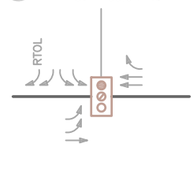
16 SR 76 / N. River Rd



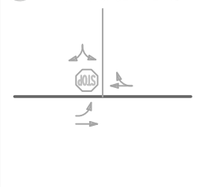
17 SR 76 / Olive Hill Rd



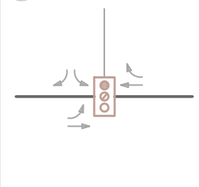
18 SR 76 / S. Mission Rd



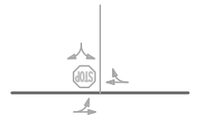
19 SR 76 / Via Monserate Rd



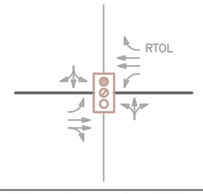
20 SR 76 / Gird Rd



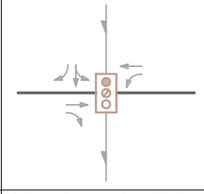
21 SR 76 / Sage Rd



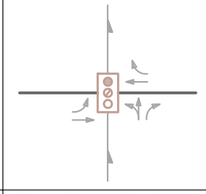
22 SR 76 / Old Hwy 395



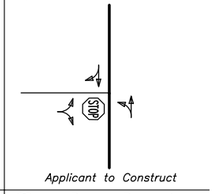
23 SR 76 / I-15 SB Ramps



24 SR 76 / I-15 NB Ramps

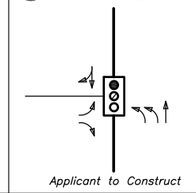


25 Project Dwy #1 / Pankey Rd



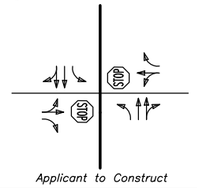
Applicant to Construct

26 Pala Mesa Dr / Pankey Rd



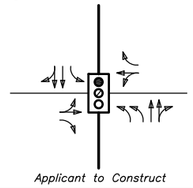
Applicant to Construct

27 Project Dwy #2 / Pankey Rd



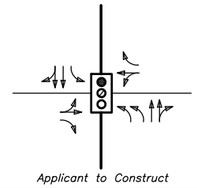
Applicant to Construct

28 Project Dwy #3 / Pankey Rd



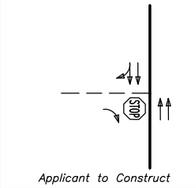
Applicant to Construct

29 Project Dwy #4 / Pankey Rd



Applicant to Construct

30 Project Dwy #5 / Pankey Rd

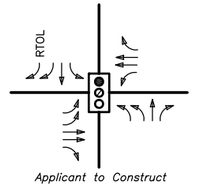


Applicant to Construct

31 Pankey Place / Pankey Rd

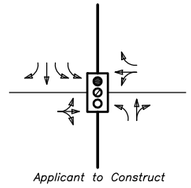
FUTURE INTERSECTION

32 SR 76 / Pankey Rd



Applicant to Construct

33 Project Dwy #6 / Pankey Rd



Applicant to Construct

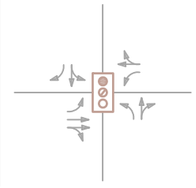
34 SR 76 / Horse Ranch Creek Rd

FUTURE INTERSECTION

35 SR 76 / Rice Canyon Rd

36 SR 76 / Couser Canyon Rd

37 SR 76 / Pala Mission Rd



38 Dulin Rd / Old Hwy 395

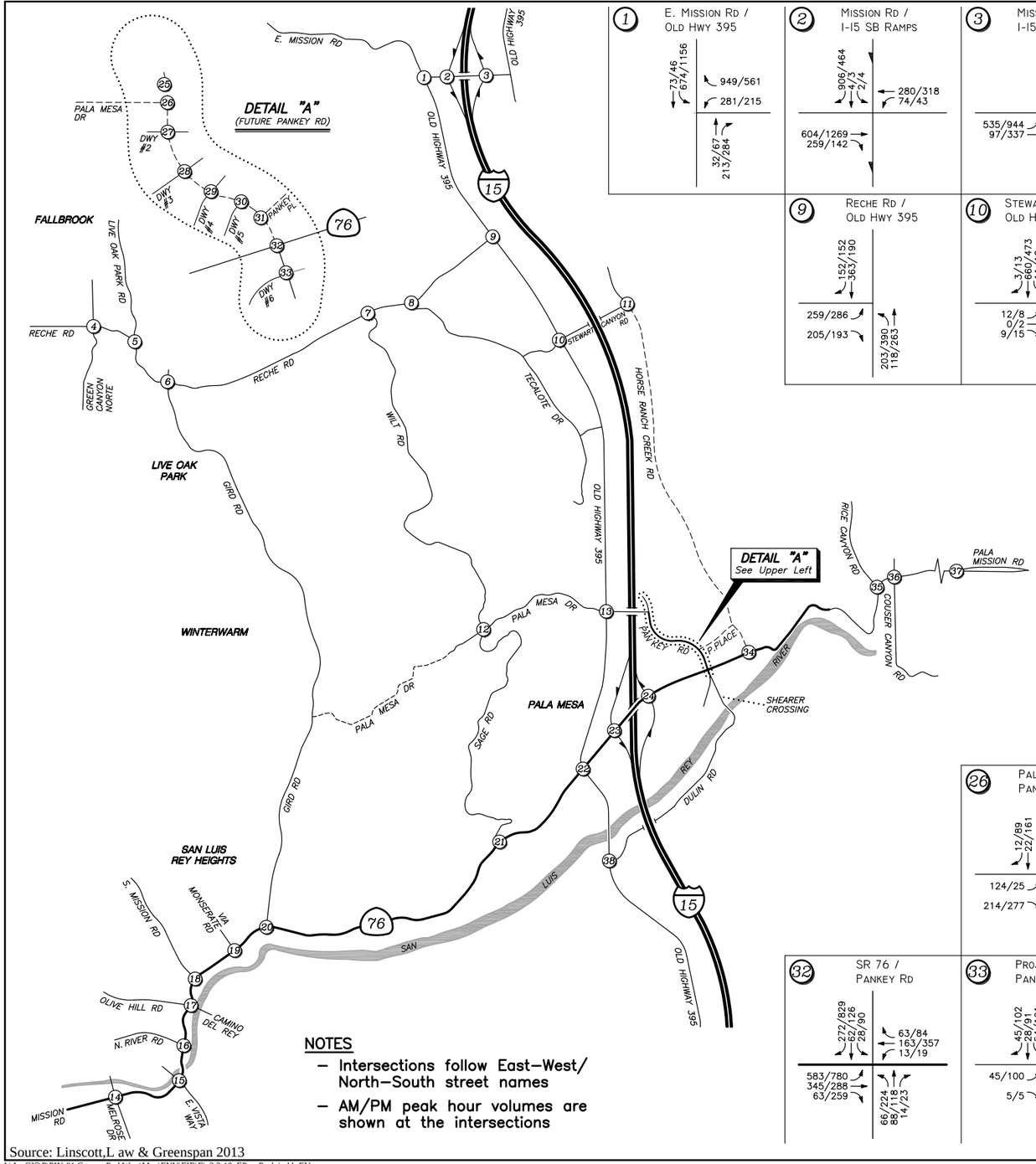
Existing Plus Project Intersection Conditions

CAMPUS PARK WEST

Figure 2.3-9

HELIX Environmental Planning

E:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-[E F ro.indd -EV



NOTES

- Intersections follow East–West/ North–South street names
- AM/PM peak hour volumes are shown at the intersections

Source: Linscott,L aw & Greenspan 2013

I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-10_EIR roPeak.indd -EV

1 E. Mission Rd / Old Hwy 395

73/46 674/1156 — 949/561 — 281/215 — 32/67 213/284

2 Mission Rd / I-15 SB Ramps

906/464 4/3 2/4 — 280/318 74/43 — 604/1269 259/142

3 Mission Rd / I-15 NB ramps

3/1 196/154 — 535/944 97/337 — 124/221 0/1 36/350

4 Reche Rd / Green Canyon Norte

4/5 — 15/13 — 9/17 479/445 54/87 — 1/5 374/461 33/32 — 120/33 0/1 115/57

5 Reche Rd / Live Oak Park Rd

123/34 — 78/52 — 53/49 413/506 — 48/33 452/498

6 Reche Rd / Gird Rd

1/4 1/1 0/1 — 1/2 360/454 43/59 — 0/4 405/438 115/121 — 102/98 0/1 50/55

7 Reche Rd / Wilt Rd

350/498 17/40 — 430/428 17/35 — 39/19 33/32

8 Reche Rd / Tecolate Rd

353/509 3/1 — 475/468 6/19 — 14/14 5/0

9 Reche Rd / Old Hwy 395

152/152 363/190 — 259/286 205/193 — 203/390 118/263

10 Stewart Canyon Rd / Old Hwy 395

3/13 660/473 11/16 — 15/14 52/51 — 12/8 0/2 9/15 — 4/10 297/632 27/85

11 Stewart Canyon Rd / Horse Ranch Creek Rd

31/16 — 12/23 27/57 — 39/45 0/1

12 Pala Mesa Dr / Sage Rd

4/2 50/41 — 27/50 11/24 14/32 — 25/20 0/1 — 0/2 8/7 31/29

13 Pala Mesa Dr / Old Hwy 395

12/30 504/294 218/225 — 114/250 31/70 5/37 — 23/14 61/63 60/60 — 26/64 197/492 61/12

14 SR 76 / Melrose Dr

196/43 15/12 84/8 — 76/5 1051/788 74/73 — 343/32 608/1074 190/253 — 414/238 30/10 114/69

15 SR 76 / E. Vista Way

125/51 120/82 1/4 — 3/43 781/641 336/434 — 27/134 571/833 261/237 — 254/123 50/112 319/334

16 SR 76 / N. River Rd

121/103 856/934 — 124/170 82/215 — 98/83 755/1064

17 SR 76 / Olive Hill Rd

29/279 216/110 56/110 — 68/108 872/936 295/379 — 50/120 784/1064 73/132 — 45/105 92/61 240/286

18 SR 76 / S. Mission Rd

600/505 178/155 — 91/151 709/685 — 446/581 604/925

19 SR 76 / Via Monserate Rd

17/10 61/33 — 49/62 705/889 — 16/7 742/1017

20 SR 76 / Gird Rd

85/57 85/59 — 51/121 666/895 — 61/87 722/935

21 SR 76 / Sage Rd

9/5 10/3 — 3/8 684/1009 — 5/1 808/1023

22 SR 76 / Old Hwy 395

48/72 154/74 308/273 — 132/328 506/775 69/47 — 68/66 730/877 102/51 — 56/53 88/119 31/40

23 SR 76 / I-15 SB Ramps

383/415 5/0 259/352 — 330/766 211/522 — 723/986 327/218

24 SR 76 / I-15 NB Ramps

149/432 435/928 — 430/634 566/743 — 116/363 1/3 437/562

25 Project Dwy #1 / Pankey Rd

34/250 — 302/62

26 Pala Mesa Dr / Pankey Rd

12/89 22/161 — 124/25 214/277 — 137/267 178/37

27 Project Dwy #2 / Pankey Rd

47/75 188/356 1/7 — 8/3 — 4/15 29/107 — 67/107 303/286 6/25

28 Project Dwy #3 / Pankey Rd

23/39 193/419 1/7 — 8/3 12/20 50/23 — 28/98 6/20 48/178 — 187/301 342/319 7/30

29 Project Dwy #4 / Pankey Rd

47/76 242/534 1/7 — 8/3 6/10 27/13 — 31/114 3/10 71/248 — 255/417 496/532 7/30

30 Project Dwy #5 / Pankey Rd

23/37 317/759 — 81/286 — 759/979

31 Pankey Place / Pankey Rd

397/1044 — 759/979

32 SR 76 / Pankey Rd

272/829 62/126 28/90 — 63/84 163/357 13/19 — 583/780 345/288 63/259 — 66/224 88/118 14/23

33 Project Dwy #6 / Pankey Rd

45/102 28/91 54/161 — 54/159 6/6 — 45/100 5/5 — 5/5 82/82 6/6

34 SR 76 / Horse Ranch Creek Rd

87/95 — 48/100

35 SR 76 / Rice Canyon Rd

16/12 8/10 — 8/12 306/456 — 10/22 331/365

36 SR 76 / Couser Canyon Rd

0/1 214/447 6/16 — 1/0 359/383 29/47 — 38/43 3/4

37 SR 76 / Pala Mission Rd

135/110 15/17 6/17 — 7/12 146/238 7/23 — 77/336 197/253 10/39 — 12/33 12/24 4/3

38 Dulin Rd / Old Hwy 395

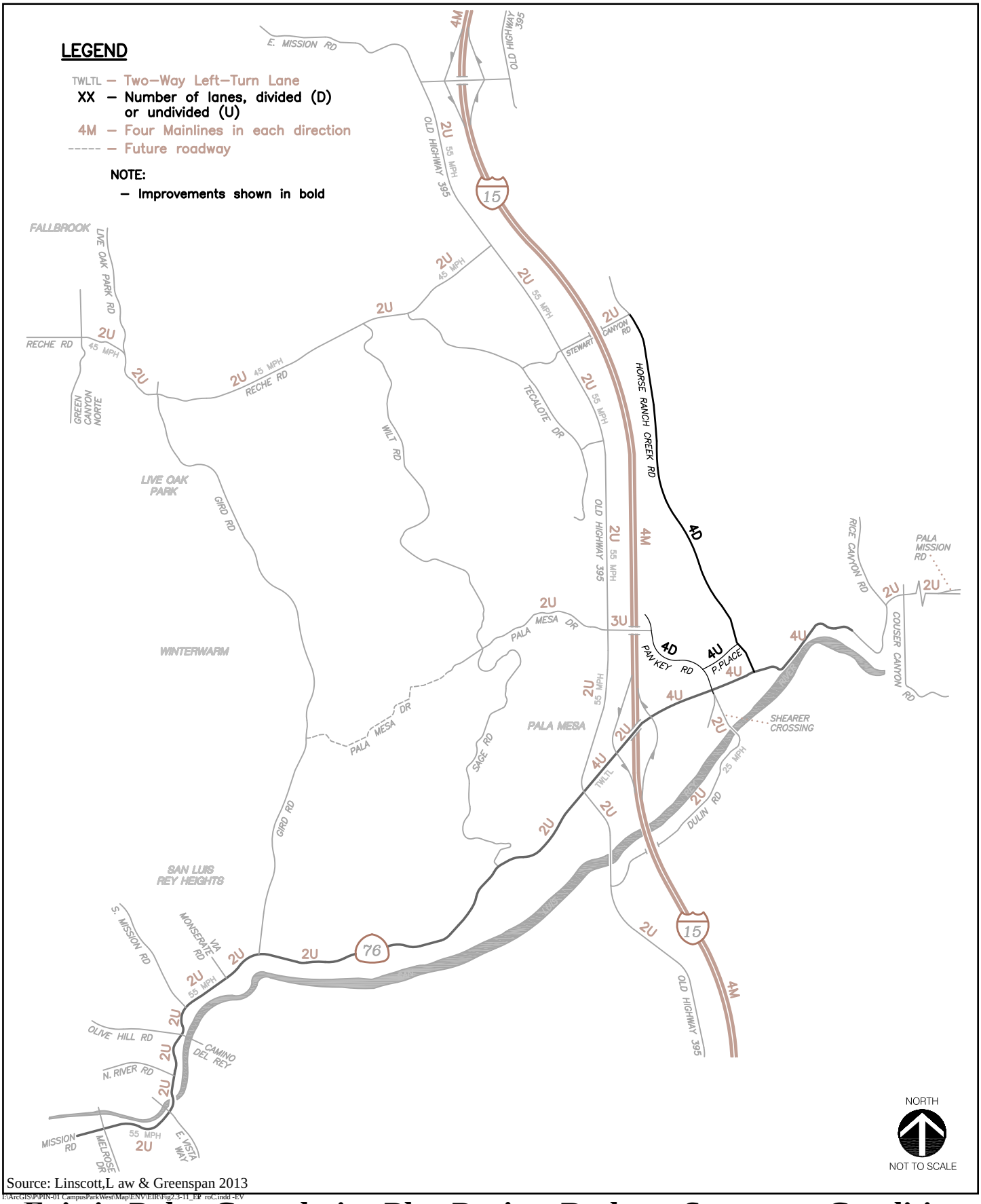
437/70 40/94 — 112/66 286/125 — 96/149 112/218

Existing Plus Project Peak Period Traffic Volumes – Intersections

CAMPUS PARK WEST

Figure 2.3-10

HELIX Environmental Planning



Source: Linscott,L aw & Greenspan 2013

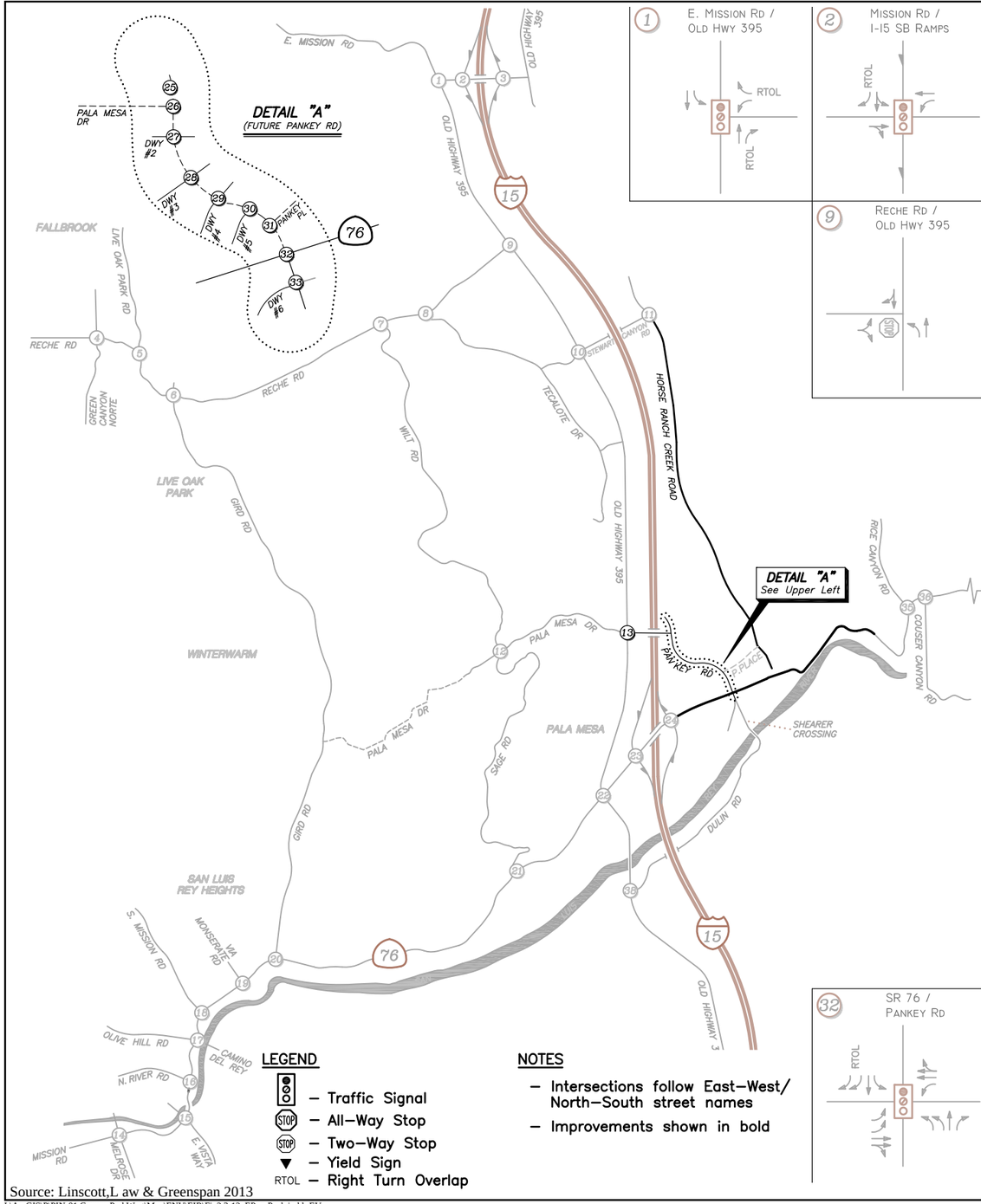
I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2.3-11_EP roC.indd -EV

Existing P lus Cumulative Plus Project Roadway Segment Conditions

CAMPUS PARK WEST

HELIX Environmental Planning

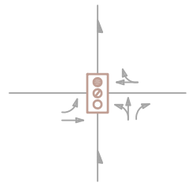
Figure 2.3-11



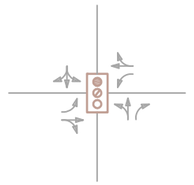
1 E. Mission Rd / Old Hwy 395

2 Mission Rd / I-15 SB Ramps

3 Mission Rd / I-15 NB ramps

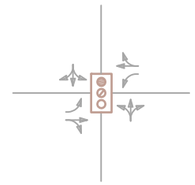


4 Reche Rd / Green Canyon Norte

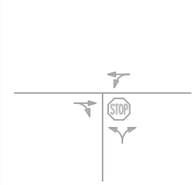


5 Reche Rd / Live Oak Park Rd

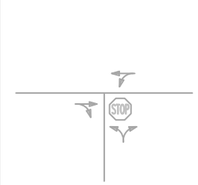
6 Reche Rd / Gird Rd



7 Reche Rd / Wilt Rd



8 Reche Rd / Tecolate Rd



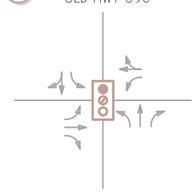
9 Reche Rd / Old Hwy 395

10 Stewart Canyon Rd / Old Hwy 395

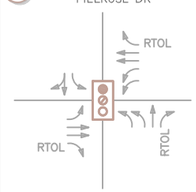
11 Stewart Canyon Rd / Horse Ranch Creek Rd

12 Pala Mesa Dr / Sage Rd

13 Pala Mesa Dr / Old Hwy 395

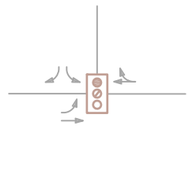


14 SR 76 / Melrose Dr



15 SR 76 / E. Vista Way

16 SR 76 / N. River Rd



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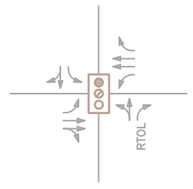
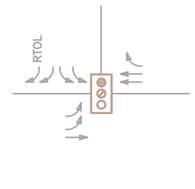
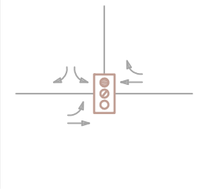


18 SR 76 / S. Mission Rd



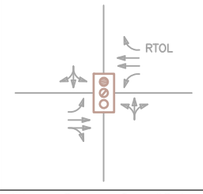
19 SR 76 / Via Monserate Rd

20 SR 76 / Gird Rd

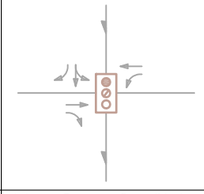


21 SR 76 / Sage Rd

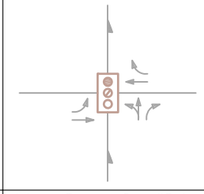
22 SR 76 / Old Hwy 395



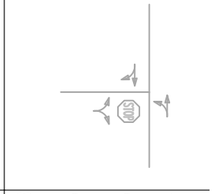
23 SR 76 / I-15 SB Ramps



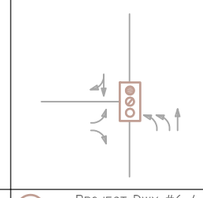
24 SR 76 / I-15 NB Ramps



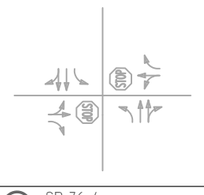
25 Project Dwy #1 / Pankey Rd



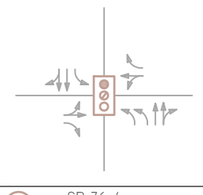
26 Pala Mesa Dr / Pankey Rd



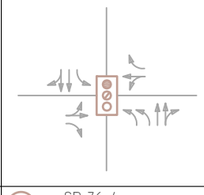
27 Project Dwy #2 / Pankey Rd



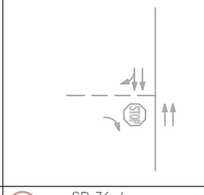
28 Project Dwy #3 / Pankey Rd



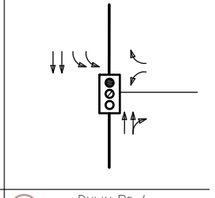
29 Project Dwy #4 / Pankey Rd



30 Project Dwy #5 / Pankey Rd

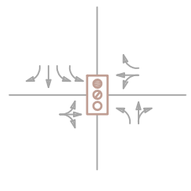


31 Pankey Place / Pankey Rd

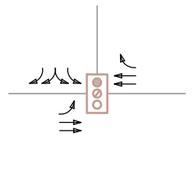


32 SR 76 / Pankey Rd

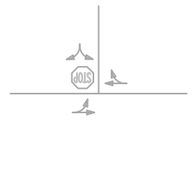
33 Project Dwy #6 / Pankey Rd



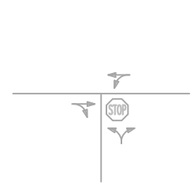
34 SR 76 / Horse Ranch Creek Rd



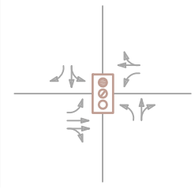
35 SR 76 / Rice Canyon Rd



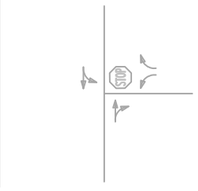
36 SR 76 / Couser Canyon Rd



37 SR 76 / Pala Mission Rd



38 Dulin Rd / Old Hwy 395



Source: Linscott,L aw & Greenspan 2013

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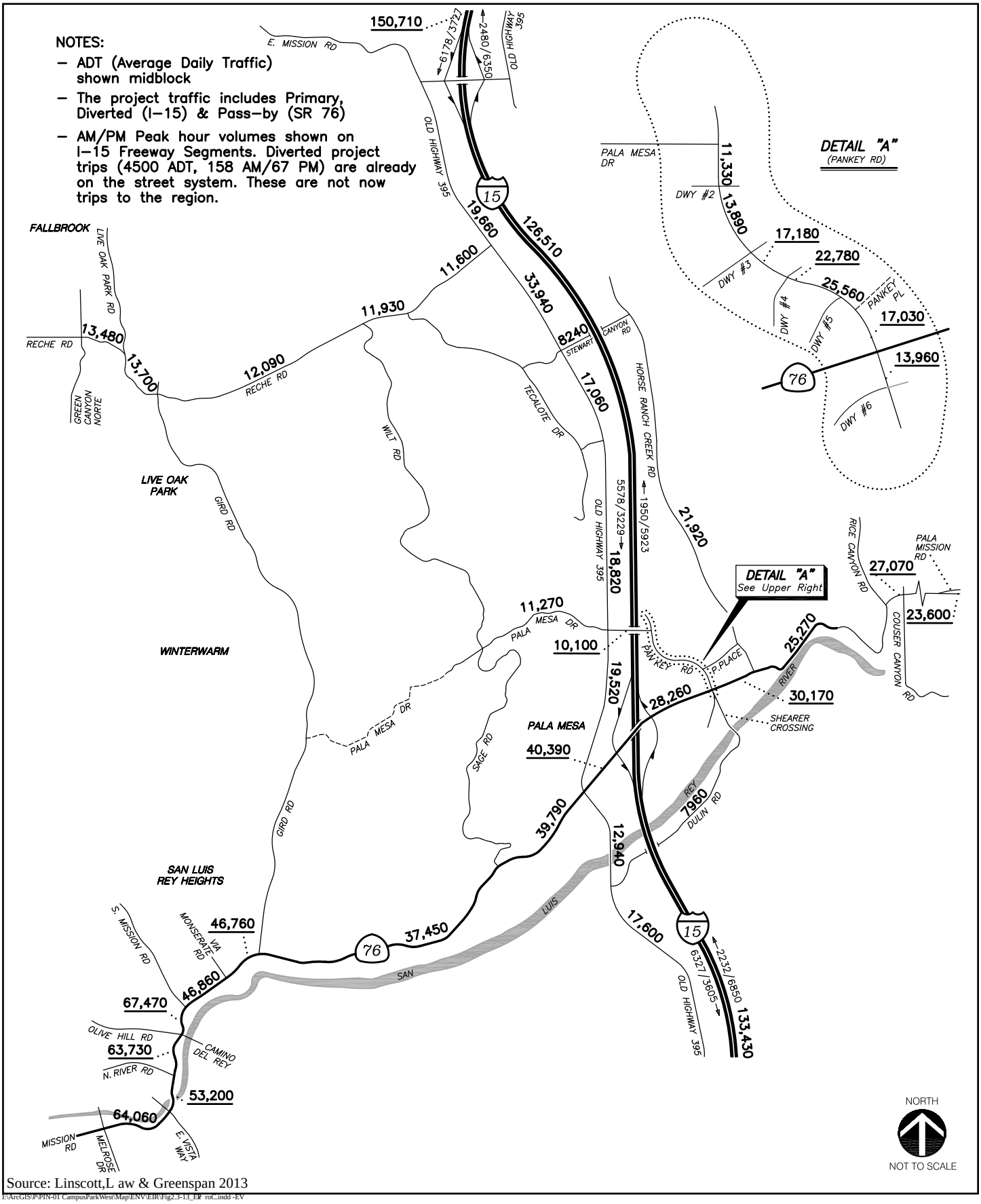
Existing Plus Cumulative Plus Project Intersection Conditions

CAMPUS PARK WEST

Figure 2.3-12

HELIX Environmental Planning



Source: Linscott,L aw & Greenspan 2013

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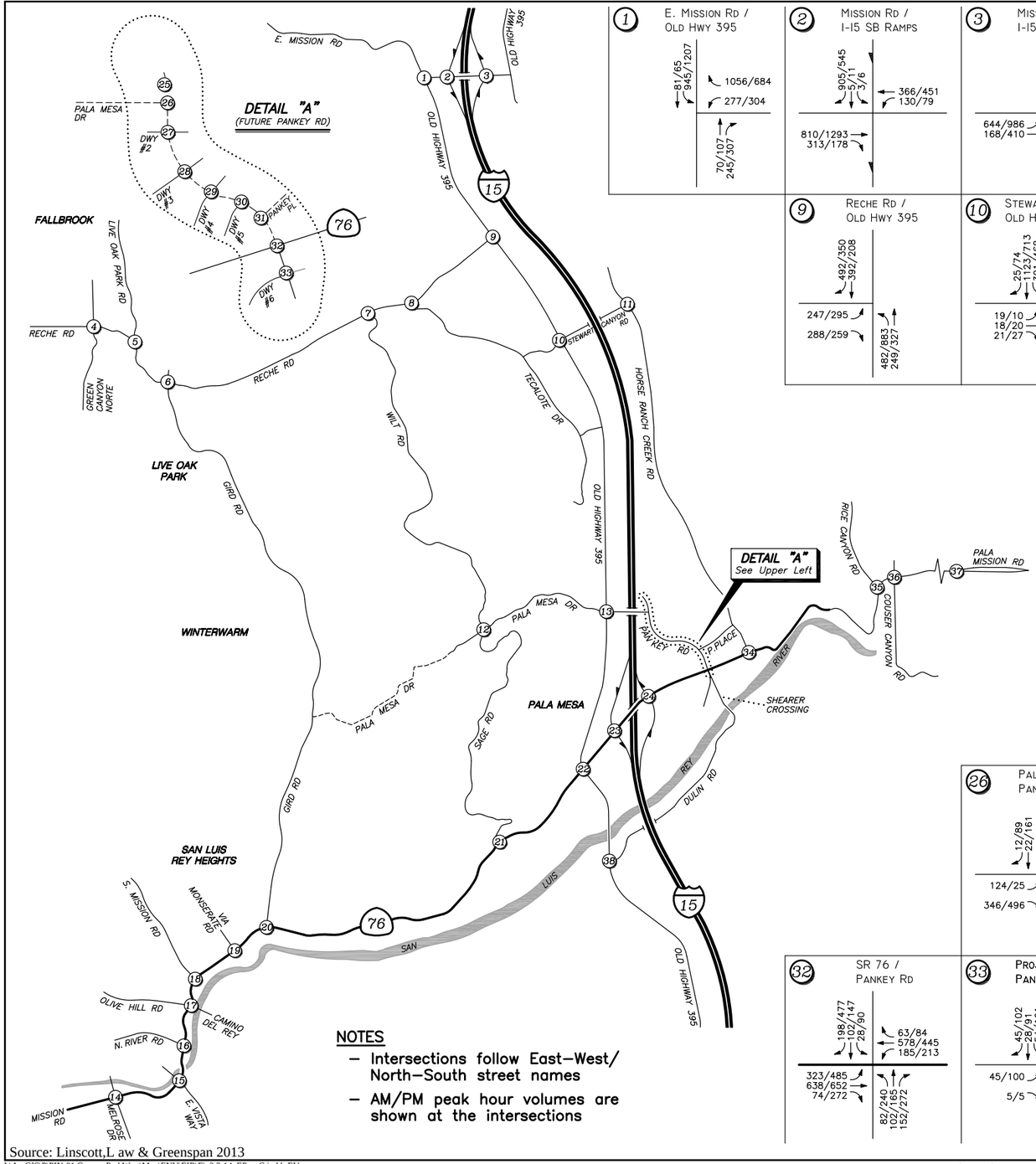
Existing Plus Cumulative Plus Project Average Daily Traffic – Roadway Segments

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-13



1 E. Mission Rd / Old Hwy 395
81/65 945/1207 1056/684 277/304 70/107 245/307

2 Mission Rd / I-15 SB Ramps
905/545 5/11 3/6 366/451 130/79 810/1293 313/178

3 Mission Rd / I-15 NB ramps
11/8 308/196 644/986 168/410 194/376 2/9 79/443

4 Reche Rd / Green Canyon Norte
12/19 6/0 24/19 11/21 599/509 70/99 1/14 387/468 33/39 255/92 2/9 207/92

5 Reche Rd / Live Oak Park Rd
138/39 86/60 64/56 426/536 69/46 492/544

6 Reche Rd / Gird Rd
1/4 1/10 0/1 2/4 358/464 56/70 1/8 404/447 132/136 122/115 1/8 60/70

7 Reche Rd / Wilt Rd
360/499 28/47 421/441 17/38 39/21 39/39

8 Reche Rd / Tecolate Rd
398/524 4/1 460/495 8/28 14/17 5/7

9 Reche Rd / Old Hwy 395
492/350 392/208 247/295 288/259 482/883 249/327

10 Stewart Canyon Rd / Old Hwy 395
25/74 1123/713 301/468 275/336 5/12 74/62 19/10 18/20 21/27 9/49 390/730 28/65

11 Stewart Canyon Rd / Horse Ranch Creek Rd
33/18 16/17 14/25 309/480 266/334 7/24

12 Pala Mesa Dr / Sage Rd
0/9 14/12 55/52 24/59 16/32 15/39 0/8 26/27 0/1 0/2 65/54 131/82

13 Pala Mesa Dr / Old Hwy 395
28/83 816/530 227/275 115/304 41/129 95/116 248/151 92/117 308/217 55/128 409/973 119/139

14 SR 76 / Melrose Dr
508/33 201/212 240/108 120/14 1994/1535 206/99 343/228 882/1785 192/253 492/292 37/210 223/360

15 SR 76 / E. Vista Way
165/63 15/94 2/11 17/58 1637/1098 354/449 71/164 939/1850 373/438 305/241 51/120 344/352

16 SR 76 / N. River Rd
240/141 856/934 35/39 128/12 782/465 201/333 338/1006 82/215 98/83 755/1064

17 SR 76 / Olive Hill Rd
163/292 302/250 112/127 204/167 1624/1446 303/407 90/180 1078/1915 169/287 111/134 184/180 252/315

18 SR 76 / S. Mission Rd
719/623 226/267 159/181 1507/1154 521/714 929/1709

19 SR 76 / Via Monserate Rd
25/15 82/42 71/119 1578/1433 17/22 1216/2019

20 SR 76 / Gird Rd
121/81 82/63 53/137 1098/1192 137/196 1096/1630

21 SR 76 / Sage Rd
15/6 13/7 4/14 1292/1461 6/3 1012/1487

22 SR 76 / Old Hwy 395
107/82 305/215 428/334 141/334 982/1137 100/87 74/109 828/989 170/116 244/200 202/304 158/120

23 SR 76 / I-15 SB Ramps
383/481 505/238 139/238 727/1016 375/356 1119/1242 356/264

24 SR 76 / I-15 NB Ramps
127/301 861/858 525/640 672/861 275/467 1/9 332/568

25 Project Dwy #1 / Pankey Rd
34/250 302/62

26 Pala Mesa Dr / Pankey Rd
12/89 22/161 124/25 346/496 281/453 178/37

27 Project Dwy #2 / Pankey Rd
47/75 320/575 1/7 8/3 4/15 29/107 67/107 447/425 6/25

28 Project Dwy #3 / Pankey Rd
23/39 327/638 1/7 8/3 12/20 50/23 28/98 6/20 48/178 187/301 486/505 7/30

29 Project Dwy #4 / Pankey Rd
47/76 374/753 1/7 8/3 6/10 27/13 31/114 3/10 71/248 255/417 640/718 7/30

30 Project Dwy #5 / Pankey Rd
23/37 449/978 81/286 903/1165

31 Pankey Place / Pankey Rd
311/687 218/576 406/493 52/26 497/672 17/59

32 SR 76 / Pankey Rd
198/477 102/147 28/90 63/84 578/445 185/213 323/485 638/652 74/272 82/240 102/165 152/272

33 Project Dwy #6 / Pankey Rd
45/102 28/91 54/161 54/159 6/6 45/100 5/5 5/5 54/82 6/6

34 SR 76 / Horse Ranch Creek Rd
390/370 70/82 80/121 555/441 452/689 344/373

35 SR 76 / Rice Canyon Rd
135/72 76/52 31/34 583/1207 33/59 1038/958

36 SR 76 / Couser Canyon Rd
0/1 492/1157 10/38 1/0 1020/920 38/58 58/61 28/12

37 SR 76 / Pala Mission Rd
180/164 18/28 16/20 27/33 269/643 18/58 236/421 449/535 36/72 34/62 12/25 4/4

38 Dulin Rd / Old Hwy 395
680/359 45/103 112/75 297/143 869/1098 119/267

Source: Linscott,L aw & Greenspan 2013

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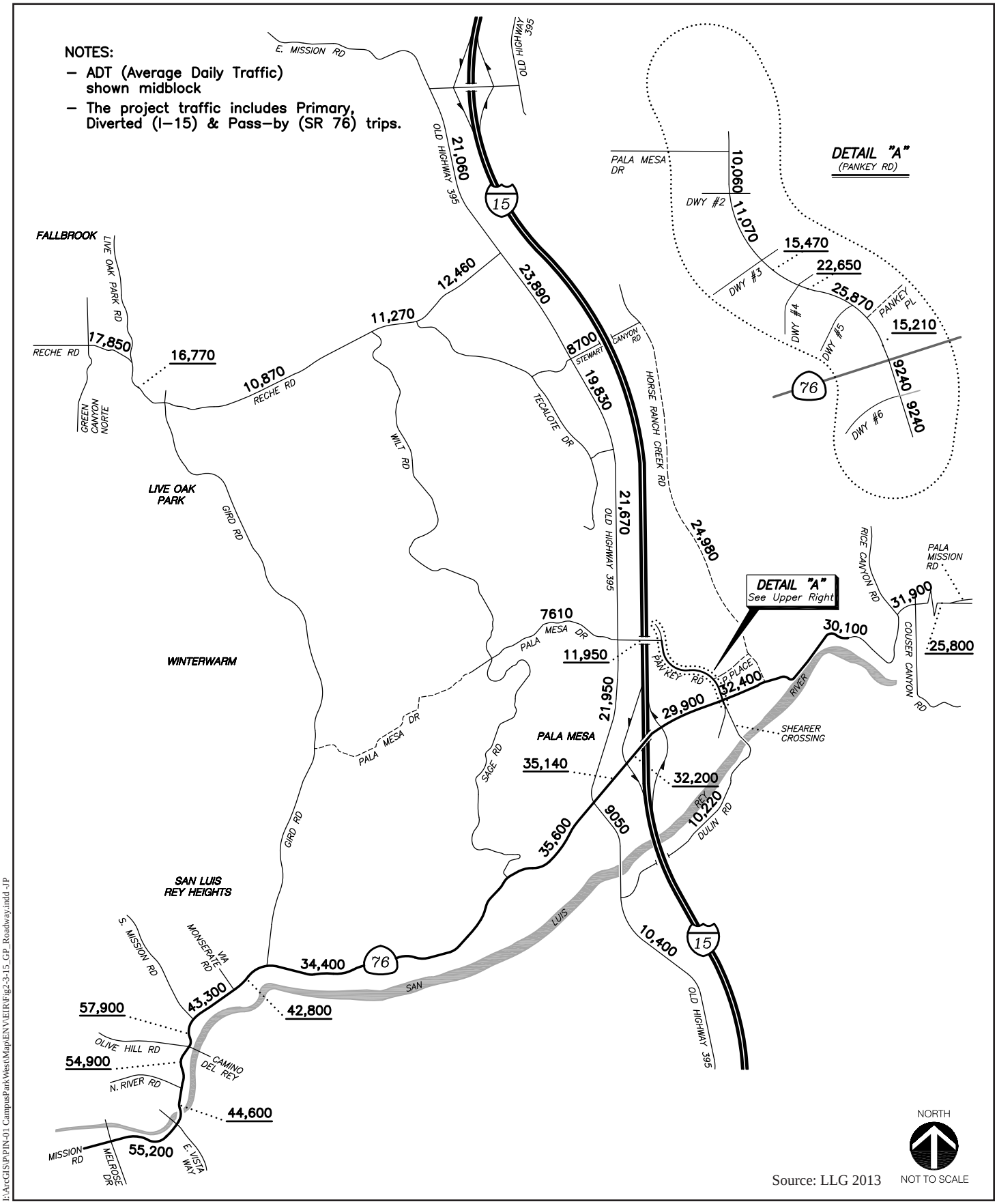
Existing Plus Cumulative Plus Project Peak Period Traffic Volumes – Intersections

CAMPUS PARK WEST

Figure 2.3-14

HELIX Environmental Planning



Source: LLG 2013

Buildout (Year 2030) General Plan Roadway Segment Conditions

CAMPUS PARK WEST

Figure 2.3-15

HELIX Environmental Planning

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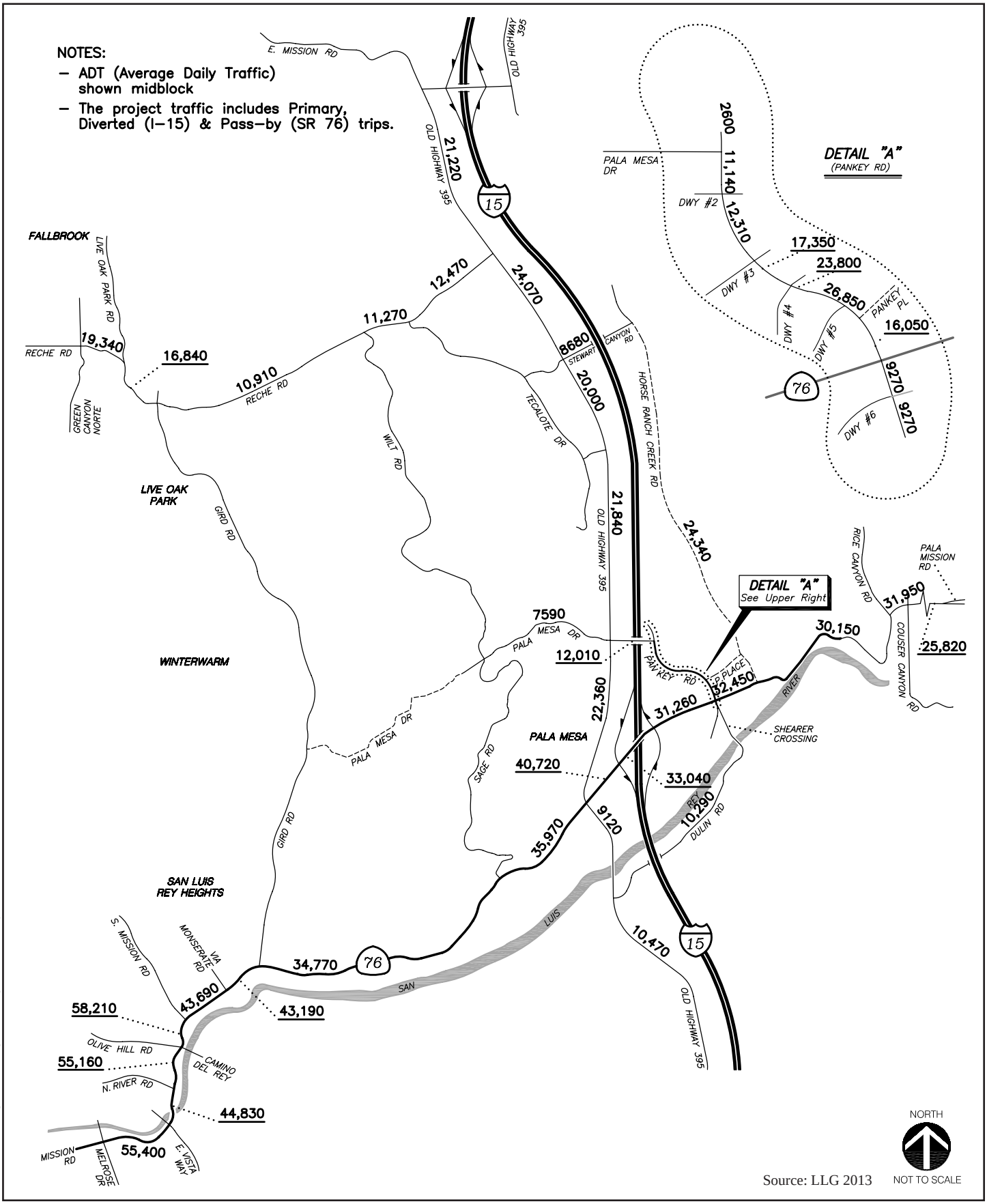

Source: LLG 2013

Buildout (Year 2030) General Plan Amendment Roadway Segment Conditions

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.3-16

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SUBCHAPTER 2.4

CULTURAL RESOURCES

2.4 Cultural Resources

The 1981 Sycamore Springs EIR identified cultural resources impacts as less than significant. In support of that finding, a cultural survey was conducted by Westec Services in 1979, in which two isolates (artifacts not associated with other cultural material) were discovered, although their location was not provided. The 1981 EIR stated that these two isolates were not significant cultural resources due to their isolated nature and the disturbance surrounding them. The 1981 EIR, however, also acknowledged that the general area has a high potential for unknown archaeological resources and recommended that an archaeological monitor be present during initial grading in the vicinity of the isolates' location.

In 1982, RECON conducted a cultural survey of the north-central portion within the original property boundaries. No additional cultural resources were located, although the 1983 Hewlett Packard EIR also acknowledged the possible presence of isolates on site.

The assessment of the Proposed Project's potential to have an adverse effect on cultural resources is based on the Cultural Resources Survey completed by Heritage Resources (2004 and as updated through 2014). The Cultural Resources Survey for Campus Park West is included as Appendix E of the EIR, with confidential records and maps on file at PDS and deposited with the South Coastal Information Center (SCIC).

The assessment of the potential for off-site improvements associated with the Proposed Project to adversely affect cultural resources is based on the following studies: (1) Campus Park Cultural Resources Survey prepared by Sue Wade (Heritage Resources 2007); (2) Cultural Resources Survey, Archaeological Testing, and Historic Building Evaluation for the Proposed Meadowood Project (TM5345RPL/SP04-001/R04-005/S04-006/S04-007/Log No. 04-02-004) prepared by ASM Affiliates, Inc. (ASM 2009); (3) Campus Park/Passerelle Off-site Road Improvements Cultural Resource Survey prepared by Sue Wade (Heritage Resources 2009), (4) Cultural Resource Record Search and Survey (2004 as updated through 2014), Campus Park West (Pappas Property) prepared by Sue Wade (Heritage Resources 2012), and 2012 coordination with ASM Affiliates regarding ongoing work for Horse Ranch Creek Road. Off-site facilities primarily would be constructed in or immediately adjacent to existing roadways, which generally are presumed to be disturbed, although have potential for buried archaeological deposits.

The results of the analysis are summarized below.

2.4.1 Existing Conditions

The Project area lies between the Santa Margarita River/Temecula Valley region to the north and the San Luis Rey River Valley region to the south. The archaeological information known about the site complexes (see Appendix E, Cultural Resources Survey) in the general area suggests that concentrations of occupation focused near major drainage confluences, as additionally discussed below. Surrounding special use sites were located near natural resources and occupied for short periods during food collecting and processing. The area was also attractive to later Spanish, Mexican, and American ranchers and farmers, with the Project property being part of Rancho Monserate, granted to Ysidro Maria Alvarado in 1846. Large ranches later developed out of the

old Monserate Rancho lands and operated through the mid-twentieth century. These ranches included the Rancho San Luis Rey facility (one of the most successful horse breeding farms in the nation), and the Pankey Brothers farm.

The presence and significance of existing cultural resources within the boundaries of the Proposed Project were determined based on a review of institutional records, previous on-site surveys (1979 and 1982), historic maps of the Project area from 1928 and 1953, field survey updates in 2004 and 2012, and coordination with archaeologists working on adjacent sites. The studies referenced above for off-site improvements were reviewed and additional field surveys were conducted in 2012 to assess the presence and significance of cultural resources in areas identified as sites or alignments for potable water and sewage conveyance and lift stations located outside of the Project boundaries.

The evaluation of cultural resources is in conformance with the County RPO, Section 21083.2 of CEQA, and Section 15064.5 of the CEQA Guidelines as well as the County Guidelines for Determining Significance and Report Format and Content Requirements, Cultural Resources: Archaeological and Historical Resources.

2.4.1.1 *Records Search Results*

Record searches were conducted at the SCIC and San Diego Museum of Man in 2004 and updated in 2012. Based on SCIC files, eight cultural resources have been recorded within one mile of the Project area, as indicated on Table 2.4-1, Archaeological Resources within One Mile of the Proposed Project.

The following resources were noted as having been recorded in the vicinity of the Project area but outside of the Project boundaries:

- One site and one isolate consisting of two flakes and one mano are located to the northwest of the Project site.

- Four sites and one isolate consisting of two pictograph boulders, a probable village site, bedrock milling, and isolated flakes are located approximately 900 to 3,000 feet east of the southeast corner of the Project and north of SR-76/Pala Road. This is the area where D.L. True excavated CA-SDI-682 in 1959 (True 1958), a site which has been identified as the ethnographic village of *Tom-Kav*. This Late Prehistoric village site is also known as the Pankey Site and extends from the slopes of Rosemary's Mountain west onto the more level terrain of the Meadowood project property.

- The site of the historic Monserate rancho adobe and structures associated with the 1930s and 1940s Rancho San Luis Rey thoroughbred breeding and training facility are located approximately 2,100 feet east of the Project site on the north side of SR-76/Pala Road within the boundaries of the Meadowood project property. Additional structures of the Rancho San Luis Rey are also located on the Campus Park West property.

The record searches confirm that prior to current studies, the area inside the Project boundaries had been surveyed at least twice: by Westec Services in 1979 as part of the larger Sycamore Springs proposed development (Breece 1979), and by RECON in 1982 for the larger Hewlett Packard proposed development (Hector 1982). Two isolates (one mano and one mano fragment) were discovered in the area of the Campus Park project during the Westec survey that was completed during conditions of good visibility (over terrain that had been recently plowed or was cleared for orange groves). The surveyors re-inspected these areas intensively and found no further cultural evidence. The report concluded that the resources both "are isolates and do not denote a site." However, given the archaeological sensitivity of the area, it was recommended that a qualified archaeologist monitor any initial grading in the area of the isolates. The RECON survey concentrated on the low ridges above the main drainage. No resources were found, and it was suggested that the topographically rugged area may have been used for hunting and could not support a more extensive use.

2.4.1.2 *Campus Park West Field Survey*

A focused field check was completed for Campus Park West, on June 30, 2004. The knolls on the large property north of SR-76/Pala Road and the three parcels on alluvial terrain south of SR-76/Pala Road were surveyed. Most of the knolls had been cleared of the orchards that had been present in 1979, and weeds had been recently cut; surface visibility in most areas was excellent. No prehistoric sites were found within the Project boundaries north or south of SR-76.

The southern portion of the large property north of SR-76 previously contained outbuildings, barn, and horse track associated with the Rancho San Luis Rey thoroughbred facility. A small runway and enclosed track used by a remote-control airplane and car club were observed in 2004 on the apparent site of a horse track indicated on the 1942 U.S. Geological Survey (USGS) map. The following remnants of the horse facility were found: a concrete slab foundation, several pepper and eucalyptus trees, and one small outbuilding that likely had been a hay shed, garage or tack building. During the 2012 field check, it was noted that the small outbuilding was no longer present; however, documentation from the 2004 survey was used to prepare a DPR-523 Archaeological Resource Record Form update. There were no surface remains present that would warrant subsurface testing, and this was confirmed with County archaeological staff (Beddow 2012: pers. comm.).

2.4.1.3 *Off-site Field Surveys*

Project utility extensions or facilities proposed for Campus Park West (TM 5424) would be located within SR-76 and Horse Ranch Creek Road. The latter road is sited on portions of neighboring properties with approved projects and certified EIRs (Campus Park [VTM 5338] and Meadowood [TM 5354]). Please refer to Figure 1-3 of this EIR for a graphic depicting the locations of Campus Park and Meadowood projects relative to the Proposed Project. Applicable results from these previous cultural resources studies are discussed below.

The southern two-thirds of the adjacent Campus Park property was surveyed twice under excellent survey conditions. The area had been engaged in agriculture (hayfields and orchards)

for at least 80 years. The surveyed area was rocky and characterized by old furrows and heavily eroded gullies trending east to west.

A field inspection (primarily a windshield survey) was conducted on July 23, 2008 to compare the results of the previously conducted surveys to the proposed off-site improvement areas for the Campus Park project, as well as to identify areas disturbed by grading, excavation, and cultivation (Heritage Resources 2009). On-the-ground inspections were necessary in a few areas that had not been previously surveyed or extensively disturbed. No significant cultural resources were identified in this survey.

ASM staff conducted a cultural resources field survey for the Meadowood property in September/October 2003 in compliance with the County CEQA guidelines and determined that additional archaeological testing was required (ASM 2009). Subsequently, ASM staff conducted limited trenching on the west side of the ranch road to determine if subsurface deposits related to the Pankey Site extended west of the road. Archaeological deposits were identified in initial backhoe trenches. Between September 2004 and January 2005, subsurface archaeological testing was conducted on the Meadowood property. Based on the results of that testing, the boundaries of CA-SDI-682 were expanded west of the ranch road to include three newly identified archaeological deposits identified as loci A, B and C. Cultural materials associated with the midden deposits included aboriginal ceramics, ground stone, bone tools, animal bones, historic glass, lithic debitage, bifaces, and one core. Limited surface artifacts consisting of four ground stone tools, one projectile point, and one aboriginal ceramic fragment were recovered from the site. Preservation of Loci A and B in open space was recommended.

In January 2011, vegetation removal was conducted for improvement of Horse Ranch Creek Road by Palomar College, with archaeological and San Luis Rey Band monitors present. Locus A and B, both designated as open space, were to be avoided. At the beginning of work, the monitors noticed that a tree adjacent to Locus B had been removed by ranch hands and disrupted soils contained midden, and prehistoric and historic archaeological materials, including bone fragments that were subsequently identified by the San Diego County Medical Examiner Office as possibly human. All work in the vicinity of the discovery was halted during review and coordination. Additional archaeological testing was implemented in January 2012 and a resulting data recovery plan was approved and implemented in February 2012. Following data recovery, work restarted on the road. Following consultation with the Most Likely Descendant, the (San Luis Rey Tribe), it was determined that the recovered archaeological materials would be inventoried and repatriated to the Tribe, and that archaeological resources remaining in place would be capped, with the road constructed above the cap.

Six buildings on the Meadowood property also were evaluated for eligibility under the California Register of Historical Resources (California Register) and San Diego County Local Register of Historical Resources (Local Register). Five of these buildings were constructed in the late 1920s or early 1930s. They were associated with Rancho San Luis Rey, the thoroughbred breeding and training facility noted above that was owned and operated by Charles E. Cooper between 1931 and 1943. The buildings evaluated include a bungalow, bunkhouse, two small garages, rustic barn, and concrete refrigeration room.

The Meadowood project area also was noted as apparently including the original location of Historic Period Rancho Monserate Adobe. The Rancho Monserate ranch house probably existed in the southeastern corner of the Meadowood property, but no physical evidence of the adobe was found. The adobe was occupied between 1846 and 1863, and a second house, Morel's house, was also located on the Meadowood site between 1869 and 1896. Although no standing remains of either building were found, the cultural resources documentation noted that there is the possibility that subsurface foundations, trash pits, privies, or other features may be present.

2.4.1.4 *Native American Consultation*

Coordination with knowledgeable representatives of Native Americans is an important component of site identification, assessment of potential site sensitivity, and identification of appropriate mitigative actions required for any resources potentially impacted by a proposed project. In the vicinity of the Project, representative band members have been active in coordination regarding burial items and associated artifacts located during the Palomar College installation of Horse Ranch Creek Road.

Pursuant to California Government Code Section 65352.3, the NAHC was contacted, as were Native American individuals/bands/organizations potentially knowledgeable regarding cultural resources in the area, during studies focused on CA-SDI-682 for the adjacent Campus Park and Meadowood projects. Representatives of the Cupa Cultural Center; La Jolla Band of Luiseño Indians; and the Pala, Pauma/Yuima, Pechanga, Rincon, San Luis Rey, Soboba, and Twenty-Nine Palms Bands of Mission Indians were contacted. A response letter from the San Luis Rey Band requested the presence of a Native American monitor during grading, excavation or other ground-breaking activities within previously undisturbed soils during construction. Subsequent letter contacts were made and consultation meetings were held in 2009 with regard to off-site improvements near site CA-SDI-682. Native American participants requested the presence of Native American grading monitors, in particular in the CA-SDI-682 area. Additional written responses were received from Pechanga Band of Mission Indians and Rincon San Luiseño Band of Mission Indians also requesting the presence of Native American monitors during ground disturbing activities associated with the Campus Park project.

In 2010, coordination with the NAHC resulted in consultation requests being sent to the Pala Band of Mission Indians, Pauma and Yuima, Rincon Band of Mission Indians, San Luis Rey Band of Mission Indians, and La Jolla Band of Mission Indians. Two tribes responded: the San Luis Rey Band of Mission Indians and Pala Band of Mission Indians. The San Luis Rey Band requested a pre-excavation agreement to be entered prior to any ground-disturbing activities; and outlined concerns regarding the preservation of cultural, archaeological, and historical sites and resources located within the Project area. The Pala Band of Mission Indians recommended archaeological monitoring and expressed a desire to stay involved with Project planning. The County is continuing to consult with interested Tribal representatives regarding the Proposed Project.

2.4.1.5 *Evaluation of Site Significance*

Cultural resources were evaluated according to the criteria presented in Section 15064.5 of the CEQA Guidelines, as amended, and the County of San Diego guidelines, as described below. A cultural resource would be considered significant if it is:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the California Register (Public Resources Code [PRC] Section 5024.1; Title 14 California Code of Regulations [CCR], Section 4850 et seq.).

2. A resource included in the local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (PRC Section 5024.1, Title 14 CCR, Section 4852), including the following:

   (a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
   (b) Is associated with the lives of persons important in our past;
   (c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
   (d) Has yielded, or may be likely to yield, information important in prehistory or history.

4. The fact that a resource is not listed in the California Register, determined not to be eligible for listing in the California Register, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), and not identified in an historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(i) or 5024.1.

In accordance with CEQA, any cultural resources must be assessed for project-related actions that could directly or indirectly impact them. Under this scenario, impacts to cultural resources not deemed important according to the above criteria would be considered less than significant. A summary of on-site and off-site cultural resources is provided below, along with a

determination as to the significance of the impact pursuant to Section 15064.5 of the CEQA Guidelines.

The County of San Diego Guidelines for Determining Significance and Report Format and Content Guidelines also define Traditional Cultural Landscapes. "A traditional cultural landscape defined as a district could include a village site, related milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps. Together, these represent a traditional cultural landscape."

Federal and state laws also mandate that consideration be given to the concerns of contemporary Native Americans with regard to potentially ancestral human remains and associated funerary objects, as well as items of cultural patrimony. Consequently, an important element in assessing the significance of the study site has been to evaluate the likelihood that these classes of items are present in areas that would be affected by the proposed project.

Also, Traditional Cultural Properties are relevant to the analysis of prehistoric cultural sites. According to Patricia L. Parker and Thomas F. King (1998), "Traditional" in this context refers to those beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. The traditional cultural significance of a historic property, then, is significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices. Examples of properties possessing such significance include:

1. A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;

2. A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;

3. An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;

4. A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with traditional cultural rules of practice; and

5. A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

A traditional cultural property, then, can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

2.4.1.6 *Findings for On-site Cultural Resources*

The surveys previously conducted inside the Project boundaries discovered no prehistoric archaeological sites. However, it was concluded that because many areas on the Project property are river terrace alluvial deposits, and because major prehistoric habitation complexes are located in close proximity, prehistoric archaeological deposits could lie buried below the alluvium or in other depositional situations.

A concrete slab foundation, several pepper and eucalyptus trees, and one small outbuilding were the only remnants of the Rancho San Luis Rey found within the Project boundaries. The core of the Rancho San Luis Rey facility, located on the Meadowood property, was previously determined not eligible for listing in the California Register and not significant under CEQA; the portion of Rancho San Luis Rey that remains on the Campus Park West property also does not possess sufficient integrity to meet eligibility or significance criteria. The remaining structure fell down and was cleared from the site per County direction in 2009. The archaeological remains associated with the structure were documented on an update to California Department of Parks and Recreation 523 Resource Record Forms and submitted to the SCIC.

Based on the above-described County Guidelines and State and federal law, the village of *Tom-Kav*, recorded to the east of the Campus Park West property as site CA-SDI-682, would potentially qualify as a Traditional Cultural Landscape/Property.

In relation to the Campus Park West property, however, the currently known location of the *Tom-Kav* village/CA-SDI-682 is well to the east. During the archaeological studies for the Campus Park West property, no archival or archaeological evidence was discovered to indicate that *Tom-Kav* village (site CA-SDI-682), extends onto the Project property. Similarly, no evidence of independent and *in situ* milling features, stone quarries and lithic tool process areas, ceremonial locations and landmarks, and temporary or seasonal camps was noted. As part of the ongoing Project evaluation, however, the County is continuing Government-to-Government Consultation with the Tribes. Coordination regarding the extent of *Tom-Kav* village will continue to be addressed as part of this Consultation.

2.4.1.7 *Findings for Off-site Cultural Resources*

In 1947, D.L. True recorded site CA-SDI-682, known in the archaeological literature as the Pankey Site (ASM 2009). The Pankey Site, located within and to the east of the Meadowood property, was identified as the village of *Tom-Kav*. True continued his work on the site over the following decades and in 1985, along with Mrs. Rosemary Pankey, proposed that radiocarbon data indicated that the early Pauma complex occupation represented seasonal use of the interior areas by coastal populations. The Pankey Site is RPO significant and is eligible for listing on the California Register and National Register of Historic Places. The site, including loci A and B, the more recently identified archaeological deposits that have relatively small portions of intact midden, also is considered a County RPO resource and, as such, impacts to the site must be avoided. The recently identified locus C of site CA-SDI-682 was determined to not be significant.

None of the buildings found on the Meadowood property associated with Rancho San Luis Rey were recommended as being eligible for either the California or Local Registers. Since there was no surface indication of the Monserate Adobe on the Meadowood property, no significance evaluation was completed. Regardless, if buried features, such as subsurface foundations, trash pits, or privies, are present, they could provide significant insight into life during the late Mexican and early American periods in San Diego County. Theoretically, the Monserate Adobe would be significant because: (1) the adobe is associated with events that have made a significant contribution to the broad patterns of California's history, in this case the late Mexican Period and transition into the American Period, and (2) subsurface deposits may provide information to further answer questions related to understanding the history of the area and life in rural San Diego County in the late Mexican Period and transition into the American Period.

2.4.2 Analysis of Project Effects and Determination as to Significance

The following discussion evaluates potential impacts to prehistoric and historical sites resulting from the Proposed Project. Section 15064.5(c) of the CEQA Guidelines addresses effects on archaeological sites. It notes that once it is known that a project may impact an archaeological resource, if that archaeological resource is neither a unique archaeological nor an historical resource, project effects on those resources shall not be considered a significant effect on the environment. The resource and potential project effects must be noted in the EIR, but the site need not be further considered during the CEQA process. The potential disturbance of human remains with regard to the Proposed Project also is discussed. The discussions within Sections 2.4.2 below apply to both **Scenario 1 and Scenario 2**.

2.4.2.1 *Prehistoric Sites*

Guideline for the Determination of Significance

A significant impact to cultural resources would occur if the Proposed Project would:

1. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of the Interior Standards.

Guideline Sources

This guideline is taken from the County Guidelines for Determining Significance, Cultural Resources: Archaeological and Historic Resources (County 2007d). Substantial adverse change is identified in the County Report Format and Content Requirements as "physical demolition, destruction, relocation, or alternation of the resource or its immediate surroundings such that the significance of an historical[1] resource would be materially impaired (County 2007d:42). Material impairment would occur when a project:

[1] For the purposes of this section, "historic" resource includes a structure, structural remains, or evidence of human activity, such as archaeological remains.

(a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

(b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

(c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Analysis

On-site Resources

No prehistoric resources were discovered during the 2004 and 2012 field surveys of the Proposed Project area. The records search and field studies described above, however, have demonstrated that prehistoric archaeological deposits could lie buried below the alluvium and that the discovery of sites has been hampered by historic land alterations and dense vegetation. There is the potential that brushing and initial grading activities associated with construction of the Proposed Project could result in the discovery of previously unrecorded, potentially significant archaeological resources. Therefore, impacts to such on-site cultural resources could be **potentially significant**. (**Impact CR-1**)

Off-site Resources

No resources were documented by Heritage Resources for the location of the Campus Park lift station at the intersection of SR-76 and Pankey Road. Specific to the RMWD pump stations to the west of the Project, field reconnaissance in October 2012 did not result in identification of any cultural resources in this disturbed area.

As noted above, the records search and studies previously described demonstrated that important archaeological (prehistoric) resources (CA-SDI-682) are located in areas associated with the adjacent Meadowood project. Also as discussed above, in 2012, known and important elements of the site were capped so that they would be preserved in place. If Campus Park does not complete ongoing installation of water and sewer pipelines in Horse Ranch Creek Road and SR-76 prior to implementation of Campus Park West, Campus Park West would complete the work. Although these pipelines are being installed in the existing disturbed roadbed and in a filled and capped portion where the known locus is being protected, resulting in a low likelihood that additional resources would be discovered, a conservative assessment is being made that unknown but potentially important subsurface resources may be present. Therefore, potential impacts resulting from construction of off-site facilities to important prehistoric resources could be **potentially significant**. (**Impact CR-2**)

2.4.2.2 *Historical Sites*

Guideline for the Determination of Significance

A significant impact to cultural resources would occur if the Proposed Project would:

2. Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5 of the State CEQA Guidelines. This shall include the destruction, disturbance or any alteration of characteristics or elements of a resource that cause it to be significant in a manner not consistent with the Secretary of the Interior Standards.

Guideline Source

This guideline is taken from the 2007 County Guidelines for Determining Significance (County 2007d), as described above. Information related to substantial adverse change and material impairment was described in Section 2.4.2.1 of this subchapter.

Analysis

On-site Resources

As a result of the site survey for Campus Park West, remnant structures associated with Rancho San Luis Rey on the Campus Park West property were evaluated for significance. These sites included an outbuilding (no longer present on site) and concrete slab. An update to the Resource Record form on file for the Rancho San Luis Rey structural remains (CA-SDI-16,890) was completed to document the on-site resource information. These structures were determined to not be significant because they do not contain historic, architectural, or informational value. Therefore, impacts to on-site historic resources would be **less than significant**.

Off-site Resources

As a result of the site survey for Meadowood, six buildings associated with Rancho San Luis Rey were evaluated for significance and none of the buildings were recommended as being eligible for either the California or Local Registers. These structures are not located within the roadbeds where pipelines could be sited. **No impact** would occur.

If buried features associated with the Monserate adobe, such as subsurface foundations, trash pits, or privies, are present in the Meadowood project area, they could provide significant insight into life during the late Mexican and early American periods in San Diego County. Unlike the activity patterns resulting in prehistoric and ethnographic period archaeological resources, however, which are broad based and widely spread, historic activities resulted in more focused features and artifacts. Given the location of the adobe and its associated features, the capping completed as part of the protection of the archaeological resources noted above would protect remnants of the historical activities that might be located in Horse Ranch Creek Road. As a result, **no impact** would occur.

2.4.2.3 *Disturbance of Human Remains*

Guideline for the Determination of Significance

A significant impact to cultural resources would occur if the Proposed Project would:

3. Disturb any human remains, including those interred outside of formal cemeteries.

Guideline Source

Guideline No. 3 is taken from the County Guidelines for Determining Significance (County 2007d) and CEQA Guidelines. In the event that human remains are discovered, excavation would cease pending a determination by the County Coroner as to whether the remains are Native American. If determined to be of Native American origin, the NAHC shall be contacted to identify the "most likely descendant" (MLD). The MLD shall be consulted and the MLD may make recommendations for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods.

Analysis

On- and Off-site Resources

No evidence of human remains, including those interred outside of formal cemeteries, was discovered during the records search, literature review or site surveys for the Proposed Project. Although unlikely, if human remains are unearthed during grading activities, impacts could be **significant**. **(Impact CR-3)**

2.4.2.4 *RPO Significant Cultural Resources*

Guideline for the Determination of Significance

A significant impact to cultural resources would occur if the Proposed Project would:

4. Propose activities or uses damaging to significant cultural resources as defined by the County RPO and fails to preserve those resources.

Guideline Source

Guideline No. 4 is taken from the County 2007 County Guidelines for Determining Significance (County 2007d). The RPO does not allow non-exempt activities or uses damaging to significant prehistoric or historic lands under County jurisdiction. The only exempt activity is scientific investigation, with preservation in place often required.

Analysis

On-site Resources

As discussed in Subchapter 1.2, Project Description, of this EIR, the Proposed Project is exempt from the RPO, as the Project area is part of pre-1988 approved specific plans. As such, there are **no impacts**.

Off-site Resources

Off-site facilities that would be constructed for the Campus Park West Project if adjacent Campus Park does not complete ongoing infrastructure installation prior to Project implementation, or as part of RMWD sewage conveyance upgrades, and that are not located within another RPO-exempt project area would be subject to the RPO. This would include installation of water and sewer lines within Horse Ranch Creek Road and SR-76, potential pump stations locations north of Pala Mesa Drive between and adjacent to I-15 and Old Highway 395, and intersection improvements at the SR-76 and Pankey Road intersection, as well as at Old Highway 395 and Pala Mesa Drive. In each instance, potential facilities would be located in areas already disturbed by roadway construction. Impacts to RPO-protected resources are considered highly unlikely given the lack of surface indications and the capping that has already occurred on Horse Ranch Creek Road as described above. There is, however, a small potential for an impact to occur. Therefore, a conservative assessment is being made that impacts to RPO-protected cultural resources from construction of off-site facilities (such as focused intersection improvements and potable water or sewer pipelines) could be **potentially significant**. **(Impact CR-4)**

2.4.3 Cumulative Impact Analysis

According to CEQA, the importance of cultural resources stems from their research value and the information that they contain. Therefore, the issue that must be explored in a cumulative analysis is the cumulative loss of that information. For sites considered less than significant, the information is preserved through recordation, test excavations and preservation of artifacts. Culturally significant sites that are placed in protected open space easements avoid direct impacts, as well as preserve potential research data. Significant sites that are not placed within open space easements and that are directly impacted by the project preserve information through recordation, test excavations, and data recovery programs that would be presented in reports and filed with the County and SCIC. The artifact collections from any potentially significant site would be curated at a federally approved curation facility, such as the San Diego Archaeological Center, and would be available to researchers for further study. Because cultural resources are non-renewable in nature, it is critical that information obtained through excavation is appropriately retained and utilized.

No on-site significant cultural resources were located. There is, however, an identified potential for on-site impacts to subsurface deposits or features that are currently not recorded. In addition, impacts could occur to off-site unrecorded and recorded prehistoric resources from the construction of facilities that would also serve the proposed Project or are being environmentally cleared under this document for RMWD. Based on this potential, Project implementation could

result in a cumulatively considerable impact. As a result of this determination, the following review was undertaken.

The cultural resources cumulative study area was identified based on potential future research questions that could be developed within the context of subsistence and settlement models for the Project area. Major east-west drainages were the travel corridors utilized by prehistoric occupants in their seasonal rounds. The confluences of drainages are often major habitation site locations, with associated temporary camps and resource procurement stations established on surrounding tributaries and adjacent uplands. The San Luis Rey River valley comprised a major travel corridor and its confluence with the Project tributary (Horse Ranch Creek) was a focus of prehistoric habitation. The ethnographic village of *Tom-Kav* (CA-SDI-682; the Pankey Site), is documented to the east of the Project. Although the lands surrounding *Tom-Kav* have been heavily impacted, there have been sufficient cultural resource sites noted and recorded to demonstrate that a similar prehistoric pattern—an occupation base surrounded by special use sites—also existed in this area of the San Luis Rey River valley.

Because archaeological data collection often is focused on addressing settlement and subsistence research questions, the cultural resources cumulative impacts study area was focused on the confluence of the San Luis Rey River valley and north-trending tributary drainage, of which *Tom-Kav* is the center. The cultural resources cumulative study area extends down the river valley to the next major tributary drainage at Gird Road and Via Monserate, and up the river valley to the major drainage at Rice Canyon. The cumulative study area extends north up Horse Ranch Creek to the headwater near Mission Road (Figure 2.4-1, Cumulative Projects for Cultural Resources).

Based on SCIC records, 98 archaeological surveys or reviews have occurred since 1977 within this area (many focused on the same, or different aspects of the same, development projects). Table 1-4 presents a list of the cumulative projects reviewed for Campus Park West. Of 42 projects currently being (or recently) processed, 12 would have no impacts to cultural resources due to negative surveys, 22 would have less than significant impacts to cultural resources (based on County file information), and 2 have no impact data available due to their early processing status. Six projects have incorporated measures to avoid known significant impacts; however, potentially significant impacts would remain due to the potential for buried resources. These six projects have incorporated grading monitoring programs to ensure that if buried resources are present, they would be identified, assessed for significance, proper recordation and avoidance, and subject to data-recovery measures. Three of the six projects (Meadowood, Campus Park, and Palomar College North), in addition to the Proposed Project, incorporate monitoring to ensure there would be no unmitigated impacts to the village site of *Tom-Kav* (CA-SDI-682) or the Monserate adobe, should such remains be encountered. The remaining three (Dien N Do Subdivision, Gregory Landfill, and Bonsall Subdivision) incorporate monitoring to protect against inadvertent impacts to known, as well as buried, resources.

The Proposed Project's potentially significant impacts to cultural resources would be reduced below a level of significance by archaeological monitoring by a County-approved archaeologist and a monitor representing the local Luiseño Tribes (San Luis Rey Band) during grading of both on- and off-site facilities. Impacts to any undiscovered or buried potentially significant cultural

resources located within the cumulative projects' boundaries would be reduced below a level of significance by similar measures. Thus, all archaeological impacts associated with the related cumulative projects are expected to be less than significant and/or fully mitigated.

Future development within the cumulative study area would be subject to similar analysis and mitigation requirements pursuant to CEQA and RPO. Based on the compliance of the Proposed Project and related projects within the cultural resources cumulative study area with CEQA and RPO, and implementation of the Project monitoring measures presented in Section 2.4.5, the Proposed Project would not result in a cumulatively considerable contribution to cumulative impacts for the issue of cultural resources and impacts would be **less than significant**.

2.4.4 Significance of Impacts Prior to Mitigation

The following potentially significant impacts could occur with Project implementation:

Impact CR-1 Construction of the Proposed Project could impact previously unrecorded, potentially significant archaeological resources. Impacts to such on-site cultural resources could be potentially significant.

Impact CR-2 Construction of off-site facilities, including focused roadway intersections and utilities upgrades, that would serve the Proposed Project could impact important prehistoric resources outside of the Campus Park West boundaries. Impacts to such off-site cultural resources could be potentially significant.

Impact CR-3 Human remains could be uncovered during on-site or off-site construction. If human remains are unearthed, the impact could be potentially significant.

Impact CR-4 Construction of off-site facilities, including focused intersection improvements and utilities upgrades, would occur in areas that are not RPO exempt. Impacts to cultural resources in areas subject to the RPO are unlikely, but could be potentially significant if they occur.

2.4.5 Mitigation

M-CR-1, 2, and 3

Prior to approval of grading or improvement plans, the Applicant shall implement a grading monitoring and data recovery program to mitigate potential impacts to undiscovered, buried archaeological resources to the satisfaction of the Director of PDS and to a level below significant. This grading monitoring program shall include, but not be limited to, the following actions:

1. Provide evidence to the PDS that a County-approved archaeologist (consulting archaeologist) has been contracted to implement a grading monitoring and data recovery program to the satisfaction of the Director of PDS. A letter from the

consulting archaeologist shall be submitted to the Director of PDS. The letter shall include the following guidelines:

a. The consulting archaeologist shall contract with a Luiseño Native American monitor to be involved with the grading monitoring program as outlined in the 2007 County Report Format and Content Guidelines.
b. The consulting archaeologist/historian and Luiseño Native American monitor shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program as outlined in the 2007 County Report Format and Content Guidelines.
c. The consulting archaeologist and Luiseño Native American Monitor shall monitor all areas identified for development, including off-site improvements.
d. An adequate number of monitors (archaeological/historical/Native American) shall be present to ensure that all earthmoving activities are observed and shall be on site during all grading activities (on and off site) for areas to be monitored.
e. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Luiseño Native American monitor(s) shall be on site full time to perform full-time monitoring. Inspections will vary based on the rate of excavation, materials excavated, and presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Principal Investigator in consultation with the Native American monitor. The Principal Investigator, in consultation with the Luiseño Native American monitor, will determine whether to monitor the cutting of previously disturbed deposits.
f. Isolates and clearly non-significant deposits shall be minimally documented in the field, and the monitored grading can proceed. Should the cultural materials or isolates and non-significant deposits not be collected by the Project Archaeologist, then the Luiseño Native American monitor may collect the cultural material for transfer to a Tribal curation facility or repatriation program.
g. In the event that previously unidentified potentially significant cultural resources are discovered, the archaeological monitor(s) or Luiseño Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Principal Investigator shall contact the County Archaeologist at the time of discovery. The Principal Investigator, in consultation with the County staff archaeologist and Luiseño Native American monitor, shall determine the significance of the discovered resource(s). The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. A Research Design and Data Recovery Program to mitigate impacts to significant cultural resources shall be prepared by the consulting archaeologist in coordination with the Luiseño Tribes. The County Archaeologist shall review and approve the Program, which shall be carried out using professional archaeological methods. Coordination with the Luiseño Tribes shall consist of providing a copy of the Data Recovery Program for review and comment. The Tribes shall have 14

days to provide comment. The Research Design and Data Recovery Program shall include: (1) reasonable efforts to preserve (avoid) unique cultural resources as defined in CEQA Section 21083.2(g) or sacred sites; (2) the capping of identified sacred sites or unique cultural resources and placement of development over the cap, if avoidance is infeasible; and (3) data recovery for non-unique cultural resources as defined in CEQA Section 21083.2(h). The preferred option is preservation (avoidance).

h. If any human remains are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the MLD, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5(b and c) and Public Resources Code Section 5097.98 shall be met. As part of the consultation, the MLD shall be given the opportunity to review the artifacts identified in proximity to the burial site.

i. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Principal Investigator shall determine the amount of material to be recovered for an adequate artifact sample for analysis. The Project Archaeologist shall consult with the Luiseño Native American monitor regarding artifact sensitivity and type.

j. In the event that previously unidentified cultural resources are discovered:

(1) All prehistoric cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Documentation of this curation shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

Or

Alternatively, the prehistoric archaeological materials may be repatriated to the appropriate Luiseño Native American Tribe. Evidence of repatriation shall be in the form of a letter from the tribe confirming that the archaeological materials have been received.

(2) Historical cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to an appropriate curation facility within San Diego County, and shall be accompanied by payment of the fees necessary for permanent curation. Documentation of curation shall be in the form of a letter from the

curation facility confirming that the archaeological materials have been received and that all fees have been paid.

k. Monthly status reports shall be submitted to the Director of PDS and the Luiseño Native American Tribes starting on the date of the notice to proceed through termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation phase, a final report shall be submitted to the Director of PDS and the Luiseño Native American Tribes describing the plan compliance procedures and site conditions before and after construction.

l. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the Director of PDS, prior to the issuance of any building permits. The report shall include Department of Parks and Recreation Primary and Archaeological Site forms. A copy of the report shall be submitted to the Luiseño Native American Tribes.

m. In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of PDS and the Luiseño Native American Tribes by the consulting archaeologist confirming that the grading monitoring activities have been completed.

2. If the Proposed Project would construct any facilities within 100 feet of archaeological site CA-SDI-682, including loci A and B, the Project Applicant shall prepare and implement a temporary fencing plan to protect the site. The fencing plan shall be prepared in consultation with a qualified archaeologist and in coordination with the Luiseño Native American monitor to the satisfaction of the Director of PDS. The fenced area shall include a buffer sufficient to protect the archaeological site; in no event shall the buffer be less than 20 feet in width. The fence shall be installed under the supervision of the qualified archaeologist and the Luiseño Native American monitor, prior to commencement of grading or brushing and be removed only after grading operations in the vicinity of CA-SDI-682 have been completed. A Luiseño Native American monitor shall be invited to be present during the removal of the temporary fencing.

M-CR-4 If the Proposed Project uncovers resources in areas that are not RPO exempt, and scientific excavation is not authorized, grading will be halted or diverted in accordance with M-CR-1, 2, and 3.

2.4.6 Conclusion

The Proposed Project may have significant impacts if unknown artifact deposits or human remains are uncovered or unearthed during on- or off-site construction (Impacts CR-1 through CR-4). The mitigation would reduce impacts to potential buried cultural resources to below a level of significance because data recovery would allow important information to be obtained prior to removal. The proposed mitigation would ensure that all information contained in the

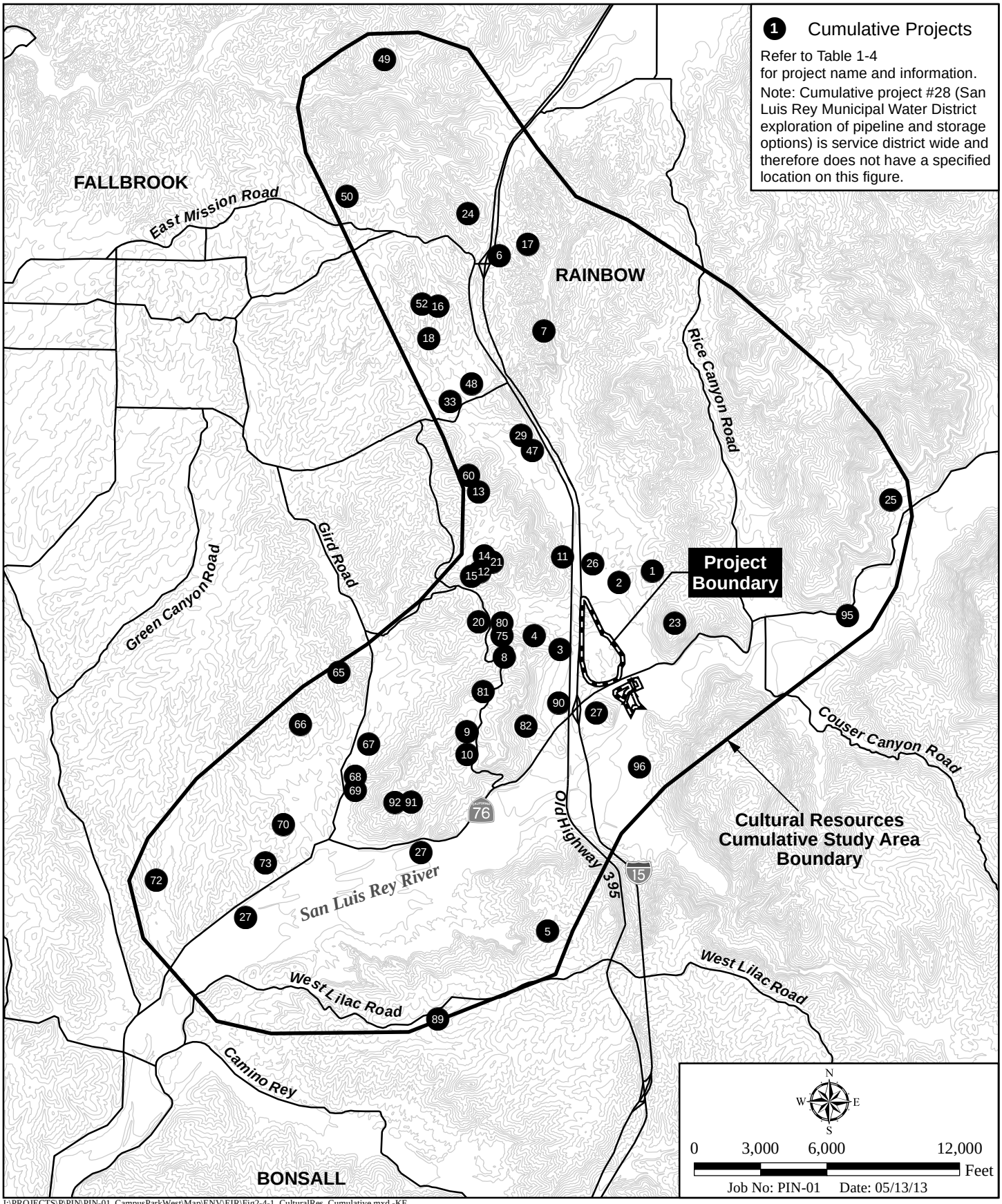
archaeological record, which is important in understanding prehistory, is preserved. The mitigation would also ensure that the archaeological monitor or Luiseño Native American monitor has the authority to halt or divert grading activities in the area of any discoveries.

If human remains are unearthed during grading activities, the County Coroner and the NAHC would be contacted as required to ensure that the proper steps are taken. Mitigation would reduce impacts to human remains to below a level of significance because, based on assessed significance, the site would be avoided or recovery would be allowed, and the human remains would not be destroyed during Project grading. The proposed mitigation would ensure that any discovered human remains would be preserved for the County Coroner and/or the NAHC and the associated tribe.

Implementation of M-CR-1 through M-CR-4 would ensure that no significant impacts to prehistoric or historic resources would occur as a result of Project development, thereby also ensuring compliance with CEQA, the County of San Diego Report Format and Content Guidelines – Cultural Resources (December 5, 2007), and California Government Code Section 65352.3 (Senate Bill 18). The ability to halt or divert grading activities followed by evaluation and treatment of the resource as specified in the mitigation measures would reduce the potentially significant impacts to less than significant levels because they would ensure that: (1) relevant information contained in the archaeological record, which is important in understanding prehistory and history, is preserved; and (2) that previously unknown cultural resources would not be lost due to unrestricted and unmonitored grading activities.

Table 2.4-1
ARCHAEOLOGICAL RESOURCES WITHIN ONE MILE OF THE PROPOSED PROJECT

Resource Record CA-SDI-	Site Type	Reference
314	Pictograph Panels	Pallette 2004 (update)
682	Ethnographic Village of *Tom-Kav*	True 1948, Crotteau 1981
684	Bedrock milling and artifact scatter	True 1960
773	Bedrock milling	True 1960
9854	Bedrock milling and artifact scatter	Cotrell 1984
10,861	Bedrock milling and artifact scatter	Cook 1987
16,890	Pankey Ranch Complex	Hector et al. 2003
P-37-014,886	Sherd isolate, ground	Cook 1987



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Cumulative Projects for Cultural Resources

CAMPUS PARK WEST PROJECT

HELIX Environmental Planning

Figure 2.4-1

SUBCHAPTER 2.5

NOISE

2.5 Noise

The 1981 and 1983 EIRs identified noise impacts to residential uses as significant, but mitigable. These EIRs concluded that planned residential uses would be significantly impacted by noise generated by I-15 and SR-76/Pala Road. Mitigation measures included constructing sound walls and/or incorporating noise attenuation measures into residences. In addition to traffic noise impacts, the 1983 EIR identified noise impacts related to heating, ventilation, and air conditioning (HVAC) equipment associated with industrial uses as significant but mitigable. Mitigation for HVAC equipment focused on building enclosures or sound barriers to attenuate noise.

Since the two previous EIRs were certified, the traffic on I-15 and SR-76/Pala Road has increased. As a result, the noise contours predicted in the earlier EIRs are no longer valid. In addition, major roadways within the Project site area may carry sufficient traffic to warrant noise attenuation to protect adjacent residential areas. Thus, new noise analysis is required to accurately evaluate the anticipated traffic noise levels and identify appropriate noise attenuation measures. Technical review of commercial and industrial mechanical equipment sources also receives additional scrutiny since the prior documents were completed over 25 years ago.

This subchapter of the EIR summarizes the Campus Park West Acoustical Site Assessment Report (HELIX 2013d), which is contained in Appendix F. The reader is referred to text below for new and/or revised evaluation of all issues related to noise for the Project.

2.5.1 Existing Conditions

2.5.1.1 *Noise Descriptors*

Noise has been simply defined as "unwanted sound." Sound becomes "unwanted" when it interferes with normal activities, when it causes actual physical harm, or has adverse effects on health.

Sound-level values discussed in this subchapter are expressed in terms of decibels (dB). Sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA), which are adjusted to approximate the hearing sensitivity of humans. Time-averaged noise levels are referred to as "equivalent sound level" (L_{EQ}), which represents the average sound level over a given sample period. Unless a different time period is specified, L_{EQ} refers to a period of one hour.

The Community Noise Equivalent Level (CNEL) is the average of the intensity of a sound, with corrections made for time of day, and then averaged over 24 hours. The corrections are additions made to actual sound levels to account for increased human sensitivity to sound during the evening and night hours, when there is a decrease in the overall amount and loudness of noise generated, as compared to daytime hours. During these hours, sounds seem louder, and are weighted accordingly. The time of day corrections require the addition of 5 dB to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and the addition of 10 dB to sound levels at night from 10:00 p.m. to 7:00 a.m.

2.5.1.2 *Existing Noise Sources*

The primary noise source in the vicinity of the Project site is automobile and truck traffic on I-15 and SR-76. The roads are adjacent to the Project site's western and southern property lines, respectively. Other existing noise sources include traffic on local roadways (i.e., Pankey Road, unnamed dirt roads), intermittent agricultural noise associated with orchards, and recreational model plane noise. The agricultural and on-site recreational noise sources are, however, considered negligible due to distance and infrequency of use.

The level of traffic noise depends on the traffic volume and speed, as well as the mix of cars and trucks in traffic flow, because the noise generated is a combination of sounds produced by engines, exhaust, and tires. Generally, heavier traffic volumes, higher speeds, and greater numbers of trucks increase the loudness of traffic noise. A noise level increase of three dBA would result from the doubling of full-speed traffic on a roadway.

2.5.1.3 *Existing Ambient Noise Levels*

To determine the existing noise environment, noise measurements were conducted at the Project site during the day on Wednesday, June 13, 2008 adjacent to I-15 and on Monday, October 1, 2012 adjacent to SR-76. The measurement near the edge of I-15 was made approximately 170 feet south of the centerline of Pala Mesa Drive (currently unused overpass). The measured noise level was 76.8 dBA L_{EQ} (averaged over a one-hour time period). The measurement near SR-76 was taken in open space east of Pankey Road. The measured noise level at that location was 63.9 dBA L_{EQ} (averaged over a one-hour time period). See Table 1-3 in the Project Acoustical Site Assessment Report in Appendix F for a summary of on-site ambient measurements.

The I-15 monitoring location was modeled to compare actual readings with predicted readings, in order to calibrate the noise model. The reader is referred to Appendix F for specifics on the calibration. The modeled existing ambient noise level at the measurement location was less than one dB greater than the measured noise level. This generally confirms the assumptions used in the noise model.

Supplemental 15-minute off-site ambient noise measurements were made at five locations (OS-1 through OS-5) near residences along Dulin Road/Pala Mesa Drive on June 28, 2010 between 11:00 a.m. and 3:00 p.m. These measurements, traffic counts for the time period, and site conditions are summarized in Tables 1-6 and 1-7 in the Project Acoustical Site Assessment Report in Appendix F. As shown in Table 1-7 in Appendix F, off-site noise levels range from 51.2 to 64.0 dB L_{EQ}. The off-site measurement locations are shown on Figure 1-5 of that appendix. These measurements were used to compute and approximate CNEL levels for the measurement locations based on normal 24-hour traffic distribution.

2.5.1.4 *Existing Noise-sensitive Land Uses*

Noise-sensitive land uses (NSLUs) include uses associated with indoor and/or outdoor activities that may be subject to stress and/or substantial interference from noise. NSLUs include any

residence, hospital, school, hotel, resort, library, or other facilities where lower noise levels are an important attribute of the environment.

The majority of the area adjacent to the Project is undeveloped open space or former grazing/agricultural land, with the exception of I-15 to the west and SR-76, which bisects the Project site. South of SR-76 and further to the east, there are orchards, single-family residences, and additional open space areas. The area west of I-15 includes single-family residences, a golf course, a fire station, agriculture, and open space uses. Numerous single-family homes and some nursery facilities are located among the hills north of the Project site.

There are several residences to the east of the site, only one of which is planned to remain; the other residences have been or will be removed by other projects. The residence to remain is located approximately 1,000 feet east of the planned alignment of Horse Ranch Creek Road, well beyond the potential noise impact distance from the road or the Project. Therefore, it is not further considered in this report.

Future multi-family residential units within PAs 2 and 3 of the Proposed Project also would be considered NSLUs.

2.5.1.5 *Regulatory Framework*

The County addresses two separate types of noise sources, mobile and stationary. In the context of the noise analysis, transportation (mobile) noise levels associated with the Proposed Project are regulated by goals and policies in the Noise Element in the County General Plan (outlined below). County Noise Ordinance Sections 36.404 and 36.409 govern operational (stationary) and construction noise levels, respectively.

"Off-site" impacts generally focus on transportation-related noise associated with increases in Project-related vehicular activity. Noise level increases and impacts attributable to development of a project are estimated by comparing the "with project" ADT to the "without project" ADT (refer to Subchapter 2.3, Transportation/Traffic, of this EIR).

County of San Diego Noise Element

The County has adopted interior and exterior noise standards as part of the Noise Element in the General Plan for assessing the compatibility of land uses with transportation-related noise impacts. For assessing noise impacts to sensitive residential land uses, the County standard is an exterior noise level (for usable outdoor space) of 60 dBA CNEL or less for single-family homes, 65 dBA CNEL or less for multi-family residential uses, and an interior noise standard of 45 dBA CNEL for both housing types. Applicable goals from the Noise Element are as follows and analysis of Project consistency with these policies is provided in Section 3.1.5, Land Use and Planning, of this EIR:

- Goal N-1: Land Use Compatibility, Policies N-1.1 through N-1.3
- Goal N-2: Protection of Noise-sensitive Uses, Policies N-2.1 and N-2.2
- Goal N-4: Transportation-related Noise Generators, Policies N-4.1, 4.2, 4.5 and 4.6

- Goal N-5: Non-transportation-related Noise Sources, Policy N-5.1
- Goal N-6: Temporary and/or Nuisance Noise, Policies N-6.2 through N-6.4

County of San Diego Noise Ordinance

Section 36.404 of the County Noise Ordinance provides performance standards and noise control guidelines for determining and mitigating non-transportation (stationary) noise source impacts to residential properties. The purpose of the Noise Ordinance is to protect, create, and maintain an environment free from noise and vibration that may jeopardize the health or welfare, or degrade the quality of life.

According to County stationary source exterior noise standards, no person shall operate any source of sound at any location within the County or allow the creation of any noise on a property that causes the noise levels to exceed the exterior noise standards at the property boundary. The Noise Ordinance sets an exterior noise limit for residential land uses adjacent to the property of 50 dBA L_{EQ} for daytime hours of 7:00 a.m. to 10:00 p.m. and 45 dBA L_{EQ} during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m.

Section 36.409 of the Noise Ordinance controls construction equipment noise and establishes a 75 dBA L_{EQ} standard between 7:00 a.m. and 7:00 p.m. Monday through Saturday at the boundary line of the property where the noise source is being generated or any occupied property where noise is received during construction. Excluding emergency work, the County sets a threshold for construction equipment of 75 dBA averaged over a period of eight hours from 7:00 a.m. to 7:00 p.m.

Section 36.410 of the County Noise Ordinance sets sound level limitations on "impulsive" or "single event" noise of 85 dBA L_{max} at residential uses. In addition to the general limitations on sound levels in Section 36.404, and excluding emergency work, work on a public road project shall not result in an impulsive noise that exceeds 82 dBA at property boundaries.

County of San Diego Standards for Sensitive Birds

In 1991, the USFWS recommended that noise levels not exceed 60 dBA or ambient conditions (whichever is greater) to protect the coastal California gnatcatcher and other sensitive bird species during their breeding seasons. Subchapter 2.6, Biological Resources, addresses potential noise impacts to sensitive birds.

2.5.2 Analysis of Project Effects and Determination as to Significance

The noise analysis presented herein evaluates Project effects to on-site and off-site NSLUs associated with both on- and off-site improvements and traffic. Because the traffic conditions for **Scenarios 1** and **2** are similar, the potential impacts associated with regard to traffic noise and are, therefore, not separately discussed. An explanation of this rationale is provided in Appendix F.

2.5.2.1 *Transportation Noise Levels*

Guidelines for Determining Significance

A significant direct noise impact would occur if Project implementation would:

1. Expose exterior on- or off-site, existing or reasonably foreseeable future, NSLUs to noise (including road noise) in excess of 60 dBA CNEL for single-family residential uses, 65 dBA CNEL for multi-family residential uses, or an increase of 10 dBA CNEL or more over existing noise levels (if that noise level is less than 50 CNEL).

2. Expose interior on- or off-site, existing or reasonably foreseeable future, NSLUs to noise in excess of 45 dBA CNEL.

Guideline Source

The above guidelines are based on the County's Guidelines for Determining Significance – Noise (January 27, 2009), as amended by the 2011 General Plan with regard to exterior standards for multi-family residential uses.

Analysis

The Traffic Noise Model (TNM) software was used to project the expected roadway noise impacts. TNM calculates the daytime average Hourly Noise Level (HNL) from traffic data; including road alignment, elevation, lane configuration, projected traffic volumes, estimated truck composition percentages, and vehicle speeds. Because much of the Project area would be paved, hard surface noise attenuation is assumed in the analysis for buildout effects. This results in a conservative (worst-case) assessment, as noise attenuation provided by vegetation or soil under soft surface assumptions was not incorporated into the model. The model calculated noise output represents the one-hour L_{EQ}, and is the equivalent CNEL with the use of 8 to 10 percent of the average daily traffic (considered to represent peak hour traffic; Caltrans Technical Noise Supplement, November 2009).

Exterior Traffic Noise Impact

Exterior on-site noise levels were analyzed using the Year 2030 (with and without Project) traffic volume forecasts from the Traffic Impact Analysis; exterior off-site noise levels were analyzed based on Existing, Existing Plus Project, Existing Plus Cumulative, and Existing Plus Cumulative Plus Project conditions (Appendix D). The change in traffic roadway noise at any location is directly proportional to the change in traffic volume if the roadway alignments are unchanged and traffic speeds are constant. This allows a determination of the change in noise associated with the Project at any area from the Project traffic information.

On-site Receptors

Project modeling was conducted under assumptions reflecting the likely build out scenario described in Section 1.2.2.6 of this EIR, with initial development occurring south of SR-76, followed in turn by general commercial and mixed-use core uses in PA 2, multi-family residential uses in PA 3, and limited impact industrial uses in PA 1.

The calculated noise levels under Year 2030 Plus Project traffic conditions (including on-site traffic) at the proposed on-site residential uses within PAs 2 and 3 are presented in Table 2.5-1, Year 2030 Plus Project Traffic Noise Levels at Future Residential Receivers. A six-foot high fire control wall is included in the Project design along the southwestern to southeastern outer edge of area PA 2 under **Scenarios 1** and **2** and the northern edge of PA 5 under **Scenario 1**. Modeling was initially performed both with and without the firewall with minimal change noted, so modeling results presented in Table 2.5-1 are based on the worst-case condition without these firewalls.

The ultimate configuration of general commercial structures in PA 2 is unknown at this time. As a result, assumptions regarding potential for noise shielding by structures within the PA 2 mixed-use core and PA 3 multi-family area is speculative at this time. Thus, modeling of the mixed-use core west of Pankey Road assuming unobstructed sound patterns shows all analyzed residential receivers (R12 through R19) in PAs 2 and 3 would be exposed to noise levels in excess of 65 CNEL (65.9 to 67.9 CNEL). These impacts to elevated exterior use areas on balconies are considered **significant**. (**Impact N-1)**

Modeling was completed to determine if barriers would lower exterior noise levels to meet the threshold. It was determined that a 5.5-foot high balcony barrier would provide adequate noise attenuation for the upper story residents of PAs 2 and 3 (no residential uses would be allowed on the ground floor of PA 2 mixed core uses as part of Project design).

Similarly, unobstructed modeling shows that analyzed ground-level receiver locations (R01 through R11) to the immediate east of Pankey Road along the perimeter of PA 3 and Pankey Road would have noise impacts in excess of the County's exterior transportation noise impact level of 65 CNEL for multi-family uses. Traffic-related noise modeling projects noise levels at 66.6 to 68.8 CNEL (Table 2.5-1). Impacts to exterior use areas at ground level in PA 3 are considered **significant**. (**Impact N-2)**

Modeling was completed assuming a six-foot barrier on Pankey Road west of PA 3. All structures were shown as attenuated, with additional shielding provided beyond that required. A lower (5.5-foot high) wall was then modeled to determine its effectiveness at attenuating noise. Table 2.5-1 shows the results of this modeling as compared to the unattenuated noise at receivers within the Proposed Project site. With this sound barrier in place, all ground level receivers east of Pankey Road would have less than significant impacts with regards to noise. The modeled noise wall locations are shown on Figure 2.5-1, Required On-site Noise Wall Along Pankey Road.

Off-site Receptors

Off-site transportation-related noise would be associated with the operations and buildout of the Project. Existing measured and calculated noise levels are presented on Table 1-7 in the Project Acoustical Site Assessment Report in Appendix F. Traffic data for the Existing, Existing Plus Project, Existing Plus Cumulative, and Existing Plus Cumulative Plus Project conditions are based on the Project Traffic Study contained in Appendix D. Potential traffic volume changes due to the Project are highlighted on Table 2-1 in the Project Acoustical Site Assessment Report in Appendix F. Similar to on-site conditions, additional traffic on area roadways would have the potential to affect off-site residences. As noted above, existing noise levels along Dulin Road (at one location close to I-15) are already elevated, ranging from 55.6 to 64.4 dBA CNEL at the measured locations. Along Pala Mesa Drive west of I-15, conditions are somewhat quieter, with measured locations ranging from 51.9 to 60.1 dBA CNEL (with the louder locations closer to I-15). With Project development, noise levels would be expected to rise in these areas as discussed below.

Both Pala Mesa Drive and Dulin Road (future Pankey Road) were modeled for worst-case conditions without consideration of topographic, vegetative, or structural shielding along the roadways. As shown on Figure 2.5-2, Year 2030 Off-site Traffic Noise Contours, as well as Table 2.5-2, Near Term Conditions: Distance to Noise Contour Lines from the Centerlines of Roadways, noise levels 100 feet from the roadway centerline are projected to be 62.0 to 65.0 dBA CNEL along Pala Mesa Drive/Dulin Road. Unattenuated, the future noise levels along this roadway could exceed the 60-dBA CNEL threshold for exterior use areas for single-family residential uses.

Field reviews of the existing Pala Mesa Drive and Dulin Road residences, however, show that homes are oriented with either the front of the house (with driveways and garages) fronting the roads, or they have fencing between the roads and the exterior use areas. Specifics are provided below.

All of the residences on the northwest side of Dulin Road face the roadway. The 60-dBA CNEL contour passes in front of or through the front section of the houses and does not include associated outdoor use areas. The residences on the southeastern side of the road, from south of Shearer Crossing to near the eastern arm of Lake Circle Drive, have the backs of the homes shielded by noise control fences. The reader is referred to Figure 2.5-3, Dulin Road Residences with Exterior Noise Control, for photographs of the noise control fences in this area.

Residences along Pala Mesa Drive also principally face the roadway, with the outdoor use areas either fully or nearly beyond the 60-dBA CNEL contour (in either Existing or Existing Plus Project conditions) and shielded by the residence. There are a few exceptions on the southern side of the road adjacent to and facing Old Highway 395 and very close to I-15 (e.g., APN 125-050-6300). Noise from I-15 in this area is so substantial that noise from vehicles on Pala Mesa Drive presents a negligible contribution to conditions at this location and it is not further discussed in this chapter. Further to the west are APNs 108-433-3400 and 108-433-0100. The outdoor use areas of these parcels would have clear views of Pala Mesa Drive, but both have solid noise control walls surrounding the areas. The reader is referred to Figure 2.5-4, Pala Mesa

Drive Residences with Exterior Noise Control. In this photograph, one of the residences is obscured by trees but the fence can be seen in gaps between branches. Noise impact modeling was completed for residences with outdoor use areas shielded by existing fences or walls to evaluate the effectiveness of these structures at attenuating future noise level increases along local roads affected by the Proposed Project.

As shown on Table 2.5-3, Future Noise Levels at Off-site Noise Sensitive Land Uses, these homes are all expected to be subject to less than 60 dBA CNEL under each of the future modeled conditions. As shown in Table 2.5-4, Direct Project Noise Impacts, traffic would not increase noise to greater than 60 CNEL at a distance of 100 feet from any modeled roadway, where it does not currently exceed that threshold. For those roadways where traffic noise already exceeds 60 CNEL, Project-related traffic would double the existing sound (increase of 3 dBA) at one location—along SR 76 between the I-15 Northbound Ramps and Pankey Road. There are no NSLUs in this area. Direct impacts would, therefore, be **less than significant**.

Interior Traffic Noise Impact

The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. The County requires that interior noise levels not exceed 45 dB CNEL. Typically, with the windows closed, building shells provide approximately 15 dB CNEL of noise reduction. Rooms exposed to an exterior CNEL greater than 60 dB could, therefore, result in an interior noise level greater than 45 dB CNEL. Reductions of 30 dB CNEL or greater from the exterior to the interior are normally feasible with enhanced building elements including thicker dual-paned windows with spacing of a ½-inch or greater.

On-site Receptors

As discussed above, multi-family residences in PA 2 and the western portion of PA 3 may be subject to an exterior noise impact greater than 65 dB CNEL, which based on a 15 CNEL exterior to interior reduction may have interior levels greater than 50 CNEL. Assuming typical construction shell reductions, exterior noise exposure would have the potential to result in an interior noise level greater than 45 dBA CNEL. Thus, the potential for an interior noise impact is considered **significant**. **(Impact N-3)**

Off-site Receptors

As noted above, off-site uses potentially affected by Project-related traffic noise would experience exterior noise of less than 60 dBA CNEL with existing barriers in place. As a result, the routine attenuation resulting from structural shielding would be expected to lower interior noise levels to 45 dBA CNEL or less. Therefore, interior traffic noise impacts to off-site residences are expected to be **less than significant**.

2.5.2.2 *Operational Noise Levels*

Guideline for Determining Significance

A significant direct noise impact would occur if Project implementation would:

3. Generate non-construction noise that exceeds the standards listed in the San Diego County Code, Section 36.404, Sound Level Limits, at all property lines.

Guideline Source

The above guideline is based on the County's Guidelines for Determining Significance – Noise (January 27, 2009).

Analysis

On-site Property Lines

Commercial Use Noise. The Project proposes mixed-use core, general commercial, limited impact industrial, and multi-family residential uses all in proximity to one another. Potential commercial uses in the mixed-use core area might feature noise sources that would impact the other mixed-use residential uses. Those commercial noise sources could include (but are not limited to) parking lots, rooftop mechanical equipment, automotive shops (with compressors, impact wrenches, and dynamometer), restaurants/nightclubs (with patron and music noise), and grocery stores (with refrigeration and freezer compressors). Impacts also could result from other adjacent residential HVAC units. If nighttime entertainment at cafés or other uses in PA 2 allow outdoor amplified music, property line noise impacts may exceed allowable limits. Even indoor nighttime entertainment venues can result in impacts if doors are open while music is played inside. Information regarding particular businesses and their specific building requirements (e.g., roof-top refrigeration, compressors, etc.) sufficient to quantify anticipated impacts are not currently available. Pending identification of specific commercial lessors and potential sound generation/development structure planning, impacts to the Project-related property lines, including abutting property lines adjacent to residential receptors in PAs 2 and 3, are conservatively assessed as **potentially significant. (Impact N-4)**

Sheriff's Station Noise. An additional on-site use that may involve a potential noise source is the Sheriff's station. A lot for purchase has been identified in the limited impact industrial area of the Campus Park West Project. Siren noise from emergency vehicles leaving the Sheriff's station would be exempted from County thresholds according to the Sections 36.402 and 36.417 of the County Noise Ordinance. Additionally, any noise related to potential helicopter activity during emergency response is also exempted. Sirens of vehicles to be used during specified shifts must be tested at the start of every shift, however, and this would be considered part of normal business operations. As such, it would be subject to County noise thresholds.

The Department of Justice Law Enforcement and Testing Standards note that the loudest siren should be 120 dBA at three meters (approximately 10 feet) from the front of the siren. It further

notes that sirens are highly directional and are normally mounted in the front facing grill area of the vehicle. Four-second tests were assumed for 37 siren tests in one hour. This equates to 109.3 dBA L_{EQ} at 10 feet from the test location. Since one shift would start at 6:00 a.m., it is assumed that siren testing would occur between 5:00 a.m. and 7:00 a.m. (being completed as officers either come off-duty, or as others prepare to leave on-duty). Depending on the location of the station, the size and orientation of the parking lot, and the presence of intervening buildings or barriers, the siren testing may exceed the nighttime hourly allowable level at the nearby on-site residences in PAs 2 or 3. Potential noise impacts from siren testing would therefore be **potentially significant**. **(Impact N-5)**

Fast Food/Gas Station Noise. **Scenario 2** of the Proposed Project also involves one new potential noise source with possible effects on nearby residences. The additional southern parcel along SR-76 may be developed with a roadside service use; options for the service are either a fast food restaurant or a gas station which may include a convenience store and carwash. Although a fast food development may not have noise impacts, the typical loudest carwash potentially associated with a gas station is characterized by an air blast dryer that creates a worst case noise of 75 dBA at 25 feet, which attenuates to less than 60 dBA at 85 feet. Due to the distance to future residences, potential car wash noise impacts within the additional southern parcel would therefore be **less than significant**.

Pump Station Noise. A pump station would be needed at the northerly extent of Campus Park West (refer to Figure 1-22). Three alternative locations for this northerly station are evaluated in this EIR, but only one would be required. One of these locations would be sited on site in the limited impact industrial area (PA 1) north of Pala Mesa Drive. (The other two alternative off-site locations are discussed below under Off-site Property Lines.) Regardless of its location, the RMWD pump station would be a submersible (mounted below-grade) sewer with an above-grade motor control center and electrical panel, which would be shielded by an enclosure. The only portion of the pump station that would produce potentially audible noise is the piping for the pump which would be constructed above ground, but located below grade in a covered pit. The noise associated with the piping would be inaudible from a distance greater than 10 feet away, and the nearest NSLU is a residence located more than 50 feet away from the closest proposed pump location. As detailed in the Project Acoustical Site Assessment Report, noise impacts from the proposed pump station design would be **less than significant**.

Off-site Property Lines

Sheriff's Station Noise. The sheriff's station siren testing discussed above under On-site Property Lines requires proximity for impacts to occur. At its closest potential location to NSLUs, the Sheriff station could be anywhere from 650 to 1,850 feet from off-site residences. At those distances, siren testing noise would not be above ambient noise levels (i.e., less than 50 dBA L_{EQ}). Therefore, although anticipated to be periodically audible, impacts to off-site residential uses west of I-15 or further away would not exceed the thresholds and would be **less than significant**.

Off-site Sewer Lift Station Noise. The Proposed Project would utilize an off-site lift station for the sewer needs of the development. This pump station (to be constructed by approved Campus

Park) would be sited on Campus Park property in the northeast quadrant of the Pankey Road/SR-76 intersection. The sewer lift station would pump all wastewater generated by the Project to an existing 12-inch force main in SR-76. Based on an evaluation of the design, the noise associated with the Campus Park sewer lift station would be inaudible from a distance greater than 10 feet away. There are no residences or NSLUs located in close proximity to the proposed pump location (including PA 3); therefore, potential noise impacts would be **less than significant**.

Off-site Pump Station Noise. As noted above, RMWD has requested that the Project environmentally clear some actions proposed for their overall system. Two additional alternative locations for the pump station are proposed off site north of Pala Mesa Road, and would be located west of I-15 (refer to Figure 1-22). The southernmost alternative site is located between Old Highway 395 and I-15 and the northernmost site is located west of Old Highway 395. For the reasons described above, these two alternative pump station locations would not produce noise in excess of thresholds. Similar to the on-site location, the only portion of the pump station that would produce potentially audible noise is the piping for the pump, which would be in a covered sump, would be inaudible from a distance greater than 10 feet away. As the nearest NSLU is a residence located more than 50 feet away from the closest proposed pump location, west of Old Highway 395, potential noise impacts would be **less than significant**.

2.5.2.3 *Construction Noise Levels*

Guideline for Determining Significance

A significant direct noise impact would occur if Project implementation would:

4. Generate construction noise that exceeds the standards listed in the San Diego County Code, Section 36.409, Sound Level Limitations on Construction Equipment.

Guideline Source

The above guideline is based on the County's Guidelines for Determining Significance – Noise (January 27, 2009).

Analysis

Construction noise represents a short-term impact on the ambient noise levels. All Project construction activities would occur during the County's allowable hours of operation. The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the location in which operation occurs, and the condition of the equipment. The average sound level of the construction activity also depends upon the amount of time that the equipment operates and the intensity of the construction during the time period.

On-site Effects

Construction noise modeling followed the construction stages outlined in Section 1.2.2.6 of this EIR. In general, Project construction would involve site preparation activities (e.g., clearing, grubbing, and grading), utilities installation, foundation construction, and finish construction. Project grading is designed to be balanced, with no import or export of dirt by heavy trucks for construction on the valley floor. Due to the rippable nature of the alluvial deposits over much of the site, no blasting is anticipated (Leighton and Associates, Incorporated 2012). Typically, the greatest one-hour noise level occurs during clearing, grubbing, and grading activities. Construction equipment used during this construction phase typically would include scrapers, dozers, compactors, and water trucks (see anticipated equipment in Chapter 1.0 of this EIR).

As part of a conservative analysis, it is assumed that the mixed use residential would be completed prior to the Phase 2 grading, and that the residential uses east of Pankey Road could be completed and occupied prior to the final grading of the light industrial area north of Pala Mesa Drive.

The closest distance between the multi-family area east of Pankey Road and the mixed use development in the Phase 1 area is approximately 160 feet; this is the same distance from the light industrial area to the multi-family residential area east of Pankey Road. The loudest equipment operations for mass grading occur when a scraper is loading, with loading operations often utilizing tandem units to completely fill the pan of each scraper. The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) lists a scraper as creating a noise level of 83.6 dBA at a distance of 50 feet. This equates to a 79.6 dBA L_{EQ} impact (82.6 dBA L_{EQ} for two units) at a 40 percent operational time. At a distance of 160 feet, this impact would be reduced by attenuation to 69.5 dBA L_{EQ} for a single unit, or 72.5 dBA L_{EQ} for a tandem unit. In this worst case scenario, if the units were to continuously work for eight hours, it would result in a noise level of 72.5 dBA L_{EQ} (8-hour) at the closest residential area. Accordingly, because this is below the related Noise Ordinance standard of 75 dBA L_{EQ}, associated impacts would be **less than significant**.

During vertical construction, the loudest portion of the construction operations typically would be the foundation excavation and concrete pour. The loudest piece of equipment, an excavator used in foundation trenching, would have little potential of creating noise in excess of 75 dBA L_{EQ} (eight-hour) beyond 50 feet from the construction activities. This is also true for other smaller equipment used during construction. Excluding a very small westernmost corner adjacent to PA 1, future residences in PA 3 would be separated from commercial and industrial areas by the width of Pankey Road. This corner creates its own setback for residences and construction noise impacts would be less than significant at the closest feasible residence. The size of equipment used for two-story (up to 35 feet) residential-only construction on finished grade pads is typically smaller and has almost no potential to exceed noise ordinance compliance at any distance. The future mixed-use development in PA 2 may potentially have commercial construction directly adjacent to a developed and occupied mixed use structure within PA 2. PA 2 is a single parcel, however, and is not covered by the normal construction noise ordinances—which protect uses on adjacent parcels. Impacts to on-site NSLUs in PA 2 from other PA 2 uses would therefore be **less than significant**.

Off-site Project Effects

The construction activity with the highest potential to impact off-site NSLUs is the mass grading. All other stages of construction would use smaller (less noisy) equipment that would not produce noise levels of 75 dBA L_{EQ} beyond a distance of 50 feet. No noise impacts due to construction-period activities on site would exceed thresholds at sensitive receptors west of I-15 or south of SR-76 due to their distance from site planning areas. There are, however, three existing residences located near the Project site that potentially could be affected by on-site construction due to their proximity the future development areas.

The residence located northeast of the Proposed Project site, east of Horse Ranch Creek Road, is over 1,800 feet from the closest on-site construction location, the residence located to the west of Horse Ranch Creek Road and north of SR-76 is over 500 feet from the closest on-site construction location, and the house located on Shearer Crossing south of SR-76 is over 400 feet from the closest on-site construction location. If a large dozer were to work for a continuous one-hour period at the closest location to the southeastern residence (400 feet away), the noise impact at that residence would be approximately 71 dBA L_{EQ}, which is under the threshold for a significant impact. More distant residences would experience commensurately lower effects as they would be located further from the noise source. Consequently, none of these houses would experience noise levels that would exceed the County's threshold of 75 dBA L_{EQ} for construction noise, and impacts would be **less than significant**.

There is a possibility that the Pankey Road bridge construction may utilize driven piles for the bridge footings. The closest off-site residence is approximately 1,000 feet from the planned bridge location. If a pile driver were to work for a continuous one-hour period at this location, the noise impact at the closest existing residence would be approximately 68.3 dBA L_{EQ}. This noise level would be below the County's threshold, and therefore **less than significant** impacts would occur.

Off-site improvements such as sewer or water pipeline placement, or roadway improvements, generally use quieter equipment than large dozers or scrapers used in mass grading. The equipment is typically located at one locale for shorter periods, and often does not operate at full power for a long duration. A backhoe, the most common piece of construction equipment used for linear utility installation, has short-term noise levels in the 70 to 85 dBA L_{EQ} range at 50 feet from the source.

The majority of proposed water mains would be 12 inches or less in diameter, although one 16-inch line would be located between Pankey Road and Horse Ranch Creek Road within SR-76 (refer to Figure 1-22). Likewise, the on-site sewer lines would all be 12 inches or less in diameter, except for one 15-inch diameter pipeline in Pankey Road between the southern Project boundary and SR-76. Smaller pipelines (12 inches or less) that are buried at shallower depth (less than five feet) rarely create significant impacts because of the types of equipment used and because the excavation and backfill moves along the length of the pipeline relatively quickly. Where larger equipment for larger lines with deep trenches could be necessary for installation of the 15-inch line within Pankey Road or 16-inch line within SR-76, the potential for excessive noise levels would exist. The closest NSLUs to the 16-inch diameter line would be the two

homes off SR-76 and Horse Ranch Creek Road. The home on SR-76 is over 250 feet north of the roadbed where the pipeline would be installed. The home on Horse Ranch Creek Road is over 125 feet east of the roadbed where the pipeline would be installed. Any distance greater than 50 feet from the equipment would attenuate excavation noise to less than significant levels. As a result, off-site construction-period noise impacts associated with utility line installation would be **less than significant**.

Construction at either of the two off-site alternative pump station locations would have the potential to expose residents west of I-15 to short-term noise. Similar to the on-site construction activities, the loudest piece of equipment involved with the construction of the pump station, regardless of the location chosen, would be an excavator. An excavator would be used to dig the trench for the pump station and would have little potential for creating noise in excess of 75 dBA L_{EQ} beyond 50 feet from the construction activities. The nearest residence to any of the off-site RWMD pump stations is approximately 70 feet away. Thus, noise impacts related to the construction of this pump station would be **less than significant**.

Although unlikely, if constructed by Campus Park West due to timing differences between the two projects, the off-site lift station proposed as part of the adjacent Campus Park project would have construction-period noise effects similar to the discussion for on-site grading and construction, Due to distance from the construction zone, none of these houses would experience noise levels that would exceed the County's threshold of 75 dBA L_{EQ} for construction noise, and impacts would be **less than significant**.

2.5.2.4 *Ground-borne Vibration/Noise*

Guidelines for Determining Significance

A significant vibration impact would occur if the Project would:

5. Subject residences to:
   a. Ongoing ground-borne vibration levels of 0.0040 inches per second (in/sec) root mean square (rms) from frequent events, or 0.010 (in/sec rms for occasional or infrequent events; and/or
   b. Ongoing ground-borne noise levels of 35 dB re micro Pascals for frequent events or 43 dB re micro Pascals for occasional or infrequent events.

6. Subject residences to vibration from isolated events (e.g., blasting) with peak particle velocity (PPV) exceeding one in/sec.

Guideline Source

The above guideline is based on the County's Guidelines for Determining Significance – Noise (January 27, 2009).

Analysis

On-site Receptors

There are no existing on-site receptors, although as noted above for construction impacts it is assumed that the mixed use residential would be completed prior to the Phase 2 grading, and that the residential uses east of Pankey Road could be completed and occupied prior to the final grading of the light industrial area north of Pala Mesa Drive.. The site consists primarily of recent or older alluvium; these deposits are assumed to be rippable. Although the entire site is underlain at depth by granite rock, this unit is not anticipated to be encountered as part of the site development process (Leighton and Associates, Incorporated 2012). Only the rough grading operation of a heavy dozer or vibratory roller, or pile driving during Project construction would have the potential to create such impacts. Due to the described alluvial nature of on-site materials, a vibratory roller would likely be used extensively to provide adequate compaction and would represent the greatest source of potential vibration impacts. A vibratory roller has a PPV of approximately 0.210 in/sec at a distance of 160 feet (as discussed in Appendix F). This would be reduced to .0831 in/sec PPV by distance attenuation only, without consideration of soil damping (i.e., the natural attenuation of vibration levels from passing through a solid medium such as soil). Based on Caltrans specifications (as outlined in Appendix F), a PPV level of 0.24 in/sec is considered "Distinctly Perceptible," while a PPV level of 0.035 in/sec is listed as "Barely Perceptible." Accordingly, the noted PPV level of 0.0831 in/sec would be slightly above the "Barely Perceptible" level, and would likely fall below this level if soil damping values were applied. Based on these considerations, potential impacts to on-site receptors from construction-related vibration would be **less than significant**.

The Project proposes multi-family residential units, where low ambient vibration is essential for interior use and sleeping conditions. The proposed residences would be located approximately 600 feet from any public road or transit right-of-way with projected noise contours of 65 dBA CNEL or more. A distance of 200 feet usually ensures that the operations do not have any chance of being impacted by ground-borne vibration or ground-borne noise levels (Harris, Miller, Miller and Hanson Inc. 1995). Accordingly, no post-construction on-site or observed off-site sources have the potential to create ground-borne vibration or low frequency (ground-borne) noise of significance, and **no impacts** to on-site uses would result.

Off-site Receptors

Due to the damping effects of soil, the vibration produced by a dozer (which would represent the greatest potential for off-site vibration impacts) is typically expected to be below 0.0040 in/sec rms at a distance of greater than 50 feet from the dozer operation. As discussed above, the closest existing residence is approximately 400 feet from the closest mass grading activities, and no closer off-site residences are planned. A pile driver has the potential to create vibration impacts at a slightly greater distance; however, at a distance of 100 feet or more from the source, vibration impacts from pile driving would be less than significant due to attenuation. Because of the distance between vibration-generating construction activities and the nearest off-site residences, any possible vibration impacts would be **less than significant**.

2.5.3 Cumulative Impact Analysis

Guideline for Determining Significance

A significant cumulative impact would occur if the Project would:

7. Considerably contribute to a cumulative scenario that would result in the exposure of any on- or off-site, existing or reasonably foreseeable future NSLU, to: (1) an increase of 10 dB (CNEL) over pre-existing noise levels of less than 50 dB CNEL resulting in a combined exterior noise level of 60 dB CNEL or greater, (2) an increase of 3 dB CNEL in existing plus project plus cumulative conditions if that total is above 60 dB CNEL, or (3) interior noise in excess of 45 dB CNEL. A "cumulatively considerable" project contribution to an identified significant cumulative noise impact would occur if the project would contribute more than a one dB increase.

Guideline Source

This guideline is based on the County's Report Format and Content Requirements – Noise (January 27, 2009).

Analysis

Project-generated noise primarily would be associated with Project-related traffic, although non-transportation noise sources are addressed in the Project Acoustical Site Assessment Report as well. The cumulative study area associated with noise identified for the Proposed Project included other projects affecting area roads also impacted by the Proposed Project (refer to Subchapter 2.6, Transportation/Traffic). The off-site cumulative traffic noise impacts associated with Project implementation in conjunction with other planned developments in the area, was calculated.

Table 2.5-4 shows the existing noise levels compared to noise levels associated with the Existing and Existing Plus Project condition, while Table 2.5-2 shows the Existing Plus Cumulative and Existing Plus Cumulative Plus Project distances to noise contour lines from the centerlines of roadways (without consideration for topography). As shown on Table 2.5-2, noise levels under Existing + Cumulative + Project conditions would exceed 60 CNEL along all modeled roadways. The change between Existing and Existing + Cumulative + Project conditions would exceed three CNEL along SR 76 from the I-15 Northbound Ramps to Rice Canyon Road, Pankey Road from SR-76 to Old Highway 395, Pala Mesa Drive from Wilt/Sage Road to Old Highway 395, and Old Highway 395 from Reche Road to Pala Mesa Drive. There are, however, no NSLUs adjacent to SR-76 or the portion of Pala Mesa Drive from Old Highway 395 to Pankey Road; therefore, no cumulative noise impacts are identified in those locations. The Project's contribution to the noise increase along the portion of Pala Mesa Drive from Wilt/Sage Road to Old Highway 395 would be 0.5 dBA and its contribution along Pankey Road from Shearer Crossing to Old Highway 395 would be 1.4 dBA; these contributions are not considered to be cumulatively considerable. The Project would result in an increase of 2.4 dBA along Pankey Road from SR-76 to Shearer Crossing. As noted above under Transportation Noise

Levels, all of the affected structures adjacent to existing roads have barriers surrounding their outdoor use areas and are appropriately oriented on their lot to provide adequate attenuation. As shown in Table 2.5-3 and detailed in Appendix F, traffic noise impact modeling conducted for these residences with outdoor use areas facing the roadway (including fences) showed that potential impacts would be **less than significant**, as cumulative noise levels (with shielding in place) would not exceed the 60 dBA CNEL threshold. The Project would result in an increase of 2.0 dBA along Old Highway 395 from Stewart Canyon Road to Pala Mesa Drive; however, as noted in Section 2.5.2.1, the noise from I-15 in this area is so substantial that noise from Old Highway 395 presents a negligible contribution to noise at this location. Based on this information, the Project **would not result in a cumulatively considerable contribution** to potential noise impacts in the area.

It should be noted that cumulative traffic noise impacts were not assessed to the proposed school off of Horse Ranch Creek Road because if the school is developed in the future, the Meadowood developer would be required to implement noise reduction measures during school development. The Meadowood project certified Final EIR accounts for the cumulative projects, including Campus Park West, in their noise analysis (County 2011) and noise attenuation has already been identified for that use. For this reason, no additional cumulatively significant noise impacts to the school related to Campus Park West implementation are expected.

In addition to the cumulative traffic effects discussed above, there is a potential for cumulative effects related to the siting of Project use areas near NSLUs both on and off site. The Project proposes mixed-use core, general commercial, limited impact industrial, and multi-family residential, uses all in proximity to one another. As noted above, potential commercial uses in the mixed-use core area might combine to have a noise impact on the residential or commercial uses include (but are not limited to) parking lots, rooftop mechanical equipment (including HVAC units), automotive shops (with compressors, impact wrenches, and dynamometers), nightclubs (with patron and music noise), and grocery stores (with refrigeration and freezer compressors). Even if each business or residence is in individual compliance with its property line noise limit, there is potential for nearby on-site uses in PAs 2 or 3 to be impacted by noise above allowable limits by the cumulative noise from all of the above sources. On-site cumulative impacts from non-transportation operational sources are therefore conservatively assessed as **potentially significant**. **(Impact N-6)**

2.5.4 Significance of Impacts Prior to Mitigation

The following significant impacts related to noise would occur with Project implementation:

Impact N-1 At buildout, Project-proposed elevated outdoor use areas (e.g., balconies) associated with multi-family residential uses in PAs 2 and 3 could experience future traffic noise levels greater than 65 dBA CNEL.

Impact N-2 At buildout, potential Project-proposed ground-level outdoor use areas associated with multi-family residential uses in PA 3 adjacent to Pankey Road would experience noise levels greater than 65 dBA CNEL from Pankey Road traffic noise sources.

Impact N-3 At on-site multi-family residences in PAs 2 and 3 where the exterior noise would be significant, interior noise levels would have the potential to exceed 45 dBA CNEL.

Impact N-4 Noise levels associated with commercial uses and residential HVAC units may result in exterior noise levels exceeding the associated property lines as stated in the Noise Ordinance, including abutting property lines adjacent to multi-family residential uses in PAs 2 and 3.

Impact N-5 Sheriff's station siren testing in PA 1 would have the potential to exceed the Noise Ordinance property line noise limits for residential uses in PAs 2 and 3 and cause direct impacts from noise levels exceeding the one-hour average L_{EQ} sound level limits.

Impact N-6 Cumulative noise levels associated with commercial uses and adjacent residential HVAC units may result in cumulative impacts related to exterior noise levels exceeding 65 dB CNEL at nearby multi-family residential and/or commercial uses in PAs 2 and 3.

2.5.5 Mitigation

On-site Exterior Noise

M-N-1 Buildout traffic noise levels at the elevated outdoor use areas within proposed PA 2 mixed-core residential uses and PA 3 multi-family residential areas shall be mitigated to County standards of 65 dBA CNEL through the following measure:

- All elevated outdoor residential use areas in PAs 2 and 3, including decks and balconies, will require noise shielding by a 5.5-foot high noise control barrier. Required sound attenuation barriers shall be solid and constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, with no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be either a single layer of tongue and groove (which must be at least one-inch total thickness or have a density of at least 3½ pounds per s.f.) or a double layer of overlapped fencing (shiplap) so that no seam between boards or sheets matches with a seam on the other layer. Where architectural or aesthetic factors allow, glass or clear plastic 3/8 of an inch thick or thicker may be used on the upper portion, if it is desirable to preserve a view. Sheet metal of 18-gauge (minimum) may be used, if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Any door(s) or gate(s) must be designed with overlapping closures on the bottom and sides and meet the minimum specifications of the wall materials described above. The gate(s) may be of one-inch thick or better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with prefabricated door jambs.

- The conservative analysis indicates that a barrier is required when no consideration is given to potential shielding provided by the Project buildings or additional attenuation due to distance. Final building design, however, may provide substantial shielding, thus reducing the final required barrier heights necessary to provide compliance with the 65 CNEL exterior requirements. The Applicant may provide an updated acoustical analysis by a County-approved noise consultant demonstrating compliance for all required exterior outdoor use areas with the County 65 dBA CNEL requirement, completed to the satisfaction of the Director of the PDS with a lower height balcony noise control barrier.

M-N-2 Buildout traffic noise levels at the ground level outdoor uses areas within proposed PA 3 multi-family residential uses shall be mitigated to County standards of 65 dBA CNEL through the following measure:

- A 5.5-foot high sound attenuation barrier shall be sited along the eastern side of Pankey Road (excluding driveway entrances) for the length of the multi-family housing area with returns to the north and south. The wall shall follow the curved portion of the driveway entrance terminating at a location where it would run parallel to the entrance. The final barrier shall conform to the standards indentified in M-N-1, above.

On-site Interior Noise

M-N-3 An exterior to interior noise control plan shall be prepared by a County-approved noise consultant for the second story or higher living areas of all multi-family homes in PAs 2 and 3 prior to obtaining building permits for the Project. Consistent with the County Noise Ordinance, the report shall confirm that interior noise levels will not exceed 45 dBA CNEL. The report shall finalize the noise requirements based on actual building design specifications, and shall be completed to the satisfaction of the Director of PDS. Noise reduction measures could include the following:

- A "windows closed" condition shall be provided that requires a means of mechanical ventilation for the second floors of all multi-family residences.
- The second floors of all multi-family residences shall be provided with weather-stripped solid-core exterior doors.
- Exterior wall/roof assemblies shall be free of cutouts and openings.
- Upgraded windows shall be provided for the second or higher floors of multi-family residences.

On-site Operational Noise

M-N-4 Potential impacts to proposed multi-family residences from commercial uses and residential HVAC units shall be mitigated as follows:

- A final noise study for the second story or higher living areas of all mixed use residential areas and businesses proposed in or adjacent to the mixed use areas shall be prepared during site plan and building permit approval for the mixed use portion of the Project. The report shall finalize the noise requirements based on actual building design specifications to ensure compliance with the County Ordinance limitations of 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. (arithmetic average of multi-family and commercial noise limits) or 65 CNEL at multi-family residential locations. Exterior and interior noise reduction requirements necessary to comply with the County Noise Ordinance for residential uses shall be presented in the final noise report. Noise control methods may include screening noise sources, relocating noise sources at a greater distance from residences and/or a combination of these measures. Implementation of noise control features would ensure compliance with County standards.

M-N-5 Siren test noise at the on-site Sheriff's station shall not exceed the following Noise Ordinance standards: 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits], or 65 CNEL at the property line. These maximum noise levels shall be attained through site plan design. Two options are available: selecting the location of the sheriff's station such that it is not in close proximity to the residences, and using an assumed on-site building as an intervening noise control structure; or constructing the parking area further away from the residences, and designating a specific siren test location. If the latter option is chosen for implementation, the location could be selected so that the sirens would face away from the residential structures, and a wall could be erected on both sides of the test area to further attenuate noise. A final noise study for the Sheriff's station shall be prepared during site plan approval. The report shall finalize the noise control requirements based on actual building design specifications, including identification of additional noise reducing measures as necessary to ensure compliance with County noise standards (i.e., 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits] or 65 CNEL at the property line between the sheriff's station and proposed multi-family residential uses).

Cumulative Noise

Cumulative commercial and residential noise impacts (**Impact N-6**) in PAs 2 and 3 will be mitigated through the implementation of M-N-4.

2.5.6 Conclusion

The Proposed Project would result in significant on-site noise impacts related to traffic. Specifically, significant impacts associated with exterior noise levels would occur to receptors within the mixed-core and multi-family residential areas within PAs 2 and 3 (Impacts N-1 and N-2). Significant interior noise impacts are assessed at these on- and off-site locations as well (Impacts N-3 and N-4). Mitigation for these impacts would include a combination of site planning and construction of noise attenuation barriers along Pankey Road and Horse Ranch Creek Road, as discussed above, which would reduce exterior noise impacts to below a level of significance. The final Title 24 (California Building Code) exterior to interior noise control plan provided by a County-approved noise consultant for the second or higher floors of all multi-family residences in PAs 2 and 3 would finalize interior requirements based on actual building design specifications and would ensure that County standards are met.

Noise levels associated with commercial uses and adjacent residential HVAC units are conservatively assessed as potentially exceeding County exterior noise standards on both a direct and cumulative basis (Impacts N-4 and N-6). Mitigation for these potential impacts would include separation of the proposed commercial and multi-family areas, proper site planning, and preparation of a noise study addressing the stationary noise sources associated with adjacent uses. The noise study(s) conducted during site plan and building permit reviews would finalize noise control requirements based on actual building design specifications and would ensure that the County's standards are met.

Siren testing noise from the Sheriff station could cause potential noise impacts to nearby residential uses (Impact N-5). Mitigation for these potential impacts would include proper site planning and preparation of a noise study, including identification shielding through planned structures or construction of an area in which shielded testing would take place. The noise study during site plan review would finalize noise control requirements based on actual building design and would ensure that the County's standards are met.

Implementation of the proposed mitigation would ensure compliance with the County Noise Element standards and Noise Ordinance property line limits. The purposes of the Noise Ordinance include controlling disturbing, offensive, and excessive noise, providing an environment in which noise is not detrimental to life, health, and enjoyment of property and "securing and promoting the public health, comfort, convenience, safety, welfare, prosperity, peace and quiet of the County of San Diego and its inhabitants" (County Code Sections 36.401[b], [d], and [e]). Compliance with Noise Ordinance limits would ensure that noise generated on the Project site would fall within the dB levels specified in the ordinance. This compliance would comprise effective mitigation as the dB level standards specified in the ordinance are those generally found to be compatible with abutting sensitive receptors within the contour.

Table 2.5-1
YEAR 2030 PLUS PROJECT TRAFFIC NOISE LEVELS
AT FUTURE RESIDENTIAL RECEIVERS

Location	Receiver Number	No Soundwall	With 5 ½-foot Soundwall
Receivers East of Pankey Road	R 01	68.8 CNEL	62.5 CNEL
	R 02	68.6 CNEL	63.7 CNEL
	R 03	69.0 CNEL	62.2 CNEL
	R 04	68.2 CNEL	62.4 CNEL
	R 05	67.1 CNEL	65.0 CNEL
	R 06	66.6 CNEL	63.2 CNEL
	R 07	66.7 CNEL	63.1 CNEL
	R 08	67.5 CNEL	63.5 CNEL
	R 09	67.5 CNEL	65.1 CNEL
	R 10	67.8 CNEL	62.4 CNEL
	R 11	68.0 CNEL	61.9 CNEL
Mixed-use core Residential Receivers West of Pankey Road	R 12	67.4 CNEL	58.7 CNEL
	R 13	65.9 CNEL	59.5 CNEL
	R 14	66.0 CNEL	62.2 CNEL
	R 15	67.7 CNEL	61.5 CNEL
	R 16	67.9 CNEL	62.0 CNEL
	R 17	66.8 CNEL	59.8 CNEL
	R 18	67.1 CNEL	58.7 CNEL
	R 19	67.8 CNEL	59.9 CNEL

Source: HELIX 2013d
5.5-foot soundwall located around western edge of PA 3 for receivers east of Pankey Road
5.5-foot barriers around/on balconies for mixed-use core and multi-family residential receivers west and east of Pankey Road

Table 2.5-2
NEAR TERM CONDITIONS:
DISTANCE TO NOISE CONTOUR LINES FROM THE CENTERLINES OF ROADWAYS[1]
Existing vs. Existing + Cumulative + Project Conditions (in dBA CNEL)

Roadway/Segment	Existing Conditions	Existing + Cumulative Conditions				Existing + Cumulative + Project Conditions					
	CNEL @ 100 ft. (dBA)	CNEL @ 100 ft. (dBA)	70 CNEL (ft.)	65 CNEL (ft.)	60 CNEL (ft.)	CNEL @ 100 ft. (dBA)	Change with Project at 100 ft (dBA)	Change at 100 ft. from Existing (dBA)	70 CNEL (ft.)	65 CNEL (ft.)	60 CNEL (ft.)
I-15											
E. Mission Road to SR-76	81.6	81.9	710	1370	2480	82.2	0.3	0.6	660	1155	1875
South of SR-76	81.4	–	–	–	–	82.4	1.0	1.0	668	1152	1870
SR-76											
West of Old Highway 395	71.9	73.8	200	420	830	74.3	0.5	2.4	220	470	890
I-15 Northbound Ramps to Pankey Road	68.6	69.4	80	180	475	72.9	3.5	4.3	163	425	868
Pankey Road to Horse Ranch Creek Road	68.5	72.8	174	375	740	73.1	0.3	4.6	175	390	775
Horse Ranch Creek Road to Rice Canyon Road	68.3	72.0	140	340	670	72.3	0.3	4.0	155	366	762

Table 2.5-2 (cont.)
NEAR TERM CONDITIONS:
DISTANCE TO NOISE CONTOUR LINES FROM THE CENTERLINES OF ROADWAYS[1]
Existing vs. Existing + Cumulative + Project Conditions (in dBA CNEL)

Roadway/Segment	Existing Conditions	Existing + Cumulative Conditions				Existing + Cumulative + Project Conditions					
	CNEL @ 100 ft. (dBA)	CNEL @ 100 ft. (dBA)	70 CNEL (ft.)	65 CNEL (ft.)	60 CNEL (ft.)	CNEL @ 100 ft. (dBA)	Change with Project at 100 ft (dBA)	Change at 100 ft. from Existing (dBA)	70 CNEL (ft.)	65 CNEL (ft.)	60 CNEL (ft.)
Pankey Road											
SR-76 (Pala Road) to Shearer Crossing	54.5	58.2	IRW	24	74	60.6	2.4	6.1	IRW	34	128
Shearer Crossing to Old Highway 395	54.5	59.0	IRW	28	82	60.4	1.4	5.9	IRW	32	120
Pala Mesa Drive											
Wilt/Sage Road to Old Highway 395	50.6	64.5	IRW	82	227	65.0	0.5	14.4	13	98	245
Old Highway 395 to Pankey Road	–	58.6	IRW	24	70	62.0	3.4	-	18	55	130
Old Highway 395											
Reche Road to Stewart Canyon Road	64.7	74.1	122	280	600	72.1	-2.0	7.4	125	327	660
Stewart Canyon Road to Tecalote Drive	65.2	67.0	65	140	325	69.1	2.1	3.9	96	215	430
Tecalote Drive to Pala Mesa Drive	65.3	67.6	70	160	352	69.6	2.0	4.3	98	222	470

Source: HELIX 2013d
[1] No Topographical Consideration
– = Roadway does not exist at present
IRW = The CNEL contour indicated exists within roadway width.

Table 2.5-3
FUTURE NOISE LEVELS AT OFF-SITE NOISE SENSITIVE LAND USES
(in dBA CNEL)

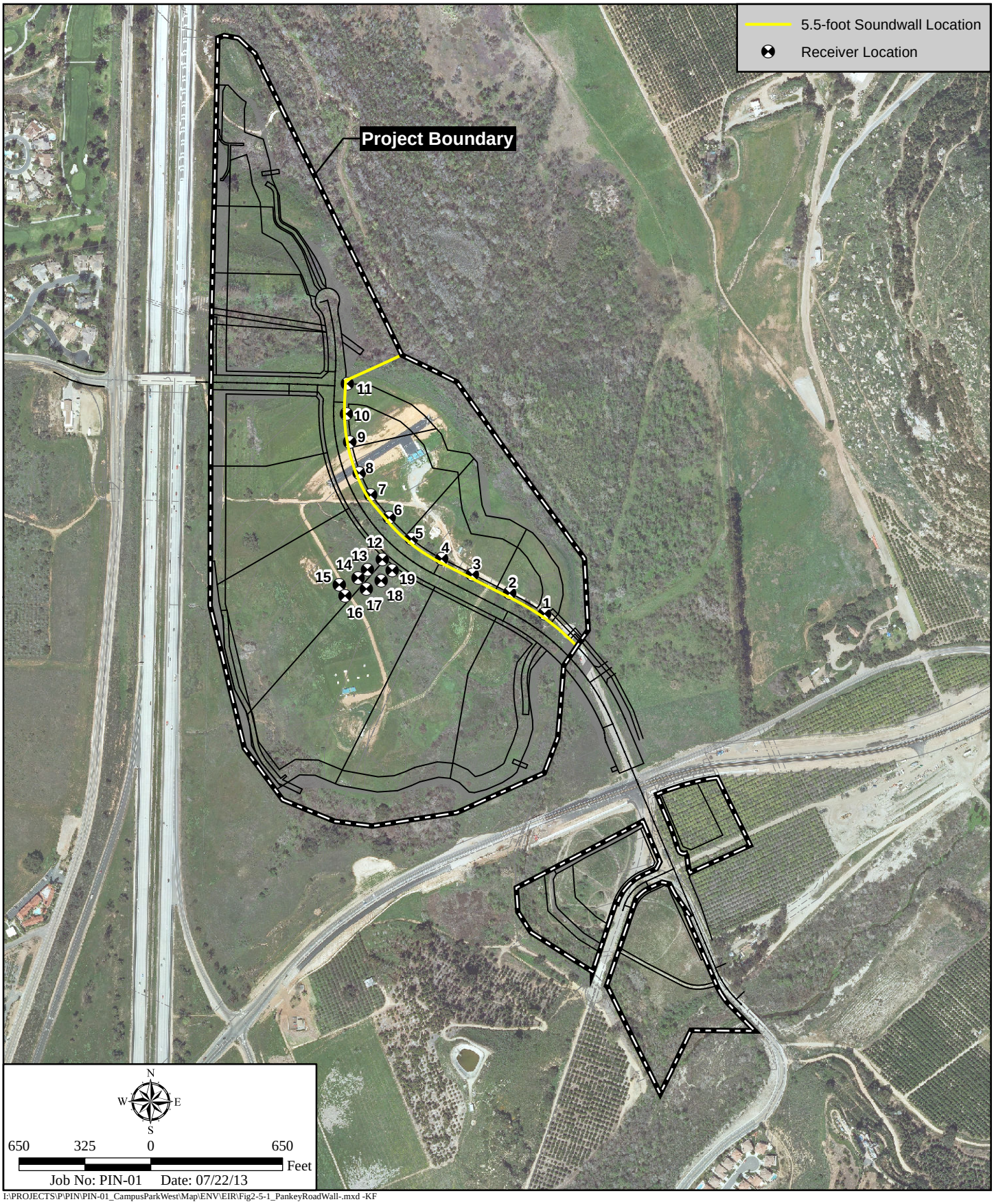
Noise Sensitive Land Use Location	Traffic Scenario					
	Existing	Existing + Project	Change with Project	Existing + Cumulative	Existing + Project + Cumulative	Change with Project
Pala Mesa Drive	47.4	52.3	4.9	59.7	60.2	0.5
Tennis Court	55.8	57.8	2.0	57.7	59.1	1.4
Dulin Residence 1	47.7	49.7	2.0	49.6	51	1.4
Dulin Residence 2	48.1	50.1	2.0	50	51.4	1.4
Dulin Residence 3	48	50	2.0	50	51.3	1.3
Dulin Residence 4	47.6	49.6	2.0	49.5	50.9	1.4
Dulin Residence 5	47.7	49.7	2.0	49.6	51	1.4
Shearer Crossing Residence (existing barrier)	50.9	52.9	2.0	52.8	54.1	1.3

Source: HELIX 2013d
All of the above residences currently have a 6 foot or higher soundwall in place, which was incorporated into the modeling. The tennis court has no attenuation barrier in place.
See Table 1-1 of Appendix F for roadway speed assumed in the noise modeling for specified NSLUs in this table.

Table 2.5-4
DIRECT PROJECT NOISE IMPACTS

Roadway	Existing Conditions				Existing + Project Conditions				
Segment	**CNEL @ 100 ft. (dBA)**	**70 CNEL (ft.)**	**65 CNEL (ft.)**	**60 CNEL (ft.)**	**CNEL @ 100 ft. (dBA)**	**Change @ 100 ft (dBA)**	**70 CNEL (ft.)**	**65 CNEL (ft.)**	**60 CNEL (ft.)**
I-15*									
E. Mission Road to SR-76	81.6	595	1050	1720	82.0	0.4	725	1400	2480
South of SR-76	81.4	580	1025	1690	81.8	0.4	625	1100	1175
SR-76*									
West of Old Highway 395	71.9	130	305	620	72.6	0.7	170	370	810
I-15 Northbound Ramps to Pankey Road	68.6	72	175	411	72.5	3.9	168	364	800
Pankey Road to Horse Ranch Creek Road	68.5	70	172	390	69.3	0.8	77	220	440
Horse Ranch Creek Road to Rice Canyon Road	68.3	68	168	380	69.2	0.9	75	210	430
Pankey Road									
SR-76 (Pala Road) to Shearer Crossing	54.5	IRW	9	28	58.4	3.9	7	22	69
Shearer Crossing to Old Highway 395	54.5	IRW	9	28	59.0	4.5	IRW	32	98
Pala Mesa Drive									
Wilt/Sage Road to Old Highway 395	50.6	IRW	IRW	11	57.1	6.5	IRW	23	60
Old Highway 395 to Pankey Road*	-	-	-	-	60.9	-	22	48	121
Horse Ranch Creek Road (Old Pankey Place)*									
North of SR 76 (Pala Road)	-	-	-	-	-	-	-	-	-
Old Highway 395									
Reche Road to Stewart Canyon Road	64.7	30	93	295	67.4	2.7	55	173	546
Stewart Canyon Road to Tecalote Drive	65.2	33	105	331	68.1	2.9	64	203	643
Tecalote Drive to Pala Mesa Drive	65.3	34	107	339	68.2	2.9	66	208	659

Source: HELIX 2013d
Note: Contour distances do not consider topographic variation, which could reduce noise levels relative to stated levels
- = Roadway does not exist at present
IRW = The CNEL contour indicated exists within the width of the roadway.
*No sensitive receptors; information provided for general area planning only



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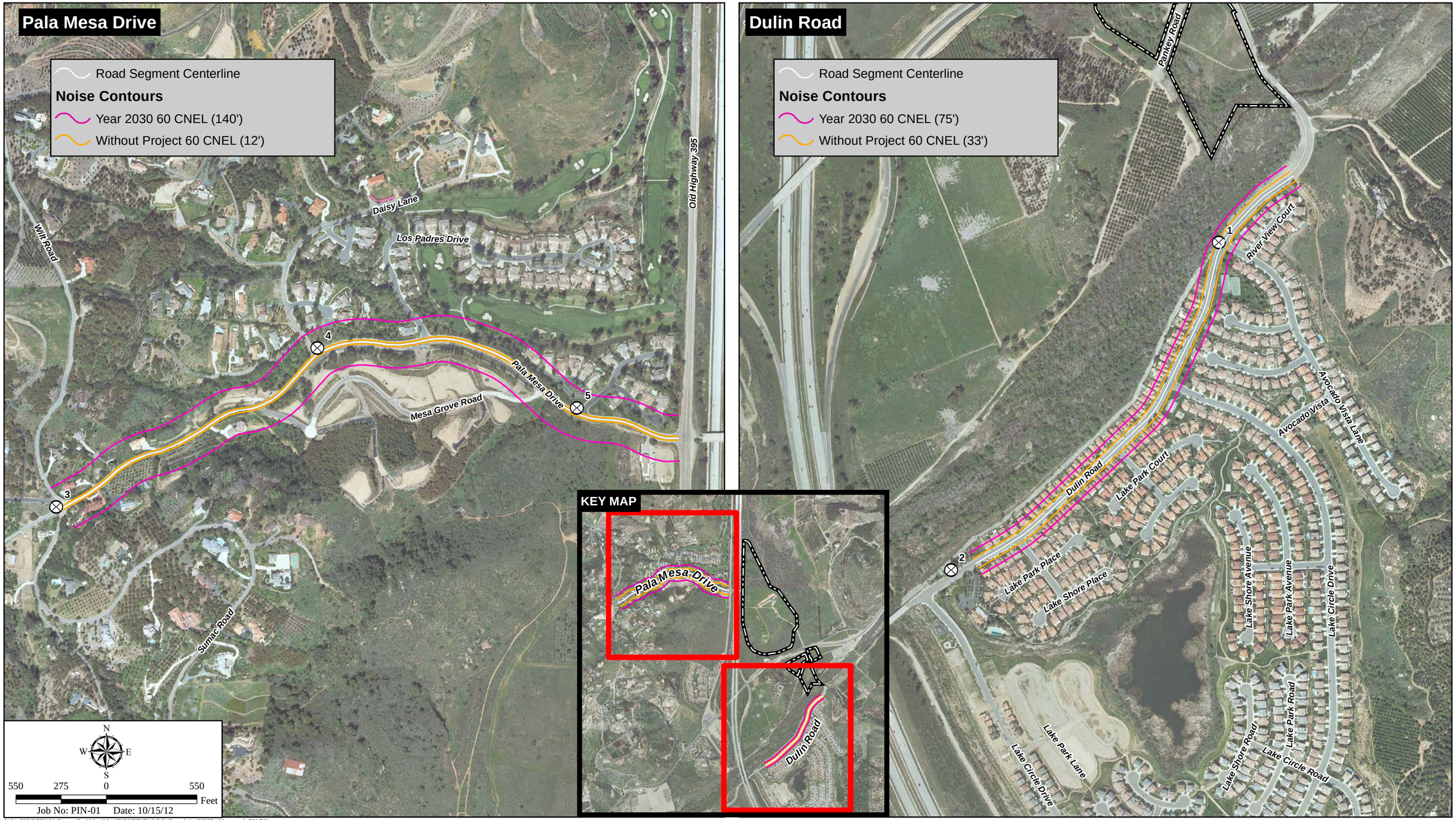
Required On-site Noise Wall Along Pankey Road

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.5-1



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Year 2030 Off-site Traffic Noise Contours

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.5-2

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Dulin Road Residences With Exterior Noise Contrib

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.5 3

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Pala Mesa Drive Residences With Exterior Noise Contrb

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.5-4

SUBCHAPTER 2.6

BIOLOGICAL RESOURCES

2.6 Biological Resources

The 1980 and 1983 EIRs identified biological resources impacts as significant but mitigable. Findings in the 1980 EIR were based on the 1979 Biological Survey for the Sycamore Springs Specific Plan. The report discussed the presence of riparian woodland, aquatic areas and associated upland disturbed grassland habitat. Mitigation measures included on-site riparian preservation, maintaining ponds related to the golf course, and revising grading assumed for the golf course. No sensitive plant or animal species were noted on site.

Findings in the 1983 EIR also were based on the 1980 Technical Report completed for the Sycamore Springs Project. Mitigation was specified for wetlands habitat—both in terms of rehabilitation/preservation and creation of acreage lost at a greater than 1:1 ratio. The small amount of sage scrub was in a portion of both prior projects to be retained in open space.

Currently, on-site habitat has changed in type and extent. The southern riparian forest on site has expanded, and a large portion of the site that was considered fallow field is now characterized as non-native grassland. In addition to changes to on-site physical conditions since the early 1980s, a number of changes have occurred in terms of review requirements. The County MSCP was implemented in 1997, and the County RPO was enacted in 1991. The least Bell's vireo (*Vireo bellii pusillus*) has been listed at both the state (October 2, 1980) and federal (May 2, 1986) levels as endangered and is known to be on site. Other sensitive species have been noted on site as well.

This subchapter describes existing biological conditions within the Project site and vicinity, identifies associated regulatory requirements, and evaluates potential impacts (including cumulative impacts) and mitigation measures related to implementation of the Proposed Project. A Biological Technical Report was prepared for the Project by REC Consultants, Inc. (REC; 2014a) and is summarized below; the complete report is included as Appendix G of this EIR. Refer to text below for new and/or revised Project evaluation of issues related to biology.

2.6.1 Existing Conditions

2.6.1.1 *Existing Setting*

Land Uses

Historically, the Project site has been used for agriculture. The northern portion of the site (north of SR-76) currently contains a model airplane airfield and a dirt model car track surrounded by a maintained fuel management zone and undeveloped habitat. The southern portion (south of SR-76) contains citrus and undeveloped habitat and borders the San Luis Rey River, located to the south. This southern area has been used for off-road activity in recent years. Surrounding land uses include undeveloped land to the north and east, undeveloped and agricultural land to the south, and undeveloped land and I-15 to the west.

Biological Surveys

The Project site was surveyed for plants and animals in 2004 and 2005 by REC, with additional surveys conducted in 2012 and 2013. Species were identified directly by sight with the aid of binoculars or by vocalizations, and indirectly by scat, tracks, and/or burrows. The existing habitat and site conditions were assessed to determine whether or not any sensitive species had the potential to occur on site. Focused protocol surveys were performed on site for the federally endangered southwestern arroyo toad (*Bufo californicus*) in 2004, and for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*) and federally and state endangered least Bell's vireo in 2004, 2012, and/or 2013. In addition, a habitat assessment was completed for the federally endangered and state threatened Stephens' kangaroo rat (*Dipodomys stephensi*) in 2004 and sensitive plant surveys were conducted in 2004 and 2005. Jurisdictional wetland delineations were performed on site by REC in 2004 and 2013.

Habitats

Eleven vegetation communities were observed within the Project site, as well as off-site impact locations. A brief description of each in relation to the Proposed Project is provided below. Vegetation communities on site are illustrated on Figure 2.6-1, On- and Off-site Biological Resources/Impacts, and summarized on Table 2.6-1, Vegetation Communities/Habitats and Proposed Impacts.

Southern Riparian Forest

Southern riparian forest within the Project site is dominated by a canopy of Gooding's black, red, and arroyo willows (*Salix gooddingii*, *S. laevigata*, *S. lasiolepis*, respectively), cottonwoods (*Populus fremontii* subsp. *fremontii*), and western sycamore (*Platanus racemosa*). The dense and diverse understory contains saplings of canopy species, shrubs such as mule fat (*Baccharis salicifolia* subsp. *salicifolia*), narrow-leaf willow (*Salix exigua*), and western poison oak (*Toxicodendron diversilobum*). A variety of herbs, such as yerba mansa (*Anemopsis californica*), San Diego sedge (*Carex spissa*), and spikesedges (*Eleocharis* spp.), constitute the herbaceous understory. Southern riparian forest is considered sensitive because it is a wetland habitat under the local, state, and federal definitions of wetlands. Wetlands are an important source of food, water, and shelter for wildlife species. They also provide valuable water quality and cycling roles in the ecosystem.

Approximately 19.6 acres of southern riparian forest habitat occur on site along Horse Ranch Creek and its tributaries. In addition, approximately 1.1 acres of this habitat occurs within off-site impact areas associated with improvements to Pankey Road and SR-76. The habitat on site is of good quality and supports several sensitive avian species, as discussed below. The edges of this habitat, however, are somewhat devalued for wildlife use due to the adjacent disturbed lands, noise from the adjacent freeway and highway, and ongoing uses.

Southern Riparian Scrub

Approximately 4.52 acres of southern riparian scrub occur along the San Luis Rey River at the southern edge of the Project site. The southern riparian scrub on site is characterized by a less tall, less dense canopy than southern riparian forest, and is dominated by shrubs and small trees, such as mule fat, tamarisk (*Tamarix* sp.), and willows. Herbs observed in this habitat include willow herb (*Epilobium ciliatum* subsp. *ciliatum*), watercress (*Nasturtium officinale*), curly dock (*Rumex crispus*), and bulrushes (*Schoenoplectus acutus* var. *occidentalis, S. pungens*). The southern riparian scrub appeared to be in fairly good condition, although non-native weeds including tamarisk and giant reed (*Arundo donax*) were observed. Southern riparian scrub also is considered a sensitive habitat under local, state, and federal definitions because of its wetland and wildlife value and scarcity.

Coast Live Oak Woodland

An approximately 0.21-acre patch of coast live oak woodland habitat occurs near the northern end of the Project site. Coast live oak woodland habitat is characterized by a canopy of coast live oak (*Quercus agrifolia*) and typically occurs on north-facing slopes and shaded ravines (Holland 1986). Shrubs and herbs observed in the low-diversity understory included common bedstraw (*Galium aparine*), non-native milk thistle (*Silybum marianum*), and western poison oak. The small patch of oak woodland on site has been moderately disturbed through invasion of non-native species in the understory. Oak woodlands are considered sensitive because of their scarcity and wildlife value.

Diegan Coastal Sage Scrub

Approximately 3.12 acres of Diegan coastal sage scrub occurs within the northern and southern portions of the Project site, and approximately 0.24 acre occurs along the proposed off-site improvement location of Old Highway 395/Pala Mesa Drive. Diegan coastal sage scrub occurs in coastal southern California and is characterized by low-density drought-deciduous shrubs, such as coastal sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and true sages (*Salvia* spp.) on low-moisture sites (Holland 1986, Schoenherr 1992). Coastal sage scrub on site is limited to one area at the north end of the site, and is somewhat isolated from other uplands by I-15 to the west and riparian woodland to the north and east. The dominant coastal sage scrub shrubs on the Project site are coastal sagebrush, California buckwheat, and coyote brush (*Baccharis pitularis* subsp. *consanginea*). Less common native species included California everlasting (*Pseudognaphalium californicum*), giant wild rye (*Elymus condensatus*), laurel sumac (*Malosma laurina*), and climbing milkweed (*Funastrum cynanchoides* subsp. *hartwegii*). This patch of coastal sage scrub is not in good condition. Most of the coastal sagebrush shrubs are old and broken, ground cover between the shrubs is dominated by non-natives, and a high number of coyote brush shrubs indicates disturbance. Although the on-site habitat is not considered to be high quality, Diegan coastal sage scrub is considered sensitive because it supports many sensitive plant and animal species regionally, and because it is generally declining in abundance.

Non-native Grassland

Approximately 45.5 acres of non-native grassland occur throughout the Project site. In addition, approximately 4.5 acres occur off site in association with roadway improvements to Pankey Road, SR-76, and Old Highway 395/Pala Mesa Drive. Non-native grassland is an herbaceous habitat dominated by annual non-native grasses such as oats (*Avena* spp.), non-native brome grasses (*Bromus* spp.), and non-native broadleaf species, such as filaree (*Erodium* spp.) and mustards (*Brassica* spp., *Hirschfeldia incana*). It is distinguished from native grassland by having 20 percent or less cover of native perennial grass species (County 2002). Non-native grassland on site is dominated by oats, non-native brome grasses, tocalote (*Centaurea melitensis*), filaree, sweet fennel (*Foeniculum vulgare*), short-pod mustard, barley (*Hordeum marinum* subsp. *gussoneanum*), and scattered native species, such as telegraph weed (*Heterotheca grandiflora*), lupines (*Lupinus concinnus*, *L. bicolor*), valley popcorn flower (*Plagiobothrys canescens*), and wreath plant (*Stephanomeria* sp.). Most of the non-native grassland on site is regularly mowed or disked to maintain a fuel management zone around the model airplane runway. Non-native grassland is not a native habitat type, but is still considered sensitive by the County because it is of value for foraging raptors and small mammals.

Pasture

Approximately 0.58 acre of pasture occurs in off-site improvements areas associated with Pankey Road. This area adjacent to Pankey Road is currently being grazed. Bare ground and non-native vegetation, such as brome grasses, oats, filaree, and mustard dominate this area. This habitat type is considered sensitive by the County because it is of value for foraging raptors and small mammals.

Agriculture/Orchard

Approximately 3.25 acres of agriculture/orchard occur within the Project site, and approximately 0.77 acre occurs in off-site improvements areas associated with SR-76. Abandoned remnants of citrus orchards and avocado trees occur in the northern section of the site, and an active citrus orchard occurs in the southeastern parcel. The abandoned orchard understory is dominated by non-native herbs, such as brome grass, Italian thistle (*Carduus pycnocephalus* subsp. *pycnocephalus*), tocalote, sweet fennel, and castor bean (*Ricinus communis*), with scattered native herbs and shrubs. The sparse understory in the active orchard includes non-natives, such as showy chloris (*Chloris virgata*), crowfoot grass (*Dactyloctenium aegyptium*), and common purslane (*Portulaca oleracea*). This habitat type is not biologically sensitive.

Eucalyptus Woodland

Approximately 0.57 acre of eucalyptus woodland occurs in one area within the northern end of the Project site. Eucalyptus woodland is a woodland habitat dominated by non-native eucalyptus trees (*Eucalyptus* spp.). The understory, typically sparse due to eucalyptus leaf litter, includes ripgut grass (*Bromus diandrus*), wild cucumber (*Marah macrocarpa*), and smilo grass (*Stipa miliacea* var. *milacea*). This habitat is not considered sensitive; however, it provides valuable roosting and nesting opportunities for raptors.

Ornamental Non-native

Approximately 0.4 acre of ornamental non-native habitat occurs within the eastern portion of the Project site to the north of SR-76. In addition, approximately 0.32 acre of this habitat is present within the off-site improvement areas associated with Pankey Road and Old Highway 395/Pala Mesa Drive. Ornamental non-native areas are dominated by ornamental plant species, and are frequently associated with historical residences. The area of ornamental non-native habitat on site is located along the access road in the northern parcel, and is dominated by several large, old Peruvian pepper trees (*Schinus molle*). Other species in this area include Italian thistle, eucalyptus, horehound (*Marrubium vulgare*), mission prickly-pear (*Opuntia ficus-indica*), and greater periwinkle (*Vinca major*). This habitat is not considered sensitive.

Disturbed Land

Approximately 39.48 acres of disturbed land occur within the Project site. In addition, approximately 2.45 acres of this habitat occur within the off-site improvement areas associated with Pankey Road and Old Highway 395/Pala Mesa Drive. Disturbed land in the northern portion of the Project site consists of land cleared for fuel management around the entry drive and model airplane runway, and includes the runway and associated parking area, which contains a dirt remote control car track. This area has been repeatedly disked and cleared for fuel management, and contains low growth of primarily non-native annual grasses and forbs. A linear area of disturbance is also associated with work by the Rainbow Municipal Water District to replace manholes and improve a gravel access road along the eastern boundary of the Project site adjacent to the creek. Disturbed land in the southern portion of the site consists of a triangle of bare land between the road and the orchard, and is mostly bare soil with scattered non-native grasses and forbs. Typical species of these areas include oats, non-native brome grasses, filaree, short-pod mustard, burclover (*Medicago* sp.), and wild radish (*Raphanus sativus*), but not to an extent that would justify classifying it as non-native grassland. This habitat type is not sensitive within the County.

Developed

Approximately 2.41 acres of developed land associated with paved Pankey Road occurs within the Project site. In addition, approximately 8.92 acres of developed areas off site consist of paved roadway associated with SR-76, Pankey Road, Shearer Crossing, Old Highway 395, and Pala Mesa Drive. This habitat type is not sensitive.

Jurisdictional Wetlands/Waters

The Project site contains jurisdictional drainages subject to regulation by the ACOE, CDFW, and County. The site does not contain any vernal pools. The ACOE regulates wetlands and Waters of the U.S. protected under Section 404 of the Clean Water Act; the CDFW regulates certain drainages and/or wetlands protected under the Fish and Game Code; and the County regulates wetlands through its RPO. On-site drainages were evaluated for potential jurisdictional status. The report summarizing findings is provided in Appendix G of the Biological Technical Report (EIR Appendix G).

Impacts to wetlands would require consultation and approvals from federal and state agencies, including a Section 404 Permit from the ACOE, 401 Certification from the RWQCB, and a 1602 SAA from CDFW.

ACOE Jurisdiction

Through implementation of the Clean Water Act (CWA), the ACOE claims jurisdiction over waterways that are, or drain to, "Waters of the United States," or "waters." The definition of "waters" includes (but is not limited to) inland waters; lakes, rivers, and streams that are navigable; tributaries to these waters; and wetlands adjacent to these waters or their tributaries. The jurisdictional limit of non-wetland waters (i.e., creeks and drainages) is the ordinary high water mark. The jurisdictional limit of wetlands is the upper limit of the wetland. Delineations of wetland limits were conducted for the Project according to the procedures found in the Wetlands Delineation Manual (ACOE 1987).

ACOE wetlands must satisfy criteria to three parameters: vegetation, soils, and hydrology. If any one parameter does not contain a positive wetland indicator, the site is not an ACOE jurisdictional wetland. Projects may be permitted on an individual basis or may be covered under one of several approved nationwide permits. Individual permits are required when more than 300 linear feet of drainages, more than 0.5 acre of wetlands, or any vernal pools would be impacted.

A jurisdictional delineation was performed on site according to ACOE wetland delineation guidelines. All areas with depressions or drainage channels were evaluated for the presence of Waters of the U.S., including jurisdictional wetlands. If an area was suspected of being a wetland, vegetation and hydrology indicators were noted, and a soil pit was dug and described. The area was then determined to be a federal (ACOE) wetland if it satisfied the three wetland criteria (vegetation, hydrology, and soil). In most cases, two sample points were evaluated, one inside the suspected wetland, and one where the hydrology and/or vegetation criteria were not satisfied. Drainages lacking evidence of wetland hydrology (i.e., inundation for more than five percent of the growing season) were considered non-wetland Waters of the U.S.

ACOE jurisdictional areas on site include the main drainage channels from bank to bank (as Waters of the U.S.), as well as some areas qualifying as ACOE wetlands, all within the riparian canopy (Figure 2.6-2, Jurisdictional Delineation/Impacts). Approximately 9.16 acres of ACOE wetlands and waters occur on site, and 0.59 acre of ACOE wetlands occurs within off-site improvement areas.

CDFW Jurisdiction

Under Section 1600 of the California Fish and Game Code, a project applicant may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless CDFW receives written notification regarding the activity. After said notification is complete, the CDFW must determine whether the activity may

substantially adversely affect an existing fish and wildlife resource. If it determines that the activity may have that effect, CDFW must provide a draft agreement (SAA) to the project applicant, describing the fish and wildlife resources that may be threatened and identifying measures to protect those resources. The Project Applicant would be required to apply for and receive approval of that SAA from CDFW.

A field determination of CDFW jurisdictional boundaries is based on the presence of a channel with a bed and bank(s) and potential riparian vegetation. Jurisdiction usually extends to the top of bank or the outer edge of riparian vegetation, whichever is wider.

The Horse Ranch Creek drainage and its larger tributaries fall under jurisdiction of CDFW to the outer edges of riparian vegetation (Figure 2.6-2). Approximately 9.16 acres of ACOE wetland and 15.57 acres of CDFW jurisdictional areas occur on site.

County Jurisdiction

The County's RPO is more restrictive than the ACOE's criteria. Under the RPO, a wetland must only meet one of the following criteria in order to be classified as a wetland: (1) at least periodically the land supports predominantly hydrophytes (plants whose habitat is water or very wet places); (2) the substratum is predominantly undrained hydric soils, or (3) an ephemeral or perennial stream is present, the substratum of which is predominantly non-soil, and such lands contribute substantially to the biological functions or values of wetlands in the drainage system.

On July 23, 2004, the San Diego County Planning Commission granted an exemption to RPO requirements to Campus Park West. (Parcels for which Tentative Maps were recorded prior to 1988 are expressly exempted from the RPO.) The Project's RPO exemption was granted due to the fact that the Project site is located within the Campus Park/Hewlett Packard Specific Plan area, which was approved in 1983 but never constructed. Additionally, the Planning Commission determined that the on-site wetlands were present due to runoff from the westerly golf course and the easterly agricultural activities. As part of the exemption, the proposed roadways were moved to the outer boundaries of the wetlands, reducing impacts beyond the originally approved project. The exemption findings are listed in Appendix H of the Biological Technical Report (EIR Appendix G). Therefore, the Proposed Project is in conformance with the Planning Commission's exemption and no further RPO analysis or mitigation is required. Nonetheless, it should be noted that mitigation of sensitive resources is proposed in accordance with the RPO.

Plant Species

A total of 206 plant species were observed on site during biological resources surveys, including 102 non-native species (4 of which are considered highly invasive) and 104 native species (refer to Appendix A of the Biological Technical Report [EIR Appendix G] for a complete list of identified plants species).

Sensitive Plant Species

One sensitive plant species was observed on site, Palmer's sagewort (*Artemisia palmeri*). This species is listed as California Native Plant Society (CNPS) List 4[1] and is a County Group D plant species. It is not federally or state listed. Palmer's sagewort ranges from San Diego County to Baja California, and can be found in chaparral, coastal scrub, riparian scrub, and riparian woodland at elevations of 50 to 3,000 feet. Palmer's sagewort has declined due to human impacts to drainages and rivers. Approximately 83 individuals were observed in the northern end of the site within Diegan coastal sage scrub and non-native grassland, near riparian habitat. It should also be noted that, during a field survey conducted in April 2013, Palmer's sagewort was not observed in the described area. The Biological Technical Report notes that the previously observed plants may have been eradicated during the 2007 Rice Canyon fire, as the associated habitat was burned, with additional disturbance potentially resulting from related fire-fighting activities.

A list of sensitive plants with the potential to occur on site is included as Appendix C of the Biological Technical Report (EIR Appendix G). Based on the results of site visits and review of California Natural Diversity Database (CNDDB) and CNPS information, no other sensitive plant species have a high potential to occur on site.

Animal Species

Seventy-three animal species were documented within the Project site. A complete list of observed animal species is provided in Appendix B of the Biological Technical Report (EIR Appendix G).

Invertebrates

Seventeen invertebrate taxa were observed on site, including butterflies, ants, bees, and crickets. The most common butterflies were mourning cloak (*Nymphalis antiopa*), western tiger swallowtail (*Papilio rutulus*), and whites (Subfamily Pierinae), which were observed in agricultural land, Diegan coastal sage scrub, non-native grassland, and southern riparian forest. Other common invertebrates on site include ants (Family Formicidae), bees (Family Apidae), California harvester ants (*Pogonomyrmex californicus*), and crickets (Family Gryllidae).

Amphibians

Two amphibian species – the California treefrog (*Hyla cadaverina*) and the Pacific treefrog (*H. regilla*) – were observed on site in and near Horse Ranch Creek during site surveys. Unidentified tadpoles also were observed.

[1] CNPS List 4 indicates a watch list for species of limited distribution, and needs monitoring for changes in population status.

Reptiles

Five reptile species were observed on site in Diegan coastal sage scrub, non-native grassland, and southern riparian forest habitat during biological resources surveys, including common side-blotched lizard (*Uta stansburiana*), orange-throated whiptail (*Cnemidophorus hyperythrus*), San Diego alligator lizard (*Elgaria multicarinata*), southern Pacific rattlesnake (*Crotalus viridis*), and western fence lizard (*Sceloporus occidentalis*).

Birds

Forty-three bird species was observed throughout the Project site. Southern riparian forest supported noticeably more birds than other habitats. The most common species were American crow (*Corvus corax*), bushtit (*Psaltriparus minimus*), common yellowthroat (*Geothlypis trichas*), lesser goldfinch (*Carduelis psaltria*), mourning dove (*Zenaida macroura*), and song sparrow (*Melospiza melodia*). Sensitive and special status bird species observed at the site are discussed below.

Mammals

Evidence of five mammal species was observed on site in the non-native grassland and southern riparian forest, including California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*; scat), desert cottontail (*Sylvilagus audubonii*), domestic dog (*Canis domestica*), and dusky-footed woodrat (*Neotoma fuscipes*; nests).

Sensitive Animal Species

Seven sensitive animal species were observed on or over the site during REC's surveys: orange-throated whiptail, least Bell's vireo, white-faced ibis (*Plegadis chihi*), yellow warbler (*Dendroica petechia*), yellow-breasted chat (*Icteria virens*), turkey vulture (*Cathartes aura*), and red-shouldered hawk (*Buteo lineatus*). In addition, other raptors were observed on or above the site. These species are discussed below.

A list of sensitive animals with the potential to occur on site is included as Appendix D of the Biological Technical Report (EIR Appendix G).

Orange-throated Whiptail (Cnemidophorus hyperythrus)

The orange-throated whiptail, a California Species of Special Concern, is a slender, quick lizard that lives in coastal sage scrub, chaparral, grasslands, and riparian areas and eats insects and spiders. One orange-throated whiptail was observed on site along the open edge of southern riparian forest habitat adjacent to the I-15 right-of-way (Figure 2.6-1).

Least Bell's Vireo (Vireo bellii pusillus)

The least Bell's vireo is a small migratory songbird that breeds in willow-dominated communities during the summer months. This species, imperiled by loss and degradation of

habitat, as well as brown-headed cowbird (*Molothrus ater*) nest parasitism, is listed as state and federal endangered. During the 2004 series of eight protocol presence/absence surveys conducted on site, at least seven least Bell's vireos, including a pair, were detected in Horse Ranch Creek and one of its northern tributaries. General locations of these observations are shown in Figure 2.6-1. Three individuals were observed on site; the others were very close to the site boundary and probably predominantly use off-site habitat.

An additional protocol survey for the least Bell's vireo was conducted for the adjacent Campus Park Project (TM 5538) in the spring/summer of 2012. Survey included the riparian habitat immediately east of the Campus Park eastern boundary and encompassed the east-west tributary of southern riparian forest in the northern portion of the Proposed Project site. The locations of previously identified least Bell's vireos on Campus Park were confirmed by the 2012 survey. Least Bell's vireos utilize the riparian forest along Horse Ranch Creek and were observed along the eastern boundary of the Campus Park West Project site that supports this habitat type. The 2012 report is included as Appendix E of the Biological Technical Report (EIR Appendix G).

Southwestern Willow Flycatcher (Empidonax traillii extimus)

The southwestern willow flycatcher, a state and federally endangered species, is a small songbird with a grayish-green back and wings, whitish throat, gray-olive breast, and pale, yellowish belly. Similar to least Bell's vireo, the southwestern willow flycatcher is a resident of riparian scrub and riparian woodland along river and stream courses; including vegetation dominated by willows, tamarisks and coast live oak. Dense willow thickets are preferred for nesting.

In 2011, two southwestern willow flycatchers were detected by Natural Resource Consultants during USFWS protocol surveys along Horse Ranch Creek and were determined to be a pair. No breeding activity could be determined during the survey observations. In 2012, one southwestern willow flycatcher was detected in a similar area (see Figure 3 of Appendix G). This bird was not seen, but was heard repeatedly calling at several spots in a line along the edge of the western riparian area. The possibility that this bird was a similar-sounding gray (*E. wrightii*) or dusky (*E. oberholseri*) flycatcher cannot be dismissed; however, it is not likely that one of these montane or submontane species would be in the lowlands in suitable southwestern willow flycatcher habitat in early July (NRC 2013).

White-faced Ibis (Plegadis chihi)

The white-faced ibis, a California Species of Special Concern, historically bred throughout California, but due to destruction of habitat is not known to breed in the state any longer. Coastal southern California supports a wintering population, including a group near Oceanside, but these birds also are threatened by habitat loss. A pair of white-faced ibises was observed flying over the site from the direction of the San Luis Rey River but probably do not use the site due to lack of habitat.

Yellow Warbler (Dendroica petechia)

The yellow warbler, a California Species of Special Concern, was historically a common, locally abundant summer resident in riparian woodlands throughout California, but current populations are substantially reduced and, in some areas, extirpated. The decline in numbers can be attributed to loss of habitat and to susceptibility to brown-headed cowbird parasitism. One yellow warbler was observed in the southern portion of the Project site (Figure 2.6-1).

Yellow-breasted Chat (Icteria virens)

The yellow-breasted chat, a California Species of Special Concern, was historically a common summer resident in southern California riparian woodlands but has declined due to loss of habitat and possibly other factors such as brown-headed cowbird parasitism. At least three were detected along the northeastern edge of the Project site (Figure 2.6-1). An additional observation of this species occurred during the previously noted 2012 least Bell's vireo survey for adjacent Campus Park.

Turkey Vulture (Cathartes aura) and Other Raptors

The turkey vulture is a large scavenger that is usually seen soaring in the sky, perched on dead trees, posts, and carrion, and on the ground. Although this species is not state or federally listed, it is of special interest to the County (a County Group I species).

Raptors, as a group, are protected from take, possession, or destruction by Fish and Game Code Section 3503.5 even if they are not individually considered sensitive. Raptors observed on site include American kestrel (*Falco sparverius*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), and turkey vulture. Although not listed by CDFW as a sensitive species, the turkey vulture and red-shouldered hawk are Group 1 County of San Diego animal species. County of San Diego Group 1 animals include those that have a very high level of sensitivity, either because they are listed as threatened or endangered or because they have very specific habitat requirements that must be met. One active hawk nest was observed off site in the adjacent property, in the southern riparian forest located near the eastern boundary.

Other Focused Surveys

As previously stated, focused protocol surveys were performed on site for coastal California gnatcatcher and southwestern arroyo toad in 2004. Neither species was detected on site during these surveys. An additional focused protocol survey for the coastal California gnatcatcher was initiated in the spring of 2013. The formerly mapped areas of coastal sage scrub on this property are small and isolated, and the largest area of this habitat (located on a knoll in the northern tip of the project) has apparently not fully recovered from the 2007 Rice Canyon Fire. The area is bounded by I-15 to the west, Palomar College (new construction) to the north and dense riparian woodland on site. The vegetation is sparse and does not appear to support the coastal California gnatcatcher. It is unlikely given the surrounding habitat types and the density of non-native grasses in the area that this area would regenerate effectively as coastal sage scrub habitat suitable for the coastal California gnatcatcher. The closest location of occupied habitat is

approximately one mile north on the Campus Park property. There is no suitable habitat between that location and the on-site disturbed habitat to act as an adequate corridor for the gnatcatcher to disperse to this location.

Arroyo toads are known to occur in San Luis Rey River, west of I-15 and upstream. The southern portion of the Project site between San Luis Rey River and SR-76 has been repeatedly disturbed for fuel maintenance and orchard operation. Although toads are thought to disperse up to 0.6 mile away from breeding habitat, the upland areas on the Project site are continuously disrupted such that aestivation of toads in these areas is unlikely. Dispersal from San Luis Rey River to the property would require the toad to either traverse the property south of SR-76, cross SR-76 either over the pavement or through culvert, and then traverse rip rap slope and/or steep 1:1 embankment. In addition during a meeting with USFWS representatives regarding the adjacent Campus Park project (TM 5538) on December 4, 2012, USFWS staff indicated that the habitat in this area was not suitable for the arroyo toad. Accordingly, additional arroyo toad surveys are not required in this area. Per SanBIOS, the closest recorded observation of the arroyo toad is 3.25 miles to the south of the Project site.

A focused habitat assessment for Stephens' kangaroo rat was conducted on site. Based on the survey, the site was determined to have suitable habitat. The site's distance, however, from known occurrences of this species (approximately 5.75 miles to the northwest in the town of Fallbrook) makes it unlikely that the Project site would support Stephens' kangaroo rat. (Refer to Appendix D of the Biological Technical Report [EIR Appendix G] for a list of sensitive animals with the potential to occur on site).

Habitat Connectivity and Wildlife Corridors

Wildlife corridors and linkages are critical to the regional conservation of sensitive species as they allow populations to access appropriate habitat and to expand. A wildlife linkage is an area of land that supports or contributes to the long-term movement of wildlife and genetic exchanges by providing live-in habitat that connects to other habitats. A wildlife corridor is a specific route that is used for movement and migration of species. A corridor may represent a smaller or narrower avenue for movement, generally consisting of local pathways connecting short distances usually covering one or two main types of vegetation communities. Wildlife linkages are landscape-level connections between very large core areas. They generally span several thousand feet and cover multiple habitat types.

Figure 2.6-3, Wildlife Movement, identifies wildlife corridors within the vicinity of the project site. As shown in this figure, the closest local wildlife corridor is directly off site to the east within Horse Ranch Creek. The riparian area on site along Horse Ranch Creek would be maintained within the on-site open space easement along the eastern boundary of the Project site.

The closest regional wildlife corridor traverses the southernmost portion of the Project site, along the San Luis Rey River. (This section is in PA 6, to be wholly retained in open space.) The upland portions of the site have historically been under agriculture and contain very little native vegetation. There is little to no direct habitat connection through the project site between the San Luis Rey River to the south and the coastal sage scrub habitat to the north of the site. The

southeastern portion of the site that functions as a limited regional wildlife corridor is located within the riparian habitat along the adjacent creek, and would be protected as open space. (This drainage only leads to pastureland to the north, however, so it provides little value as a regional wildlife corridor.)

On-site coastal sage scrub is limited to one area at the north end of the site, and is somewhat isolated from other uplands by I-15 to the west and the riparian woodland to the north and east. The on-site patch of coastal sage scrub is not in good condition as most of the coastal sagebrush shrubs are old and broken, ground cover between the shrubs is dominated by non-natives, and a large amount of coyote brush shrubs indicates disturbance. However, significant stands of coastal sage scrub occur northeast of the Project site near Rice Canyon. Rice Canyon is less than one mile east of the project site and currently is comprised of sparse rural development. This off-site area provides vegetation cover ideal for movement of wildlife species to hide from predators, forage for food, and breed and nurture their young. In addition, some off-site areas along I-15 include small to medium sized patches of coastal sage scrub that form a series of habitat "stepping stones" ideal for foraging birds. California gnatcatchers are known to occur within these "stepping stone" patches of coastal sage scrub habitat along I-15 (County 2004, USFWS 2004).

On-site coastal sage scrub is not considered a viable or utilized wildlife corridor for a variety of reasons, including its poor condition and isolation. The 2004 protocol survey for the California gnatcatchers did not detect any California gnatcatchers on the site. When compared to the Project site, both Rice Canyon and off-site I-15 "stepping stone" linkages provide higher quality habitat and unobstructed development; creating feasible wildlife corridors, adequate foraging, and vegetation cover sufficient for protection from predators.

2.6.1.2 *Regulatory Framework*

Federal

Federal Endangered Species Act

Administered by the USFWS, the federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a 'take' under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Sections 4(d) and 7 of the federal ESA regulate actions that could jeopardize endangered or threatened species. A special rule under Section 4(d) of the ESA authorizes take of certain protected species under approved state NCCP programs (also administered by the states). The County participates in a 4(d) program relative to Diegan coastal sage scrub. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect

listed species. A Section 7 consultation (formal or informal) is required when there is a nexus between listed species' use of the site and ACOE jurisdictional areas such as those that occur on the Project site. A Biological Assessment is required for any major construction activity if it may affect listed species. In such a case, take can be authorized via a letter of Biological Opinion, issued by the USFWS for non-marine related listed species issues. The only federally and/or state listed species located on site is the least Bell's vireo, and impacts to this species would require a Section 7 consultation if the Draft North County Multiple Species Conservation Program Subarea Plan has not been adopted by project completion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is a federal statute that prohibits the ability to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention… for the protection of migratory birds… or any part, nest, or egg of any such bird." This statute allows the USFWS to enforce the prohibition of direct "taking" of active nests. Implementation of this law typically includes restrictions on development activities when sensitive nesting birds, including raptors, are present.

State

Endangered Species Act

The California ESA is similar to the federal ESA in that it contains a process for listing of species and regulating potential impacts to listed species. Section 2081 of the California ESA authorizes CDFW to enter into a memorandum of agreement for take of listed species for scientific, educational, or management purposes.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) provides a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The California ESA followed NPPA and covers both plants and animals that are determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated as threatened under the California ESA.

Natural Community Conservation Planning Program

The objective of the NCCP Act, passed by the state of California in 1991, is to conserve natural communities and accommodate compatible land uses. The NCCP is broader in its orientation and objectives than the California and federal ESAs. These laws are designed to identify and protect individual species that have already declined significantly in number. The objective of the NCCP is to conserve natural communities (thereby also preserving the species that live in them) and accommodate compatible land uses. This pilot program is a cooperative effort

between the state and federal governments and numerous private partners. The focus of the California pilot program is the Diegan coastal sage scrub community of southern California. Diegan coastal sage scrub supports the federally listed threatened coastal California gnatcatcher and approximately 100 other potentially threatened or endangered species. The habitat is fragmented and distributed over more than 6,000 square miles, encompassing portions of San Diego, Orange, Riverside, Los Angeles, and San Bernardino counties.

For planning purposes, some these regions are organized into "subareas" that correspond to geographic boundaries of participating jurisdictions and/or landowners. In each subregion and subarea, a local lead agency coordinated the collaborative planning process. Working with landowners, environmental organizations, and other interested parties, the local agency oversees the numerous activities that compose the development of a conservation plan. The CDFW and USFWS provide the necessary support, direction, and guidance to NCCP participants in these functions. The County is participating in the NCCP and has an MSCP in place for southern and western portions of the County (County 1997).

RWQCB Certification

If an entity proposes to conduct any activity including, but not limited to, the construction or operation of facilities that may result in any discharge to Waters of the U.S., a 401 Certification must be obtained. The Project applicant would be required to apply for and receive approval of a 401 Certification from the RWQCB.

County

Draft North County Multiple Species Conservation Program Subarea Plan

The MSCP is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve. The total MSCP study area encompasses 582,243 acres, of which 43 percent (252,132 acres) is in the unincorporated areas of San Diego County. The County adopted an MSCP Subarea Plan on October 22, 1997 for the southwestern portion of the County, to meet the requirements of the NCCP Act of 1991 and the federal and state ESAs (County 1997). This Subarea Plan became effective March 17, 1998 with issuance of the Take Permit by the USFWS.

The Project site, while in an unincorporated area of the County, does not fall within the limits of the adopted MSCP Subarea Plan. The Project site falls, however, within the Draft North County Subarea of the MSCP, for which the County is currently processing a Subarea Plan.[2] Under the Draft North County Subarea of the MSCP, the Project is proposed within a hardline development area, as well as Pre-Approved Mitigation Area (PAMA). A hardline development area is an area negotiated within a project's boundaries with the resource agencies to allow development in conformance with the North County MSCP. Pursuant to the potential for the draft document to

[2] A preliminary draft of the North County Plan was released for public review on February 19, 2009. Based on comments received, a revised Plan, as well as a draft EIR/Environmental Impact Statement (EIS) is planned.

be approved prior to Project approval, the proposed hardline was confirmed during County and Applicant coordination with the resource agencies in September 2010.

At the present time, however, because the North County Segment of the MSCP does not apply due to its current draft status, conformance with the MSCP and associated Biological Mitigation Ordinance (BMO) are not required for the Proposed Project. Instead, the Project would be subject to the requirements of the NCCP and Section 4(d) of the federal ESA for impacts to Diegan coastal sage scrub. Pursuant to Section 4(d) of the federal ESA, as discussed above, impacts to Diegan coastal sage scrub are limited to five percent of the total acreage occurring within the County as of 1994, and require a Habitat Loss Permit (HLP), pursuant to Habitat Loss Ordinance 8365.

Resource Protection Ordinance

The RPO, effective October 10, 1991, as amended March 21, 2007, provides development controls for unique topography, ecosystems, and natural characteristics within the County deemed to be fragile, irreplaceable, and vital to the general welfare of the County's residents. The resources protected by the County under the RPO include wetlands and wetland buffers (addressed above under jurisdictional waters), steep slopes, sensitive habitat lands, floodways, floodplain fringe, and significant prehistoric and historic sites. The RPO requires that, prior to approval of tentative maps or major use permits, a Resource Protection Study must be completed and findings made relative to compliance with the provisions of the RPO. As noted above, on July 23, 2004, the San Diego County Planning Commission determined that the Campus Park West site (and adjacent Campus Park property) was exempt from the RPO requirements (PC7-23/RPO-Exemption) because a Tentative Map for the site was recorded prior to August 10, 1988, pursuant to Section 86.605(b).

2.6.2 Analysis of Project Effects and Determination as to Significance

All numbers and discussion are based on **Scenario 2** which has approximately 1.35 acres more impacts than **Scenario 1**. The majority of the issues discussed below are equally applicable to both **Scenarios 1** and **2**. This is because the potentially sensitive species may move from one location to another in the immediate vicinity; birds fly from one location to another, etc. The small size (approximately two acres overall) and location (their immediate proximity to PAs 2 and 5) of the **Scenario 2** parcels also result in there being no substantial difference from **Scenario 1**. Similarly, off-site utility pipelines, focused roadway improvements and potential pump station locations are identical for both scenarios. Overall, therefore, the discussions below apply to either scenario. Where impacts to vegetation type are called out, differences between the scenarios are clarified.

2.6.2.1 *Special Status Species*

Guidelines for the Determination of Significance

A significant impact to special status species would occur if the Proposed Project would:

1. Impact one or more individuals of a species listed as federally or state endangered or threatened.
2. Impact the survival of a local population of any County Group A or B plant species, a County Group I animal species, or a species listed as a state Species of Special Concern.
3. Impact the regional long-term survival of a County Group C or D plant species or a County Group II animal species.
4. Impact arroyo toad aestivation or breeding habitat.
5. Impact golden eagle habitat.
6. Result in a loss of functional foraging habitat for raptors.
7. Increase noise and/or nighttime lighting to a level above ambient proven to adversely affect sensitive species.
8. Impact the viability of a core wildlife area, defined as a large block of habitat (typically 500 acres or more not limited to project boundaries, though smaller areas with particularly valuable resources may also be considered a core wildlife area) that supports a viable population of a sensitive wildlife species or supports multiple wildlife species.
9. Increase human access or predation or competition from domestic animals, pests, or exotic species to levels that would adversely affect sensitive species.
10. Impact nesting success of sensitive animals (as listed in the County Guidelines for Determining Significance – Biological Resources) through grading, clearing, fire fuel modification, and/or noise generating activities such as construction.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (June 30, 2009).

Analysis

On-site Resources

Federally and State Endangered and Threatened Species

The only federally and/or state listed species located on site during on-site surveys is the least Bell's vireo. Three of the observed locations of the least Bell's vireo would be directly impacted by the Project. There is also potential for indirect impacts to the species. Loss of three least Bell's vireo would be **significant**. **(Impact BI-1)**

State Species of Concern, County Group A and B Plant Species, and County Group I Animal Species

The following California Species of Special Concern were observed within the study area: orange-throated whiptail, white-faced ibis, yellow warbler, and yellow-breasted chat. The turkey vulture, a County Group I animal species, also was observed on site (although this species does not nest on site). No County Group A or B plant species were observed during surveys of the Project site.

The observed on-site location of an orange-throated whiptail would be impacted by the Project. Orange-throated whiptails are a species of special concern, but are not listed on federal or state threatened or endangered species lists. As such, the threshold is impacts resulting in threats to the survival of a local population. As noted above, this species occupies a number of different habitats, including scrub, riparian and grassland habitats, all of which remain in the immediate vicinity following Project implementation. As such, the loss of a single identified individual is considered adverse, but would not be anticipated to impact the survival of the local population. Therefore, impacts to the orange-throated whiptail would be **less than significant**.

The Proposed Project would **not impact** the observed locations of the on-site white-faced ibises, yellow warbler, and yellow-breasted chats.

County Group C and D Plant Species and County Group II Animal Species

The Project would directly impact the location of all 83 observed individuals of Palmer's sagewort on site. This species is a CNPS List/CPRP 4 and a County Group D plant species and these 83 plants would not represent a significant population in the region as it is known to grow abundantly throughout most of the inland streams and rivers. Palmer's sagewort is still relatively abundant along the San Luis Rey River and its tributaries. Since it grows abundantly adjacent to creeks, it should be an adequately protected species under the local, state and federal laws protecting wetland habitats. Therefore, protection of the wetland habitats under federal, state and local laws will further protect this species. In addition, the loss of 83 Palmer's sagewort individuals does not result in an impact to the regional long-term survival of this plant. Therefore, although impacts to Palmer's sagewort by the Project would be adverse, such impacts would be **less than significant**.

No other County Group C or D Plant and County Group II Animal would be impacted by construction of the Proposed Project.

Arroyo Toad

Arroyo toads require slow-moving ponded streams and rivers with sandy gravelly banks. The site contains no habitat suitable for the arroyo toad. The habitat on site is densely vegetated and when the creek flows, it does not pond. Arroyo toads are known to occur in the San Luis Rey River, west of I-15 and upstream of the Project site. The portion of the Project site between the San Luis Rey River and SR-76 has been repeatedly disturbed for fuel maintenance and orchard operation. Although toads are thought to disperse up to 0.6 mile away from breeding habitat, the

upland areas on the Project site are continuously disrupted such that aestivation of toads in these areas is unlikely. Impacts to arroyo toad would therefore be **less than significant**.

Golden Eagle

No golden eagles are known to occur on site or within 4,000 feet of the site. Accordingly, **no impacts** to golden eagles would occur as a result of Project development.

Raptor Foraging Habitat

A turkey vulture and other non-listed raptors were observed on or over the Project site. These species would lose up to 43.75 acres of foraging habitat (non-native grassland and pasture). The loss of non-native grassland and pasture would result in a **significant** impact to raptors. **(Impact BI-2)**

Indirect Impacts/Edge Effects

The Project has the potential to indirectly impact adjacent habitat through edge effects and incursion of trespassing people, runoff from development that may increase volume and velocity of flow to downstream habitat, increased noise and light, predation by pets, and invasive plant and pest species. The Project would incorporate design features including shielding and directing lighting to minimize light impacts on adjacent riparian habitat, and use of vegetative screening to block lighting from vehicular traffic headlamps; stabilization of dirt storage piles by chemical binders, tarps, fencing or other erosion control; salvage and stockpile of native topsoil (top three to five inches) within a disturbed on-site location; no buildings will be allowed within the limited building zones, Project landscaping inclusion of native vegetation and drought tolerant plant materials; compliance with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions; proposed prohibition of brushing, clearing, and grading activities during the avian breeding season (February 15 through August 31); installation of temporary protective fencing around the limits of grading/construction; and construction of permanent walls and/or fences between residences, other development or roadways to reduce indirect impacts to wildlife from noise, lighting and glare (with additional discussion of proposed wall/fence designs and locations provided in the Biological Technical Report [EIR Appendix G]). Most indirect impacts/edge effects are addressed through the above Project design considerations. The potential for pest predation, and need to confirm breeding season construction restrictions, as well as presence of a construction-period biological monitor, and implementation of the Project Resource Management Plan, on-site enhancement plan and off-site revegetation plan, result in indirect impacts/edge effects during both construction and over the long term being identified as potentially **significant. (Impact BI-3a)**

Core Wildlife Area

The Project would not impact the viability of a core wildlife area. Historically, the Project site has been used for agriculture. The northern portion of the site (north of SR-76) currently contains a model airplane airfield and a dirt model car track surrounded by a maintained fuel

management zone and undeveloped habitat. The southern portion (south of SR-76) contains citrus and undeveloped habitat and borders the San Luis Rey River, located to the south. This southern area has been used for off-road activity in recent years. Surrounding land uses include undeveloped land to the north and east, undeveloped and agricultural land to the south, and undeveloped land and I-15 to the west. Therefore, this area does not make up a block of 500 acres of undisturbed land and Project development would result in result in **less than significant** impacts. The closest local wildlife corridor is directly off site to the east within Horse Ranch Creek, which would be avoided by project design and buffered with signs and fencing.

Nesting Success

Similar to indirect impacts/edge effects overall, most adverse effects would be addressed through the above Project design considerations. The potential for pest predation, and need to confirm breeding season construction restrictions, as well as presence of a construction-period biological monitor, and implementation of the Project Resource Management Plan, on-site enhancement plan and off-site revegetation plan, result in indirect impacts/edge effects during both construction and over the long term being identified as potentially **significant**. **(Impact BI-3b)**

Off-site Resources

No special status species were observed within the portions of Campus Park and Meadowood where off-site potable water and sewage conveyance pipelines would be located in Horse Ranch Creek Road, or to the potential pump station locations at the northeast corner of SR-76/Pankey Road or in disturbed areas adjacent to I-15 and Old Highway 395 north of the Pala Mesa Drive bridge.

Other off-site facilities would include roadway improvements to SR-76, Pankey Road, Shearer Crossing, and the intersection of Old Highway 395/Pala Mesa Drive. Improvements to the Pankey Road Bridge will include potential construction techniques such as pile driving, which will result in increased construction noise. The Project would incorporate design features including prohibition of brushing, clearing, and grading activities which are noise generating activities during the avian breeding season (February 15 through August 31). Implementation of such design features would reduce potential impacts to **less than significant** levels. In addition no special status species were observed in the areas of proposed improvements. **No impacts** would occur.

2.6.2.2 *Riparian Habitat and Sensitive Natural Communities*

Guidelines for the Determination of Significance

A significant impact to riparian habitat or other sensitive natural communities would occur if:

11. Project-related grading, clearing, construction, or other activities would temporarily or permanently remove sensitive native or naturalized habitat (as identified in the County

Guidelines for Determining Significance – Biological Resources, excluding those without a mitigation ratio) on or off the Project site.

12. Any of the following would occur to or within jurisdictional wetlands and/or riparian habitats as defined by the ACOE, CDFW, and County: removal of vegetation; grading; obstruction, or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity, and abundance.
13. The Project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of three feet or more from historical low groundwater levels.
14. The Project would increase human access or competition from domestic animals, pests, or exotic species to levels proven to adversely affect sensitive habitats.
15. The Project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (June 30, 2009).

Analysis

On-site Resources

Vegetation Communities/Habitats

Development of the Proposed Project under **Scenario 2** would impact 96.53 acres of habitat on site, including 7.56 acres of southern riparian forest, 3.31 acres of southern riparian scrub, 0.2 acre of coast live oak woodland, 2.03 acres of Diegan coastal sage scrub, 38.70 acres of non-native grassland, 3.25 acres of agriculture/orchard, 0.56 acre of eucalyptus woodland, 0.40 acre of ornamental non-native, 38.31 acres of disturbed land, and 2.21 acres of developed land (Table 2.6-1 and Figure 2.6-1). **Scenario 1** would reduce impacts to non-native grassland by 1.27 acres, southern riparian forest by 0.01 acre, disturbed habitat by 0.04 acre, and developed habitat by 0.03 acre in PA 5 and in the southeast corner of PA 2 where an entry monument could be installed in the northwest corner of the SR-76/Pankey Road intersection. Impacts to sensitive habitats, including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub, and non-native grassland, would be **significant**. **(Impacts BI-4a through e, respectively)**

Impacts to the non-sensitive habitats (i.e., agriculture/orchard, eucalyptus woodland, ornamental non-native, disturbed, and developed) would be **less than significant**.

Jurisdictional Wetlands/Waters

Impacts to jurisdictional wetlands would occur through filling, grading, and potential erosion within the Project site. The Proposed Project would impact 3.26 acres of ACOE wetland and 10.97 acres of CDFW jurisdictional area, on site. Impacts to ACOE and CDFW jurisdictional areas would be **significant**. **(Impact BI-5)**

Although RPO (County) wetlands also would be impacted, the Project is exempt from RPO, as determined by the County; therefore, impacts to RPO wetland would be **less than significant**.

Groundwater Table

The Project is not anticipated to draw down the groundwater table to the detriment of groundwater-dependent habitat, as there are no plans for wells or other activities known to cause draw down effects. Impacts would be **less than significant**.

Indirect Impacts

The Project has the potential to indirectly impact more habitat acreage through edge effects and incursion by human trespass. Proposed design features such as fencing, signage, and provision of a buffer between development and preserved habitat, however, would decrease this impact to **less than significant** levels.

Runoff from development may increase volume and velocity of flow through the adjacent riparian area, which could lead to increased erosion and degradation of the habitat. The Project would, however, include the incorporation of riprap and energy dissipater structures, which are expected to prevent potential indirect impacts related to increased runoff (see also the discussion of Hydrology in EIR Section 3.1.4). Impacts would therefore be **less than significant**.

The Project has the potential to increase human access and/or competition from pests or exotic plant species to levels proven to adversely affect sensitive habitats. The Project would incorporate design features (refer to Table 1-3), including a 25- to 100-foot buffer along the edge of riparian habitat and use of drought-tolerant plantings on adjacent manufactured slopes. Such design features would reduce potential impacts to **less than significant** levels.

Wetland Buffer

The Project does not include a wetland buffer adequate to protect the functions and values of existing wetlands. While wetland buffers varying in width from 25 feet to over 100 feet would be provided in most areas (depending on quality of habitat and adjacent uses), buffers are absent in some locations and manufactured slopes would locally encroach into low-quality non-native grassland and disturbed habitat areas within the 100-foot buffers in several areas. Specifically, the width of proposed buffers adjacent to areas adjacent to habitat occupied by least Bell's vireo would be less than 100 feet in some locations and the width adjacent to areas of unoccupied habitat would be less than 50 feet in some areas. Accordingly, impacts associated with wetland buffers would be **significant**. **(Impact BI-6)**

As stated above, the increased presence of landscaping and development may increase the population of Argentine ants into the proposed open space, including wetland buffer. Given that the proposed manufactured slopes adjacent to the open space would be planted with drought-tolerant species and the Project would implement an RMP as part of Project design, this impact is expected to be **less than significant**.

Off-site Resources

The Proposed Project would include off-site impacts to 1.1 acres of southern riparian forest, 0.24 acre of Diegan coastal sage scrub, 4.47 acres of non-native grassland, 0.58 acre of pasture, 0.77 acre of agriculture/orchard, 0.32 acre of ornamental non-native, 2.45 acres of disturbed land, and 8.92 acres of developed land. Impacts to sensitive habitats, including southern riparian forest, Diegan coastal sage scrub, non-native grassland, and pasture, would be **significant**. **(Impacts BI-4a, d, e, and f, respectively)**

In addition to roadway improvements to SR-76, Pankey Road, Shearer Crossing, and the intersection of Old Highway 395/Pala Mesa Drive which are discussed above, proposed off-site potable water and sewage conveyance pipelines would cross the Campus Park and Meadowood sites. These improvements would be located within roads. Horse Ranch Creek Road has already been graded to the width to support a four-lane facility, and SR-76 is already built out in this area. **No impacts** would occur.

A total of 1.26 acres of ACOE and CDFW jurisdictional wetland would be impacted off site. Impacts to ACOE and CDFW jurisdictional areas would be **significant**. **(Impact BI-5)**

2.6.2.3 *Wildlife Movement and Nursery Sites*

Guidelines for the Determination of Significance

A significant impact to wildlife movement or nursery sites would occur if the Proposed Project would:

16. Prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
17. Substantially interfere with connectivity between blocks of habitat, or potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
18. Create artificial wildlife corridors that do not follow natural movement patterns.
19. Increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site specific analysis of wildlife movement.
20. Not maintain an adequate width for an existing wildlife corridor or linkage and/or further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
21. Not maintain adequate visual continuity (i.e., long lines-of-sight) within wildlife corridors or linkage.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (June 30, 2009).

Analysis

On-site Resources

The Project would not prevent wildlife access to foraging habitat, breeding habitat, nursery sites, water sources, or other areas necessary for their reproduction. Although a significant amount of non-native grassland and pasture would be developed (see Impacts BI-3e and f, above), these on-site habitats are not identified as necessary for reproduction or nursery sites of a sensitive species. The Project would provide areas of open space on site in order to protect the most sensitive and high quality biological resources on site. Any on site open space areas would be preserved with an easement and would be subject to an RMP. The open space areas provide contiguous blocks of foraging and breeding habitat, along with access to local water sources (because it would not substantially change blocks of valuable habitat), and will buffer potential nursery sites off site within Horse Ranch Creek.

The Project would not substantially interfere with connectivity between blocks of habitat, and would not substantially interfere with a local or regional wildlife corridor or linkage (due to the absence of the latter). The riparian habitat that would be placed within the on-site open space easement is the most likely area to support wildlife activity.

As previously stated, the closest wildlife corridor is off site along the eastern boundary (refer to Figure 2.6-3). The Project would not create artificial wildlife corridors that do not follow natural movement patterns. It is anticipated that wildlife utilizing the riparian areas along the eastern boundary of the site would continue to do so as this area would be placed within an open space easement. The Project maintains adequate visual continuity (i.e., long lines-of-sight) within the partially on-site and off-site corridors.

The Project has the potential to indirectly impact habitat by the increase of noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement. The Project proposes 25- to 100-foot buffers to the on-site open space easement. In addition, the Project design would incorporate design features including shielded and directed lighting to minimize light impacts on adjacent riparian habitat; prohibition of brushing, clearing, and grading activities during the avian breeding season (February 15 through August 31); installation of temporary protective fencing around the limits of grading/construction; and construction of permanent noise and other walls and fences (as well as screening vegetation) between residences, other development or roadways to reduce indirect impacts to wildlife from noise, lighting and glare. Implementation of such design features would reduce potential impacts to **less than significant** levels.

The Project maintains an adequate width for an existing wildlife corridor or linkage and would not further constrain an already narrow corridor through activities such as (but not limited to)

reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path. The width of the open space easement is adequate and preserves the highest quality of habitat on site in a contiguous manner.

In summary, Project impacts to wildlife corridors and nursery sites would be **less than significant**.

Off-site Resources

Proposed off-site potable water and sewage conveyance pipelines would be completely underground following installation. This would not affect wildlife movement through corridors or wildlife nursery sites over the long-term. Pump stations would be small in size and located within otherwise disturbed areas. Other off-site facilities would include improvements to existing roadways. These improvements would not affect wildlife movement through corridors or wildlife nursery sites. Impacts would be **less than significant**.

2.6.2.4 *Local Policies, Ordinances, and Adopted Plans*

Guidelines for the Determination of Significance

A significant impact would occur if the Proposed Project would:

22. Impact coastal sage scrub vegetation within lands outside of the MSCP in excess of the County's five-percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
23. Preclude or prevent the preparation of the subregional NCCP. (If, for example, the Project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.)
24. Impact any amount of wetlands or sensitive habitat lands as outlined in the RPO.
25. Not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
26. Not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan, Habitat Management Plan, Special Area Management Plan, Watershed Plan, or similar regional planning effort.
27. Not minimize impacts to Biological Resource Core Areas (BRCAs) within lands in the MSCP, as defined in the BMO.
28. Preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
29. Not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
30. Not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
31. Reduce the likelihood of survival and recovery of listed species in the wild.
32. Result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (MBTA).

33. Result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (June 30, 2009).

Analysis

On- and Off-site Resources

HLP Ordinance and NCCP Goals and Requirements

The Project site falls within the North County Subarea of the MSCP, for which the County is currently processing a Subarea Plan. Since this regional planning document is not yet approved, NCCP compliance would be required for upland impacts. Therefore, pursuant to the 4(d) rule of the federal ESA, impacts to coastal sage scrub are limited to five percent of the total acreage occurring within the County, and require an HLP pursuant to Habitat Loss Ordinance 8365. The Proposed Project would remove a total of 2.27 acres of Diegan coastal sage scrub (2.03 acres on site and 0.24 acre off site), which is considered a significant impact. While the Proposed Project would remove coastal sage scrub habitat, implementation of mitigation for this impact would ensure that the Proposed Project would ultimately comply with the NCCP guidelines.

The Project would not preclude or prevent the preparation of the subregional NCCP as the Project does not propose development within areas that have been identified by the County or resource agencies as critical to future habitat preserves. As part of the MSCP process, negotiations concerning the "hardline" preserve and development areas have resulted in concentrating development in the area of the site that was previously under agriculture and slated for future development. Significant biological resources adjacent to Horse Ranch Creek have been identified for preservation through an open space easement.

The Project would not preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines. As part of the hardline process, connectivity has been closely examined for this Project. As a result, the upland portions of the project, which have historically been subject to agriculture and disturbance, would be utilized for development. The higher value riparian habitat along the creek along the eastern edge of the site would be protected in open space.

Accordingly, Project impacts related to the NCCP would be **less than significant**.

County Resource Protection Ordinance Wetlands

Although RPO wetlands are proposed to be impacted, an exemption from the RPO was approved for this Project in July 2004 by the County. Therefore, **no impacts** related to RPO wetlands would occur.

Narrow Endemic Species

As noted above, the Project falls under the North County Subarea of the MSCP, although this regional planning document (and any associated narrow endemic list) has not yet been approved. The Project is not subject to the approved South County MSCP and its narrow endemic species list. Based on the described conditions, **no impacts** to narrow endemic species would occur from Project implementation.

Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The Project would not result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (per the MBTA). Although raptors were noted on site, including a nest in the southern riparian forest near the eastern Project boundary, **no impacts** to migratory birds or to their nests and/or eggs would result from the Project (because the applicant is legally required to comply with the MBTA) and the Project would be consistent with the MBTA.

The Project would not result in the take of eagles, eagle eggs, or any part of an eagle (per the Bald and Golden Eagle Protection Act). No eagles were observed during the biological surveys of the Project site. Accordingly, **no impacts** to eagles would result from the Project and the Project would be consistent with the Bald and Golden Eagle Protection Act.

As noted above, proposed off-site potable water and sewage conveyance pipelines would be located within roadbeds, and focused roadway improvements would similarly be located in disturbed transportation corridors. The potential pump stations have been sited in areas either already cleared through a certified Final EIR or previously disturbed in association with existing I-15 and Old Highway 395 development. Impacts to local policies, ordinances, and adopted plans would be **less than significant**.

2.6.3 Cumulative Impact Analysis

Guidelines for the Determination of Significance

A significant cumulative impact would occur if the Proposed Project would:

34. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a wildlife species, cause a wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community.
35. Have impacts that are individually limited, but cumulatively considerable.

Guidelines Source

These guidelines are based on the County Guidelines for Determining Significance – Biological Resources (June 30, 2009).

Analysis

Impacts that may not be considered significant on a project-specific level can become significant when viewed in the context of other losses in the vicinity of the project site. When evaluating cumulative impacts, CEQA states that "lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used" (Section 15130[b][3]). The Project site is partially located in an eastern arm of the Northern Valley Humid Temperate Ecological Region and partially in the Northern Foothills Humid Temperate Ecological Region, as mapped by the County. The Project site is east of I-15 in the Pala Mesa Valley and watershed of the San Luis Rey River. The area is sparsely developed, consisting primarily of rural residential, active groves, and riparian habitats along the floodplain of the San Luis Rey River and its tributaries. Natural habitats of the region consist of sage scrubs, chaparrals, riparian and oak woodlands, and sandy washes. Areas that are important to the wildlife of the region include the San Luis Rey River corridor, large tracts of undeveloped coastal sage scrub to the east (Rice Canyon), and the coastal sage scrub/chaparral "stepping stone" areas west of I-15. Therefore, the Project's cumulative study area is within five miles of the site in the eco-region as discussed above.

The least Bell's vireo is known to occur throughout the San Luis Rey River, Santa Margarita River, San Diego River, Sweetwater River, and their tributaries. For this assessment, cumulative impacts to least Bell's vireo are assessed utilizing the San Luis Rey River corridor and its tributaries. Southwestern willow flycatcher is also associated with these drainages.

When analyzing cumulative impacts to wetlands, waters, and aquatic species, it is important to consider impacts within the watershed in which the project is located, as impacts outside the watershed would be less relevant. The area analyzed for the Proposed Project includes the San Luis Rey River watershed within the eco-region defined above from approximately Bonsall to Pala. Oak woodlands are included within this cumulative impact assessment area because the oak woodlands in the region are generally associated with minor tributaries to this river.

There are 95 private projects and one public works project (SR-76 widening and realignment as well as improvements to the interchange with I-15) in the vicinity of the Project site. Figure 2.6-4, Cumulative Projects for Biological Resources, shows the general locations of each project listed. Of these 95 projects, 87 are known to support biological resources similar to those found on the Project site. Projects not utilized in this analysis either did not support biological resources, were categorically exempt and therefore no information was available, or did not support the resources under consideration for the Proposed Project.

Cumulative Impacts to Sensitive Plants

The only sensitive plant species that would be impacted by the Project is Palmer's sagewort, a CNPS List/CRPR 4 and County Group D plant species. The 83 individual plants that would be impacted do not represent a significant population in the region as it is known to grow abundantly throughout most of the inland streams and rivers. This plant species is still relatively abundant along San Luis Rey River and its tributaries. In addition, protection of wetland habitats

under federal, state, and local laws, would further protect this species. Therefore, cumulative impacts to sensitive plant species are anticipated to be **less than significant**.

Cumulative Impacts to Sensitive Wildlife

Significant direct impacts to the observed location of three least Bell's vireos are expected to occur on site. The majority of the least Bell's vireo observed locations, and all observed locations of the southwestern willow flycatcher, however, are within the riparian habitat proposed to remain in open space. Least Bell's vireo occur in the major river systems of San Diego County and more locally to the Project site within Santa Margarita River, its tributaries, and San Luis Rey River as far east as Pala and as far west as Oceanside. These species are also is known to occur in Windmill and Pilgrim creeks. Per SanBIOS, the occurrences of the least Bell's vireo are attributed to the San Diego Bird Atlas. Observations of this species within the cumulative impact analysis study area are consistent with the identified river systems above. The population of least Bell's vireos in these riparian systems accounted for 74 percent of the total population in San Diego County in 1996 (Unitt 2004). Least Bell's vireos also are known to re-colonize within restored southern riparian forest habitat. Between 1978 and 1981, only 61 territorial males were noted throughout the County. By 1985, this number had increased to 223 and in 1996, to over 1,400 territorial males (Unitt 2004). The listing of the species and the protection of wetlands has dramatically reversed decline of this species. In addition, it should be noted that mitigation for wetland impacts requires creation of new habitat at a minimum 1:1 ratio and restoration of habitat at a 2:1 ratio in accordance with least Bell's vireo habitat. One of the success criteria for the created habitat shall be occupation by at least the same number of least Bell's vireos impacted by the Project. It should also be noted that unlike the Campus Park and Campus Park West projects, other projects within the cumulative impact analysis study area are subject to the RPO. As a result, riparian habitats within those project sites would likely be considered RPO wetlands and impacts to these areas would not be allowed. Due to the regional increase in population, the proposed habitat mitigation, and other applicable Project design features (e.g., buffers and barriers), the loss of three least Bell's vireo and their habitat would be a **less than significant** contribution to cumulative effects.

Cumulative Impacts to Riparian and Sensitive Habitats

Permanent impacts to sensitive habitats associated with the Proposed Project include impacts to southern riparian forest, southern riparian scrub, Diegan coastal sage scrub, coast live oak woodland, non-native grassland, and pasture. Of the 95 projects in the vicinity, 87 projects support one or more of these habitat types. Although adding to the cumulative loss of these habitats, these projects, like the Proposed Project, are required to set aside open space to protect impacted habitats. In the case of wetland habitats, mitigation is required at a minimum ratio of 1:1 creation and 2:1 restoration. This results in no net loss, and an increase in habitat quality. Due to the no net loss policy under federal, state, and County regulations, the Project's contribution to cumulative impacts to wetland habitats would be **less than significant**.

Most land in the Fallbrook and Pala Mesa areas is large-lot rural residential or undeveloped land that would be required to comply with the NCCP guidelines, and eventually the North County MSCP, thereby reducing or hindering the cumulative loss of sensitive upland habitats. Because

of the rural undeveloped nature of this region, cumulative impacts associated with the incremental loss of upland habitats, including Diegan coastal sage scrub, coast live oak woodland, non-native grassland, and pasture, are expected to be **less than significant**.

Cumulative Impacts to Jurisdictional Areas

As discussed under riparian habitats, above, there are numerous projects within the biological resources cumulative study area that support wetlands and waterways. The County RPO's restriction on wetland impacts and the federal and state implementation of a no net loss policy ensures that cumulative impacts to jurisdictional wetlands and/or waters would be **less than significant**.

Cumulative Impacts to Wildlife Movement and Nursery Sites

Because no significant wildlife corridors are identified on the Project site, the Proposed Project would **not contribute to cumulative impacts** to regional or local wildlife corridors or nursery sites.

Cumulative Impacts to Local Policies, Ordinances, and Adopted Plans

No significant impacts associated with compliance of local policies, ordinances, or adopted plans have been identified under the Proposed Project; therefore, the Project would **not contribute to cumulatively significant impacts** associated with local policies, ordinances, or adopted plans.

2.6.4 Significance of Impacts Prior to Mitigation

The following significant impacts related to biological resources would occur with Project implementation:

Impact BI-1 The location of three observed least Bell's vireos, a federally and state listed endangered species, would be directly impacted by the Project. There is also potential for indirect impacts to the species.

Impact BI-2 Raptors would lose up to 43.75 acres of foraging habitat (non-native grassland and pasture).

Impact BI-3a Potential indirect/edge effects could occur to habitat and associated sensitive species during Project construction and over the long term.

Impact BI-3b Potential indirect/edge effects could adversely impact nesting success during Project construction and over the long term.

Impact BI-4a Development of the Proposed Project would impact up to 8.66 acres of southern riparian forest, including 7.56 acres on site and 1.10 acres off site.

Impact BI-4b Development of the Proposed Project would impact 3.31 acres of on-site southern riparian scrub.

Impact BI-4c Development of the Proposed Project would impact 0.20 acre of on-site coast live oak woodland.

Impact BI-4d Development of the Proposed Project would impact 2.27 acres of Diegan coastal sage scrub, including 2.03 acres on site and 0.24 acre off site.

Impact BI-4e Development of the Proposed Project would impact 43.17 acres of non-native grassland, including 38.7 acres on site and 4.47 acres off site.

Impact BI-4f Development of the Proposed Project would impact 0.58 acre of off-site pasture.

Impact BI-5 The Proposed Project would impact 3.26 acres of ACOE wetland on site and 0.59 acre of ACOE wetland off site; and 10.97 acres of CDFWG jurisdictional area on site and 0.67 acre of CDFW jurisdictional area off site.

Impact BI-6 The Proposed Project would result in impacts associated with the adequacy of the wetland buffer to protect the functions and values of existing wetlands.

2.6.5 Mitigation

Mitigation is identified for each of the significant impacts identified above. Table 2.6-2, Summary of Required Mitigation for Impacts Associated with the Proposed Project, summarizes the amount of habitat impacted on and off the Project site, as well as the amount of required mitigation. Figure 2.6-5, Biological Open Space, shows the proposed open space areas for the Project site. The mitigation measures listed below would reduce Project impacts to biological resources to below a level of significance.

The mitigation outlined below for direct impacts to on- and off-site habitats includes preservation both on and off site, off-site creation of habitat, and on-site enhancement of habitat. Appendices K and L of the Biological Technical Report (EIR Appendix G) contains the conceptual mitigation plans for the Project, including the Conceptual On-site Wetland Enhancement Plan (REC 2013b) and the Conceptual Off-site Wetland Creation and Enhancement Mitigation Plan (REC 2013c), respectively. A conceptual RMP (REC 2014d; Appendix J of EIR Appendix G) also was prepared for the Proposed Project, and discusses short- and long-term management of the habitat to be preserved on site.

M-BI-1 The significant impacts to three least Bell's vireos will be mitigated through the creation, enhancement, and preservation of habitat occupied by the least Bell's vireo (refer to M-BI-4a and M-BI-4b for additional details).

M-BI-2 The loss of up to 43.75 acres of raptor foraging habitat (non-native grassland and pasture) will be mitigated through implementation of measures M-BI-4e and M-BI-4f, below.

M-BI-3a Indirect impacts to habitat and associated sensitive species shall be largely addressed through Project design features identified in this section and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of construction outside the breeding season. A Resource Avoidance Area (RAA) shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be utilized. Surveys shall be done to determine if any nests are located within 300 feet of brushing, clearing and/or grading activities. If nests are located within this distance, no brushing, clearing or grading shall be done in this area until the nests are no longer active or until temporary barriers adequate to ensure that noise does not exceed 60 dBA at the nests have been installed.

M-BI-3b Indirect impacts to nesting success shall be largely addressed through Project design features identified in this section and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of construction outside the breeding season. A RAA shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be completed as required in M-BI-3a.

M-BI-4a Significant **Scenario 2** direct impacts to 7.56 acres on site and 1.10 acres off site of southern riparian forest shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 25.98 acres. **Scenario 1** impacts to southern riparian forest would total 7.55 acres on site and 1.10 acres off site, for a total of 8.65 acres. These impacts shall be mitigated by the on-site preservation of a minimum of 10.93 acres (**Scenario 1**) and 10.95 acres (**Scenario 2**) of southern riparian forest. In addition, a minimum acreage of 8.66 creation and 6.37 enhancement (**Scenario 2**) or 8.65 creation and 6.35 enhancement (**Scenario 1**) of southern riparian forest shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4b Significant direct impacts to 3.31 acres of southern riparian scrub shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 9.93 acres. Up to 1.21 acres of southern riparian scrub shall be preserved and enhanced on site. The

remaining required acreage shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4c Significant direct impacts to 0.20 acre of coast live oak woodland shall be mitigated at a 3:1 ratio, for a total of 0.6 acre preserved off site.

M-BI-4d Significant direct impacts to 2.27 acres of Diegan coastal sage scrub on and off site shall be mitigated at a 2:1 ratio, for a total of 4.54 acres. A total of 1.29 acres shall be preserved/restored on site and 3.25 acres shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4e Under **Scenario 2**, significant direct impacts to 43.17 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 21.59 acres. A total of 7.98 acres shall be preserved/restored on site and 13.61 acres shall be preserved off site. Under **Scenario 1**, significant direct impacts to 41.9 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 20.95 acres. A total of 7.98 acres shall be preserved/restored on site and 12.97 acres shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4f Significant direct impacts to 0.58 acre of off-site pasture shall be mitigated at a 0.5:1 ratio, for a total of 0.29 acre preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-5 Significant direct impacts to southern riparian forest and southern riparian scrub shall require permits from the ACOE and CDFW as jurisdictional wetlands/waters and mitigation at a ratio of 3:1, with a minimum 1:1 creation component to ensure no net loss of wetlands. The Project shall include on-site preservation/enhancement of 12.16 acres of riparian habitat as described in the Conceptual On-site Wetland Enhancement Plan (Appendix K of EIR Appendix G) and creation/enhancement of additional wetland habitat off site as described in the Conceptual Off-site Wetland Creation and Enhancement Plan (Appendix L of EIR Appendix G; also see M-BI-4). Additional off-site mitigation will be provided for any of the proposed on-site habitat enhancement that is not accepted by the County.

M-BI-6 Significant, temporary impacts to low-quality non-native grassland and disturbed habitat areas from grading within the wetland buffers shall be mitigated through

revegetation of the slopes with native (yet low fuel) vegetation. The revegetation of these slopes will provide higher quality buffer habitat to the adjacent riparian habitat, and the buffer areas shall be included in the Resource Management Plan to ensure that the sensitive resources of the adjacent habitat are protected.

2.6.6 Conclusion

Implementation of the Proposed Project would result in significant direct impacts to three least Bell's vireos (Impact BI-1). The acreage of restored, enhanced and created riparian scrub or riparian forest combined therefore must be adequate to support at least three least Bell's vireo individuals. Least bell's vireo territories range from 0.5 to 7 acres in size depending on density of the species in the area. To support one pair plus one additional individual, riparian habitat enhancement should be at least 1 to 14 acres (or two territories). The project would enhance 10.95 acres of on-site riparian forest, as well as 1.21 acres of riparian scrub habitat. In addition, 8.66 acres of off-site southern riparian forest would be created and 6.37 acres would be enhanced, and 3.31 acres of off-site riparian scrub habitat would be created and 5.41 acres would be enhanced. The Project would, therefore, provide over 35 acres of enhancement, restoration and creation of least Bell's vireo habitat (riparian forest /riparian scrub), which would provide more than enough habitat to support three least Bell's vireo. Thus, this impact would be mitigated to below a level of significance through creation, preservation, and enhancement of habitat occupied by least Bell's vireo, as well as measures to mitigate indirect impacts through breeding season avoidance and construction-period monitoring (M-BI-1 and M-BI-3a).

The potential indirect impacts to nesting success would be mitigated through measures to mitigate indirect impacts through breeding season avoidance and construction-period monitoring (M-BI-3b). The loss of non-native grassland and pasture as foraging habitat for raptors (Impact BI-2) would be mitigated through the on-site preservation/restoration and off-site purchase of non-native grassland and/or raptor foraging habitat (M-BI-4e and M-BI-4f). The specified habitat mitigation ratios take into consideration the importance of preserving areas necessary to ensure the continued survival of least Bell's vireo and raptors. The habitat preservation ratios are effective, because through retention of sustainable habitat, sensitive species can continue to thrive. The mitigation would preserve species habitat, and thus help to ensure survival of these species within the Project site (open space) and the County. The mitigation ratios utilized for impacts to these species' habitat was developed based on NCCP Guidelines (CDFW and California Resources Agency 1997) intended to accomplish preservation of sensitive species, and were reviewed and approved by the wildlife agencies.

Implementation of the Proposed Project would result in significant impacts to sensitive habitats, including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub, non-native grassland, and pasture (Impacts BI-4a through BI-4f, respectively). These impacts would be adequately mitigated through on-site preservation (in some cases to include enhancement) and off-site mitigation or purchase of mitigation credits (M-BI-4a through M-BI-4f). Implementation of these mitigation measures would avoid or substantially reduce the significant effects because the mitigation ratios for impacts to these habitats were developed based on NCCP Guidelines (CDFW and California Resources Agency 1997), and the wildlife agencies have reviewed and approved these mitigation ratios. Additionally, these standard ratios have been applied to projects within the County since PDS

developed its first Biological Report Guidelines in the mid-1990s (approved by the Deputy Chief Administrative Officer [DCAO]). The ratios are identified as effective because these reviewing agencies have reached consensus that retention at these ratios will result in sustainable levels of these habitats.

Impacts to jurisdictional wetlands (Impact BI-5) would be mitigated by the creation of wetlands off site, as well as enhancement of on-site wetlands (M-BI-5). Implementation of this mitigation measure would mitigate impacts to these jurisdictional areas because the typical mitigation ratio for impacts to wetlands is 3:1 (with a minimum 1:1 creation ratio thereby replacing the values of the impacted wetland), which is a ratio the resource agencies reviewed and approved. Federal, state, and County policies require that projects have a no net loss of wetlands. Because the Proposed Project would mitigate its impacts to wetlands at a 3:1 ratio, including a minimum 1:1 creation ratio and 2:1 preservation/enhancement ratio, no net loss of wetland habitat would occur. The mitigation would be additionally documented through the resource agency permitting process, including a Section 404 Permit from the ACOE, a 401 Certification from the RWQCB, and a 1602 Streambed Alteration Agreement from the CDFW.

Impacts related to the adequacy of wetland habitat buffers (Impact BI-6) would be addressed through revegetation of areas where grading for manufactured slopes encroaches into the buffers with native (yet low fuel) vegetation, as well as including the buffer areas in the RMP (M-BI-6). These efforts would provide higher quality habitat in the buffer areas adjacent to existing wetlands, and provide habitat monitoring and management of buffer areas through the RMP process. The proposed on-site biological open space would be preserved in perpetuity and managed by an appropriate natural lands management organization. Approval of the RMP by the County and wildlife agencies would occur prior to finalization of the map or approval of other discretionary permits. The long-term management measures would decrease the likelihood of resident/visitor incursion into the Project open space, and minimize any associated impacts.

Table 2.6-1
VEGETATION COMMUNITIES/HABITATS AND PROPOSED IMPACTS (acres)

Vegetation Community/Habitat	Existing On Site	On-site Impacts	Off-site Direct Impacts	Total Impacts
Southern riparian forest (61300)	19.61	7.56	1.10	8.66**
Southern riparian scrub (63300)	4.52	3.31	0	3.31
Coast live oak woodland (71160)	0.21	0.20	0	0.20
Diegan coastal sage scrub (32500)	3.12	2.03	0.24	2.27
Non-native grassland (42200)	45.47	38.70	4.47	43.17*
Pasture (18310)	0	0	0.58	0.58
Agriculture/orchard (18100)	3.25	3.25	0.77	4.02
Eucalyptus woodland (11100)	0.57	0.56	0	0.56
Ornamental non-native (11000)	0.40	0.40	0.32	0.72
Disturbed land (11300)	39.48	38.31	2.45	40.76***
Developed (12000)	2.41	2.21	8.92	11.13****
TOTAL	**119.04**	**96.53**	**18.85**	**115.38**

Source: REC 2014a

* **Scenario 1** would decrease impacts to NNG by 1.27 acres for a total impact of 41.9 acres.

** **Scenario 1** would decrease impacts to SRF by 0.01 acre for a total impact of 8.65 acres.

*** **Scenario 1** would decrease impacts to Disturbed habitat by 0.04 acre for a total impact of 40.72 acres.

**** **Scenario 1** would decrease impacts to Developed habitat by 0.03 acre for a total impact of 11.1 acres.

Table 2.6-2
SUMMARY OF REQUIRED MITIGATION FOR IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT

Habitat	Existing On Site (acres)	On- and Off-site Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Preserved/Enhanced/ Restored On Site (acres)*+	Off-site Mitigation (acres)+
Southern riparian**** forest	19.61	8.66	3:1	25.98	10.95	15.03 (8.66 acres of which must be creation)**
Southern riparian scrub	4.52	3.31	3:1	9.93	1.21	8.72 (3.31 acres of which must be creation)**
Coast live oak woodland	0.21	0.20	3:1	0.60	0.0	0.60
Diegan coastal sage scrub	3.12	2.27	2:1	4.54	1.29***	3.25
Non-native grassland****	45.47	43.17	0.5:1	21.59	7.98***	13.61
Pasture	0	0.58	0.5:1	0.29	0	0.29
TOTAL	**72.93**	**58.19**	**--**	**62.93**	**21.44**	**41.49**

Source: REC 2014

* The open space limits shown on Figure 2.6-4 include revegetated manufactured slopes. These manufactured slopes were counted as direct impacts but also would be included in the open space after revegetation. In addition, the acres of these slopes were not included in the overall biological open space on site.

** Mitigation for wetland impacts requires at least 1:1 creation and 2:1 restoration/enhancement.

*** 0.44 acre of CSS and 1.21 acres of NNG preserved on site are proposed revegetation of temporary impacts from manufactured slopes in the wetland buffers.

**** **Scenario 1** would decrease impacts to NNG by 1.27 acres for a total impact of 41.9 acres and require 20.95 acres of mitigation. As a result off-site mitigation purchase would be reduced to 12.97 acres. It would also decrease impacts to SRF by 0.01 acre for a total impact of 8.65 acres and require 25.95 acres of mitigation. As a result, off- site mitigation purchase would be reduced to 8.65 acres of creation and 6.35 acres of enhancement.

+ On-site acreage available; however, it may not all be approved as restoration mitigation. Please note that on-site mitigation may decrease and off-site mitigation may increase.

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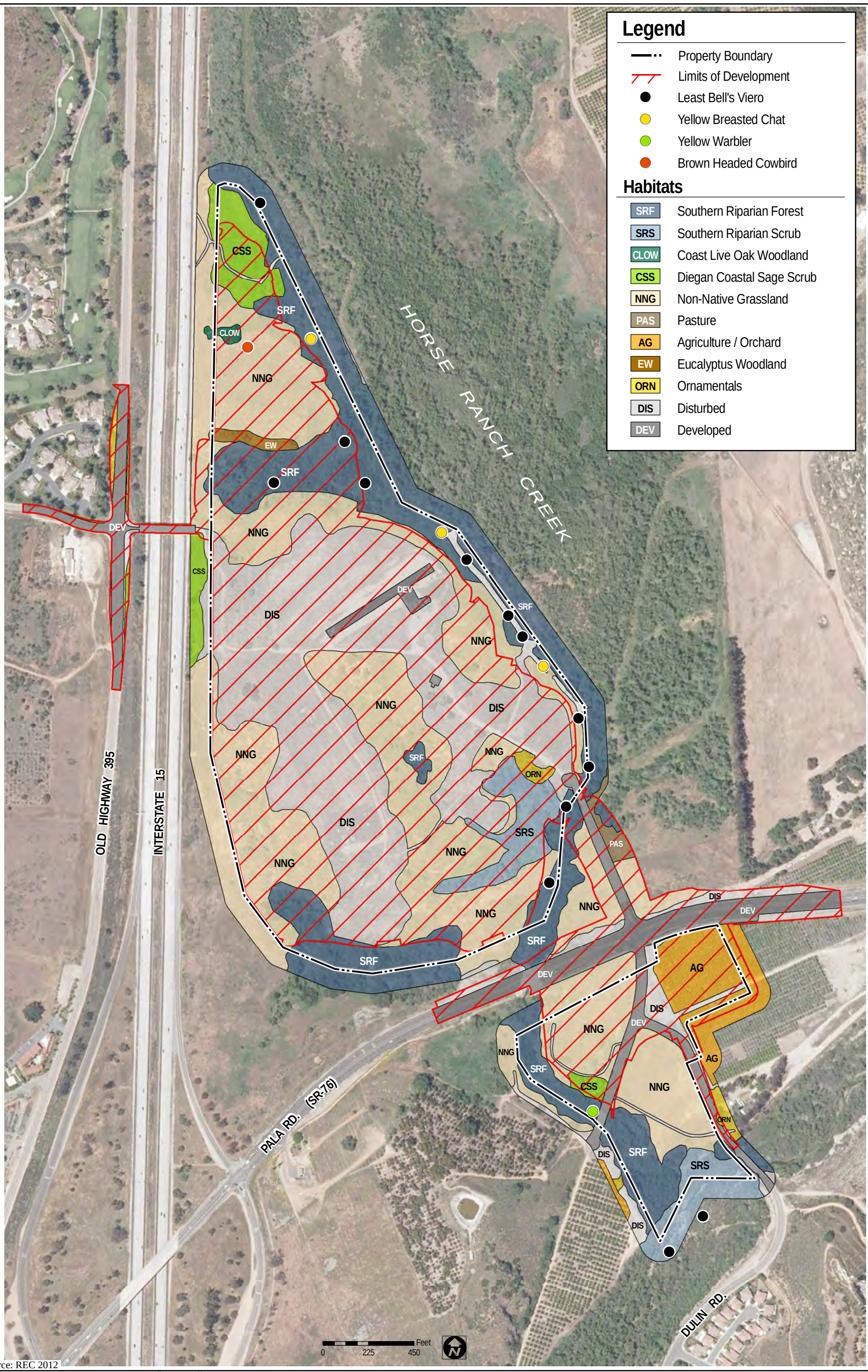

Source: REC 2012

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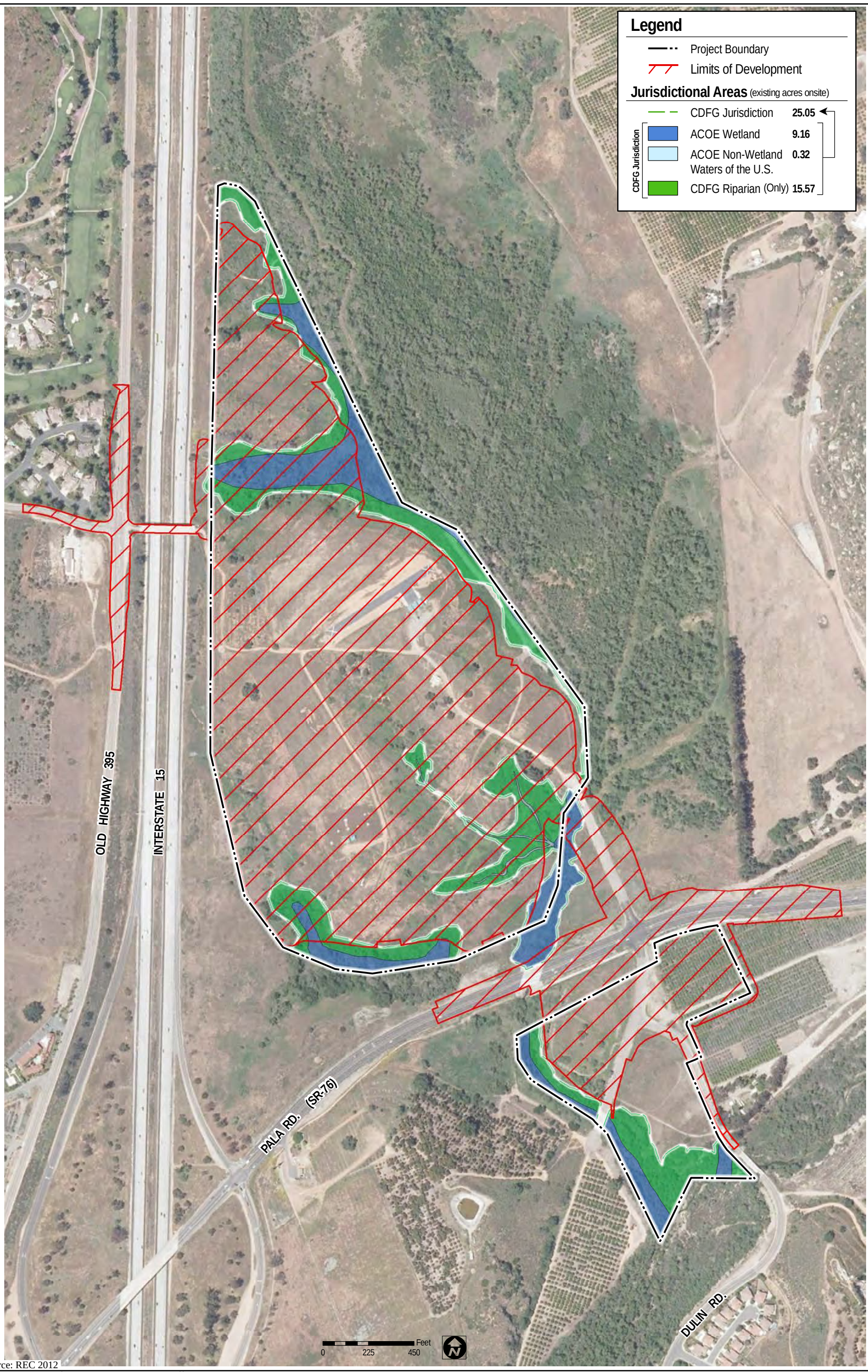
On- and Off-site Bib g cal Resources/Impacts

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.6 1



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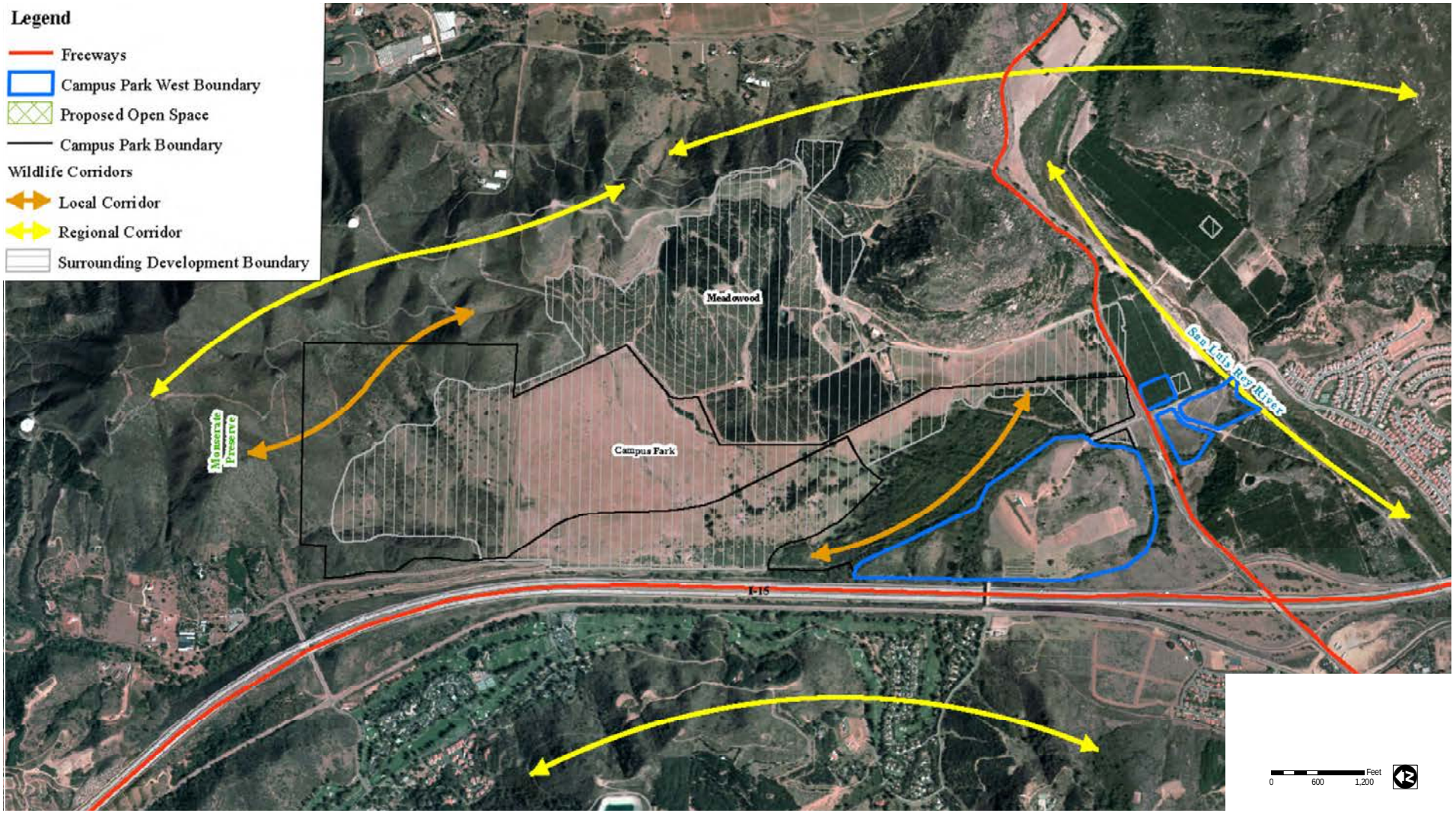
Jurisdictional Delineation/Impacts

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.6 2



Source: REC 2012

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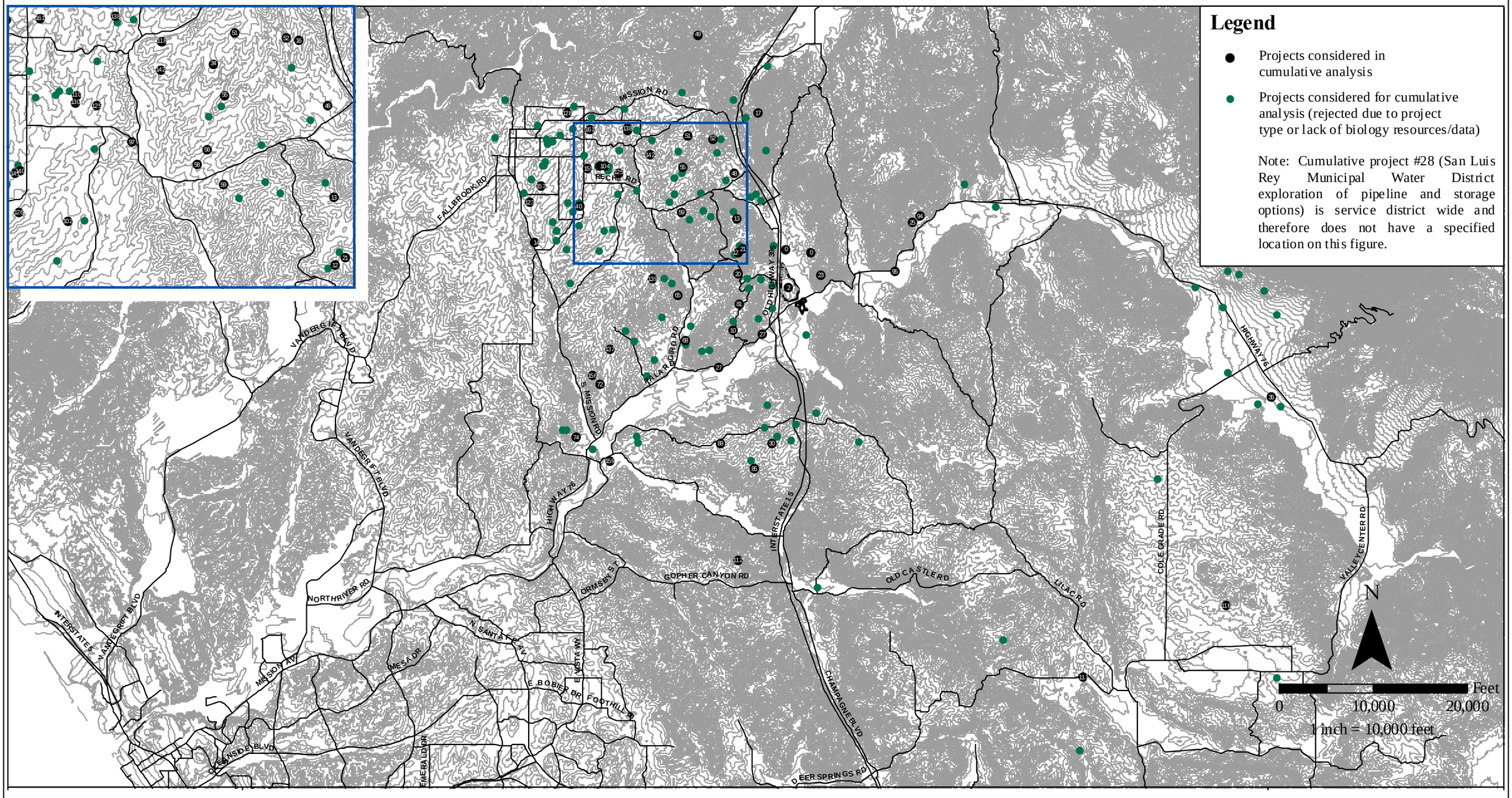
Wildlife Movement

CAMPUS PARK WEST

Figure 2.6-3

HELIX Environmental Planning



Source: REC 2010

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Cumulative Projects fo Bib g cal Resources

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.6 4

I:\ArcGIS\P\PIN-01 CampusParkWest\Map\ENV\EIR\Fig2-6 5 BiologicalOpenSpace.indd -EV

Bib g cal Open Space

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.6 5

SUBCHAPTER 2.7

PALEONTOLOGICAL RESOURCES

2.7 Paleontological Resources

Paleontological impacts were assessed in the 1981 Sycamore Springs EIR and found to be less than significant based on analysis of on-site alluvial deposits. Paleontological resources were not addressed in the 1983 Hewlett Packard EIR.

This analysis is based on mapping provided in the Geotechnical Investigation conducted for the Proposed Project by Leighton and Associates, Inc. (Leighton) in 2012. Leighton's analysis is included in Appendix I. Additional geologic information was obtained from the Updated Geotechnical Assessment, Proposed Campus Park (Shepardson Engineering Associates 2007) and Paleontological Resource Assessment, Campus Park/Passerelle Development Project (Department of Paleoservices, San Diego Natural History Museum [Paleoservices] 2005). The Shepardson and Paleoservices analyses are included as part of the Geology/Paleontology Appendix for the Final Subsequent EIR for Campus Park (County 2011), which is incorporated by reference and available for public review and inspection at the County's PDS offices.

2.7.1 Existing Conditions

2.7.1.1 *Geologic Formations*

Paleontology is the science dealing with prehistoric plant and non-human animal life. Paleontological resources (or fossils) typically encompass the remains or traces of hard and resistant materials such as bones, teeth, or shells, although plant materials and occasionally less resistant remains (e.g., tissue or feathers) can also be preserved. The formation of fossils typically involves the rapid burial of plant or animal remains and the formation of casts, molds, or impressions in the associated sediment (which subsequently becomes sedimentary rock). Because of this, the potential for fossil remains in a given geologic formation can be predicted based on known fossil occurrences from similar (or correlated) geologic formations in other locations. Accordingly, while there are no recorded fossil occurrences or collection efforts known from the Project site, paleontological resource potential can be inferred from on-site geology and off-site fossil occurrences in similar materials, as outlined below.

Based on the geotechnical investigations undertaken for the Proposed Project, surficial materials and geologic formations observed or expected to occur within the Project site include fill deposits, native topsoils/colluvium, Quaternary (Holocene) alluvium, Quaternary river terrace deposits, and Cretaceous igneous intrusive rocks. This is supported by mapping developed for the Project, as well as the adjacent Campus Park area (County 2011a).

Historic fill deposits exhibit no potential for the occurrence of significant paleontological resources due to their recent age and the destructive nature of their origin (i.e., mechanically processed through methods such as crushing and screening). Similarly, native topsoil deposits do not exhibit any potential for significant paleontological resource values due to their relatively recent age and methods of formation and deposition (i.e., physical and chemical weathering, with soil transported and deposited by methods such as water, wind and gravity). On-site colluvial deposits exhibit no potential for significant paleontological resource values due to their relatively

recent age and method of deposition, as well as the fact that they are derived from igneous rocks (as described below) or related materials.

Quaternary alluvial materials are assigned a low paleontological resource sensitivity due to their relatively recent age, high-energy formation/deposition environment, and the fact that, with rare exceptions, significant fossil occurrences are unknown from alluvial deposits in San Diego County.

Igneous intrusive rocks generally exhibit no potential for the occurrence of paleontological resources based on their molten origin. Accordingly, residual soil deposits also exhibit no paleontological resource potential due to their formation from igneous rocks and relatively recent age. Santiago Peak Volcanics can contain a mix of metavolcanic and metasedimentary elements. The metasedimentary elements can contain micro-fossils and are identified as having moderate paleontological resource sensitivity. Small deposits of this mix are present north of SR-76, often adjacent to areas of older quaternary alluvium.

Quaternary river terrace deposits and alluvial fan deposits have been identified in the Project vicinity. These deposits are located both on site and within the adjacent Campus Park project site (where off-site Project pipelines could be constructed in Horse Ranch Creek Road if construction by Campus Park is not completed prior to Campus Park West implementation). Figure 2.7-1, Paleontological Resources, illustrates the general location of Quaternary older alluvium (Qoa, Quaternary river terrace deposits) in this quadrant and underlying most of the Campus Park West site north of SR-76. River terrace deposits were formed at times of higher and older stream base levels than exist today, and are of probable late Pleistocene age. Such deposits are known to locally contain the fossilized remains of animals and plants. Fossils recovered from Pleistocene-age river terrace deposits within and adjacent to the San Luis Rey River in Oceanside included mammoth, mastodon, camel, horse and tapir. The river terrace deposits are considered to exhibit a moderate paleontological resource sensitivity.

2.7.1.2 *Regulations*

The County Guidelines for Determining Significance – Paleontological Resources (January 15, 2009) provide direction for evaluating environmental effects related to paleontological resources, pursuant to related CEQA standards. The Guidelines give an overview of paleontological resources and their occurrence in San Diego County, and provide guidance for assessing resource values, identifying the nature and extent of impacts, and establishing mitigation/reporting requirements.

Section 87.430, Paleontological Resources, of the San Diego County Code of Regulatory Ordinances states that:

> The County Official may require that a qualified paleontologist be present during all or selected grading operations, to monitor for the presence of paleontological resources. If fossils greater than twelve inches in any dimension are encountered, then all grading operations in the area where they were found shall be suspended immediately and not resumed until authorized by the County Official. The

permittee shall immediately notify the County Official of the discovery. The County Official shall investigate and determine the appropriate resource recovery operations, which the permittee shall carry out prior to the County Official's authorization to resume normal grading operations.

2.7.2 Analysis of Project Effects and Determination as to Significance

The following analysis takes into consideration both on- and off-site improvements; however, no distinction is made between **Scenarios 1** or **2** as impacts to paleontological resources would not be affected by variations in proposed land uses.

2.7.2.1 *Paleontological Analysis*

Guideline for the Determination of Significance

The Proposed Project would have a potentially significant environmental impact to paleontological resources if it would:

1. Directly or indirectly damage a unique paleontological resource or site, or include grading or excavation that would disturb the substratum or parent material below the major soil horizons in any paleontologically sensitive area of the County, as shown on the San Diego County Paleontological Resources Potential and Sensitivity Map.

Guideline Source

Guideline No. 1 is taken from the County Guidelines for Determining Significance – Paleontological Resources (January 15, 2009).

Analysis

On-site Resources

As discussed above, developable parcels located south of SR-76, and some of the Project area north of SR-76 are underlain by topsoils/fill and recent alluvial/colluvial deposits and/or Cretaceous igneous intrusive rocks at depth, all of which are rated as having a no to low paleontological sensitivity. Much of the Project site north of SR-76 is underlain by river terrace deposits, however, which has a moderate paleontological sensitivity rating. The County Paleontological Resources Monitoring Requirements map indicates monitoring by an excavation/grading contractor would be required on the Project site parallel to I-15 and south of SR-76. Table 1 in the Paleontological Guidelines, "Formations with a High or Moderate Potential to Contain Paleontological Resources in San Diego County," includes older Quaternary alluvial fan deposits among the formations with paleontological potential. The County Guidelines further note that for projects within areas of high or moderate paleontological resources potential that propose excavation equal to or greater than 2,500 cy, the services of a project paleontologist and a paleontological resources monitor are required.

Grading for the Proposed Project would consist of approximately 850,000 cy of cut and fill in the site proper. Earthwork for the Project would impact areas containing deposits with a moderate paleontological sensitivity rating; therefore, potential impacts to paleontological resources could be **potentially significant**. **(Impact P-1)**

Off-site Resources

River terrace deposits considered to have a moderate paleontological sensitivity rating underlie off-site locations of facilities that would serve the Project. If required, off-site trenching associated with installation of wastewater pipelines in Horse Ranch Creek Road, as well as focused road improvements on Old Highway 395, could disturb river terrace deposits. Because both of these areas have been previously disturbed, it is possible that new lines would be placed within engineered fill and no impacts would occur. Pending final design, however, potential impacts from these facilities to paleontological resources are conservatively identified as **potentially significant**. **(Impact P-2)**

2.7.3 Cumulative Impact Analysis

The cumulative projects in the vicinity of the Project site are listed in Table 1-4 and depicted on Figure 2.7-2, Cumulative Projects for Paleontological Resources, of this EIR.

Based on review of the 2007 Kennedy and Tan Geologic Map of the Oceanside 30' x 60' Quadrangle, California, and as indicated above, the area is dominated by volcanic/granitic formations. Also as noted above, these formations are generally not fossil bearing. The projects most likely to potentially contain paleontological resources would be located within Quaternary tertiary deposits (such as the Proposed Project) or in the Santiago Peak Volcanics. These include projects immediately adjacent to Campus Park West (Campus Park and Meadowood projects), as well as 13 projects also appearing to be located within the older quaternary alluvium associated with the terraces adjacent to the river valley/primary drainages (1, 2, 7, 26, 27, 39, 40, 41, 42, 46, 74, 93 and 95). Six projects are also potentially located within the medasedimentary pockets identified on the Kennedy and Tan map (6, 17, 13, 33, 48 and 60). All of the listed projects would be subject to similar analysis and (if applicable) mitigation requirements for paleontological resources as described in this subchapter (and pursuant to CEQA).

The importance of individual resources comes from the research value and the information they can provide to the paleontologist. The information gained from test excavations and data recovery programs for projects with paleontological resource impacts within the County would be presented in reports and filed with the County, as well as a scientific institution with permanent paleontological collections, such as the San Diego Natural History Museum. The fossil collections from any potentially significant site also would be curated at such a scientific institution and would be available to other paleontologists for further study. Based on the required regulatory compliance of both the Proposed Project and applicable cumulative projects with analysis and mitigation requirements for paleontological resources under CEQA, implementation of the Proposed Project would not significantly contribute to cumulative paleontological resource impacts. Cumulative Project effects on paleontological resources would be **less than significant**.

2.7.4 Significance of Impacts Prior to Mitigation

The following potentially significant impacts related to paleontological resources could occur under Project implementation:

Impact P-1 Project grading for on-site facilities, including excavation and grading activities, could have a potentially significant impact paleontological resources within terrace deposits.

Impact P-2 Project grading for off-site facilities could have a potentially significant impact on paleontological resources within terrace deposits.

2.7.5 Mitigation

The following mitigation measures shall be implemented to ensure that potential adverse impacts to paleontological resources from Proposed Project implementation would be reduced to less than significant. Evidence shall be provided to the Director of PDS that the following notes have been placed on the grading plan:

M-P-1 and 2

A qualified paleontologist shall be at the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual having an M.S. or Ph.D. in paleontology or a related field (e.g., sedimentary or stratigraphic geology, evolutionary biology, etc.), and who has knowledge of San Diego County paleontology and documented experience in professional paleontological procedures and techniques.

A qualified paleontologist or paleontological monitor (under the supervision of the qualified paleontologist) shall be on site on a full-time basis during the original cutting of previously undisturbed deposits of moderate paleontological resource sensitivity (i.e., Quaternary river terrace deposits) to inspect exposures for fossils. A paleontological monitor is defined as an individual with at least one year of experience in field identification and collection of fossil materials. The paleontological monitor shall work under the direct supervision of the qualified paleontologist.

The Project Applicant shall: (1) submit a copy of a letter signed by the qualified paleontologist or paleontological monitor which states that the applicant has retained their services and acknowledges agreement to perform and/or be responsible for concurrence with the Project mitigation measures; and (2) authorize the qualified paleontologist to direct, divert, or halt any grading activity, and to perform all other acts required by the provisions listed below. If the qualified paleontologist or paleontological monitor ascertains that the river terrace deposits are not fossil bearing, the qualified paleontologist shall have the authority to terminate the monitoring program.

If paleontological resources are unearthed, the qualified paleontologist or paleontological monitor shall:

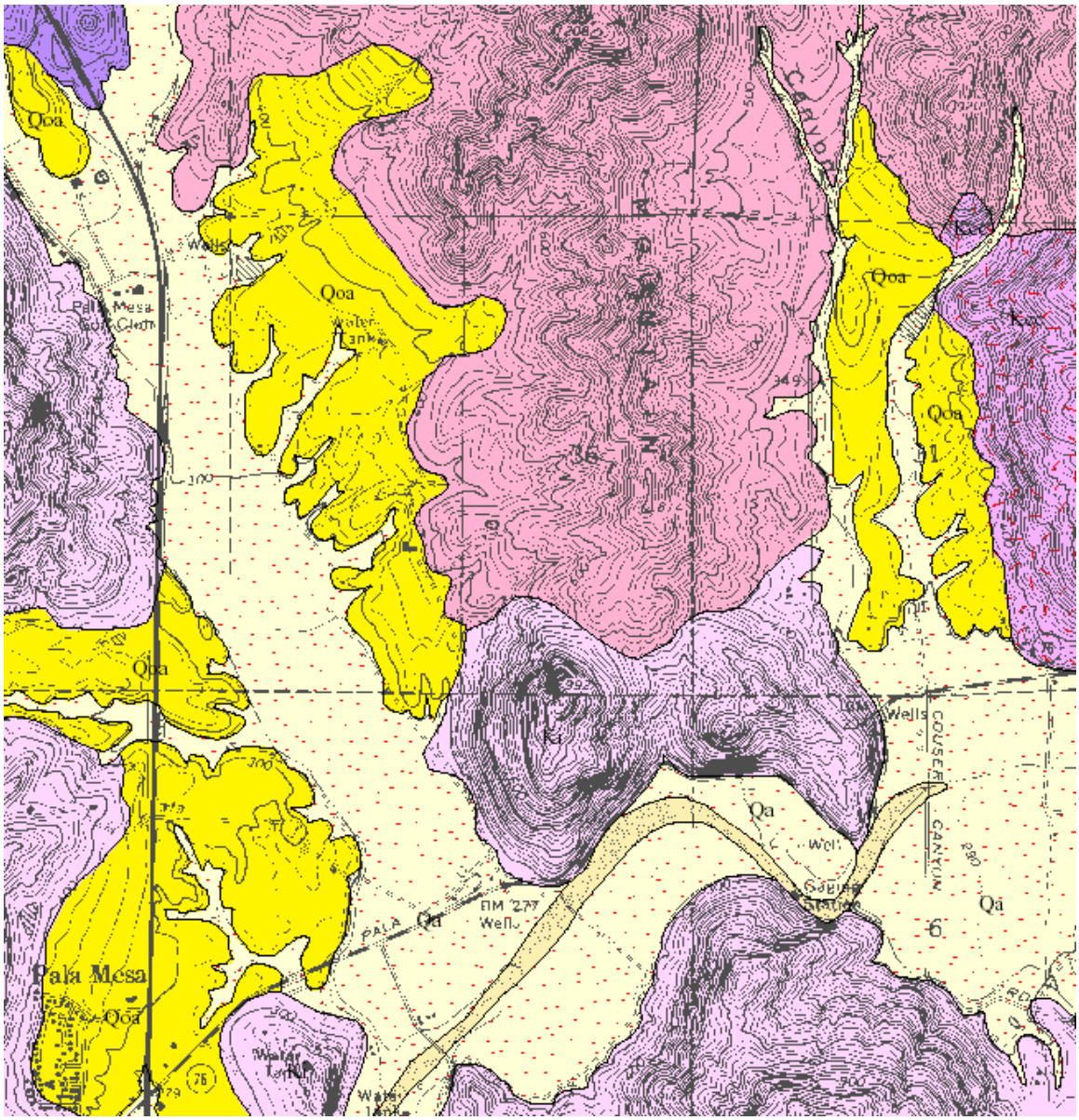
1. Direct, divert, or halt any grading or excavation activity until the sensitivity of the resource can be determined and the appropriate recovery implemented.
2. Salvage unearthed fossil remains.
3. Record stratigraphic and geologic data to provide a context for the recovered fossil remains.
4. Prepare collected fossil remains for curation.
5. Curate, catalog, and identify all fossil remains to the lowest taxon possible, inventory specimens, assign catalog numbers, and enter the appropriate specimen and locality data into a collection database.
6. Transfer the cataloged fossil remains to an accredited institution (museum or university) in California that maintains paleontological collections for archival storage and/or display.

The qualified paleontologist shall prepare a final Paleontological Resources Mitigation Report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

2.7.6 Conclusion

Grading and excavation activities associated with development of on- and off-site facilities for the Proposed Project could result in potentially significant impacts related to disturbance/destruction of sensitive fossil resources preserved within the Quaternary (Pleistocene) river terrace deposits (Impacts P-1 and P-2). Mitigation for these impacts would include monitoring during original cutting of previously undisturbed Quaternary river terrace deposits and collection of fossils, if discovered (M-P-1 and 2). The mitigation also ensures that the paleontological monitor has the authority to halt or divert grading activities in the area of any discovery. Implementation of the specified mitigation measures would reduce associated impacts to paleontological resources to less than significant because they would ensure that relevant information contained in the paleontological record, which is important in understanding prehistory, is preserved.

Qa	Quaternary Alluvium
Qoa	Quaternary old alluvium
Other mapped rocks units have no paleontological sensitivity	



Source: Tan et al.,2000

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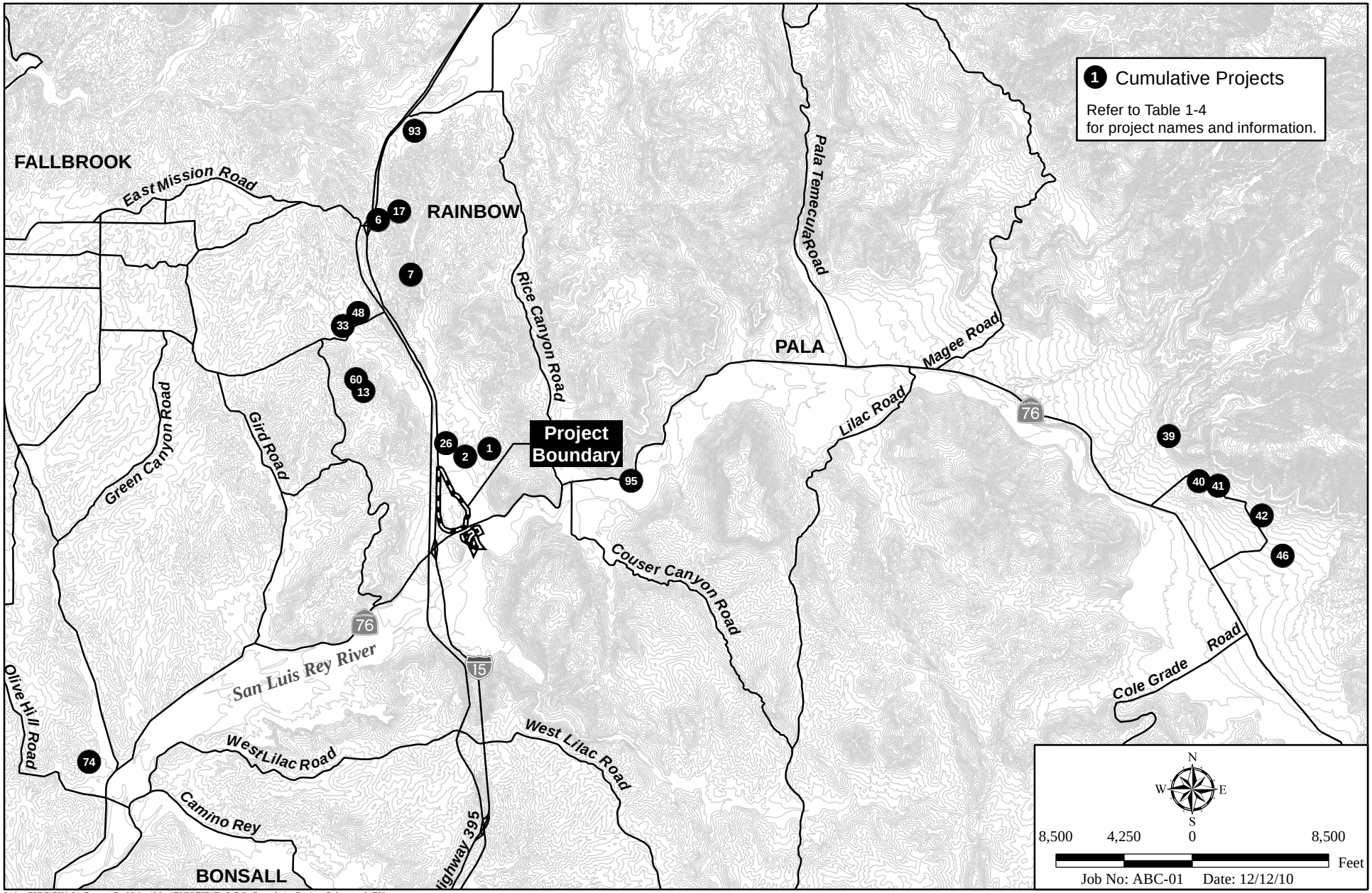
Paleontological Resources

CAMPUS PARK WEST

Figure 2.7-1

HELIX Environmental Planning



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Cumulative Projects for Paleontological Resources

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 2.7-2

SUBCHAPTER 2.8

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

2.8 Significant Irreversible Environmental Changes Which Would be Involved in the Proposed Project Should it be Implemented

CEQA Guidelines Section 15127 requires irreversible changes be evaluated in EIRs prepared for projects that would involve: (a) the adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency; (b) the adoption by a LAFCO of a resolution making determinations; and (c) the requirement for preparing an environmental impact statement pursuant to the National Environmental Policy Act. The Proposed Project would involve a GPA as well as LAFCO determinations regarding annexation to SDCWA and RMWD, which would provide water and wastewater services. The following analysis addresses Project changes that would be considered irreversible and Project commitments/use of resources that would be considered irretrievable.

The construction and implementation of the Project would result in irreversible environmental changes to the Project site. The on-site physical effects of these changes are fully addressed in Chapters 2.0 and 3.0 of this EIR. In general, conversion of currently vacant land, with sensitive habitat (as well as agriculture/orchard and eucalyptus woodland), to urbanized uses (paved roadways and graded lots with buildings and landscaping) would represent an irreversible loss of existing biological resources on approximately 96 acres of on-site habitat. On-site woodlands include southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub, and non-native grassland. These impacts are considered permanent and the losses are considered irreversible.

Biological open space would be dedicated on site. Some of these lots would preserve wetlands and wetland buffers on the northern, eastern and southern portions of the Project planning areas north of SR-76/Pala Road, and in the western and southern portions of the planning area south of SR-76/Pala Road. Two lots comprised of manufactured slopes, landscaped areas, detention basins, and drainage facilities would be dedicated as open space and maintained by a Homeowners' Association. The proposed open space lands would account for approximately 27 percent of the Project site area. Only the lots that are kept in undisturbed condition would be considered to not constitute an irreversible change to biological resources. The open space areas with manufactured slopes and drainage facilities would add to the irreversibly changed footprint of the Project.

The cut and fill proposed to create the developed footprint of the Project would result in an irreversible change to the existing topography. Also, any potential paleontological and cultural resources that may be buried could be irreversibly changed if they were excavated, though their collection and preservation for study would constitute acceptable mitigation and could prove beneficial. The changes in topography and overall conversion of the Project area from rural and vacant to developed uses also would result in irreversible aesthetic changes. Likewise, the imposition of urban activities into the existing area would irreversibly change the noise environment, and modification of drainage patterns would irreversibly change on-site hydrology.

Known on-site mineral resources in the San Luis Rey River valley were found not to be available for extraction due to their proximity to existing residences. These resources are considered to be

already lost, so the conversion of the parcels south of SR-76 to other uses would not represent an irreversible change to mineral resources caused by the Project.

More generally, the Project construction would require the commitment of energy, natural resources, and building materials. Non-renewable fuels would be used by construction equipment, haul trucks, and worker vehicles. Non-renewable energy also would be expended during the harvesting and mining of natural resources such as wood and aggregate and during the subsequent manufacturing of construction materials such as framing and concrete. This commitment of resources and energy would be commensurate with that of other projects of similar size but would be irretrievable.

Post-construction consumption of non-renewable resources would include the use of electricity and natural gas by Project residents, workers, and visitors. This energy use would be a long-term commitment and irretrievable, although any energy-saving features of the Project would reduce this commitment.

CHAPTER 3.0

ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

SUBCHAPTER 3.1

EFFECTS FOUND NOT SIGNIFICANT AS PART OF THE EIR PROCESS

CHAPTER 3.0 – ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

3.1 Effects Found Not Significant as Part of the EIR Process

3.1.1 Climate Change

Since certification of the 1981 Sycamore Springs and 1983 Hewlett Packard EIRs, global climate change (GCC) and greenhouse gas emissions (GHGs) have emerged as issues of environmental concern. HELIX prepared the Climate Change Analysis Report (2013c) to evaluate potential environmental impacts associated with the Proposed Project's emission of GHGs, and the effects of global climate change on the Proposed Project. The Climate Change Analysis Report is summarized in the following discussion, with the complete report included as Appendix H of this EIR.

3.1.1.1 *Existing Conditions*

Background

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. The earth's climate is in a state of constant flux with periodic warming and cooling cycles. Extreme periods of cooling are termed "ice ages," which may then be followed by extended periods of warmth. For most of the earth's geologic history, these periods of warming and cooling have been the result of many complicated and interacting natural factors, including: volcanic eruptions which spew gases and particles (dust) into the atmosphere; the amount of water, vegetation, and ice covering the earth's surface; subtle changes in the earth's orbit; and the amount of energy released by the sun (sun cycles). Since the beginning of the Industrial Revolution around 1750, however, the average temperature of the earth has been increasing at a rate that is faster than can be explained by natural climate cycles alone.

With the Industrial Revolution came an increase in the combustion of carbon-based fuels such as wood, coal, oil, natural gas, and biomass. Industrial processes have also created emissions of substances that are not found in nature. This in turn has led to a marked increase in the emissions of gases that have been shown to influence the world's climate. These gases, termed "greenhouse" gases (GHG), influence the amount of heat that is trapped in the earth's atmosphere. Because recently observed increased concentrations of GHGs in the atmosphere are related to increased emissions resulting from human activity, the current cycle of "global warming" is generally believed to be largely due to human activity. Of late, the issue of global warming or global climate change has arguably become the most important and widely debated environmental issue in the U.S. and the world. Because climate change is caused by the collective of human actions taking place throughout the world, it is quintessentially a global or cumulative issue.

Global climate change refers to changes in Earth's temperature, wind patterns, precipitation and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4) nitrous oxide (N_2O), hydrofluorocarbons

(HFCs, such as HFC-23), perfluorocarbons (PFCs, such as CF_4), and sulfur hexafluoride (SF_6), which are known as GHGs.

The potential of a gas to trap heat and warm the atmosphere is measured by its global warming potential (GWP). GHGs either breakdown or are absorbed over time. Thus, the potential of a gas to contribute to global warming is limited by the time it is in the atmosphere, its "atmospheric lifetime." To account for these effects, GWPs are calculated over a 100-year time horizon (U.S. EPA 2010). Because of its relative abundance in the atmosphere and its relatively long atmospheric lifetime, carbon dioxide has been designated the reference gas for comparing GWPs. Thus, the 100-year GWP of CO_2 is equal to "one" and the GWP of other GHGs are expressed as multiples of the GWP of CO_2 (see Table 3.1.1-1, Global Warming Potentials and Atmospheric Lifetimes).

Types of GHGs

Water vapor is the most abundant and variable GHG in the atmosphere. It is not considered a pollutant; it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves.

CO_2 is an odorless, colorless, GHG. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human-caused) sources of CO_2 include the burning of fuels such as coal, oil, natural gas and wood. Concentrations are currently around 379 parts per million (ppm). Some scientists say that concentrations may increase to 1,130 CO_2 equivalent (CO_2e) ppm by 2100 as a direct result of anthropogenic sources (Intergovernmental Panel on Climate Change [IPCC] 2007). Some predict that this will result in an average global temperature rise of at least 7.2°Fahrenheit (°F) (IPCC 2007).

CH_4 is a gas and is the main component of natural gas used in homes. It has a GWP of about 21, or 21 times the GWP of CO_2. A natural source of CH_4 is from the decay of organic matter. Geological deposits known as natural gas fields contain CH_4, which is extracted for fuel. Other sources are from decay of organic material in landfills, fermentation of manure, and cattle digestion.

N_2O, also known as laughing gas, is a colorless gas and has a GWP of about 310. N_2O is produced by microbial processes in soil and water, including reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (e.g., nylon and nitric acid production) also emit N_2O. It is used in rocket engines, as an aerosol spray propellant, and in race cars. During combustion, NO_x (NO_x is a generic term for mono-nitrogen oxides, NO and NO_2) is produced as a criteria pollutant and is not the same as N_2O. Very small quantities of N_2O may be formed during fuel combustion by nitrogen and oxygen.

Fluorocarbons are gases formed synthetically by replacing all hydrogen atoms in CH_4, or ethane, with chlorine and/or fluorine atoms. Chlorofluorocarbons are nontoxic, nonflammable, insoluble, and chemically nonreactive in the troposphere (the level of air at Earth's surface).

Chlorofluorocarbons were first synthesized in 1928 for use as refrigerants, aerosol propellants and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped by requirements of the Montreal Protocol. Fluorocarbons have a GWP of between 140 and 11,700, with the lower end being for HFC-152a and the higher end being for HFC-23.

SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It has the highest GWP of any gas – 23,900. SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Ozone is a GHG, although unlike the other GHGs, it is relatively short-lived in the troposphere and, therefore, is not global in nature. According to CARB, it is difficult to make an accurate determination of the contribution of ozone precursors (NO_X and Volatile Organic Compounds [VOCs]) to global warming (CARB 2006).

A summary of the most common naturally occurring and artificial GHGs is provided in Table 3.1.1-1. Of the gases listed in Table 3.1.1-1, CO_2, CH_4 and N_2O, are produced by both natural and anthropogenic (human) sources. The remaining gases, HFCs, CFs, and SF_6, are the result of solely human processes.

Regulatory Framework

All levels of government have some responsibility for the protection of air quality, and each level (international, federal, state, and regional/local) has specific responsibilities relating to air quality regulation. GHG emissions and the regulation of GHGs is a relatively new component of air quality.

International Greenhouse Gas Legislation

Montreal Protocol

The Coordinating Committee on the Ozone Layer was established by the United Nations Environment Program (UNEP) in 1977, and UNEP's Governing Council adopted the World Plan of Action on the Ozone Layer in 1977. Continuing efforts led to the signing of the Vienna Convention on the Protection of the Ozone Layer in 1985. This in turn led to the creation of the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol), an international treaty designed to protect the stratospheric ozone layer by phasing out production of ozone-depleting chemicals (ODCs). The Montreal Protocol was adopted on September 16, 1987 and became effective on January 1, 1989.

By the end of 2006, the 191 parties to the treaty had phased out over 96 percent of ODCs (UNEP 2007). Because of this success, scientists are now predicting that the ozone hole will "heal" later this century (UNEP 2007). The substantial reduction of ODCs also has benefits relative to GCC because these substances are potent GHGs. As noted, however, the phasing out of the ODCs has led to increased use of non-ozone depleting substances, such as HFCs, which, although not detrimental to the ozone layer, also are potent GHGs.

United Nations Framework Convention on Climate Change

The U.S. participates in the United Nations Framework Convention on Climate Change (UNFCCC), which was signed on March 21, 1994. The Kyoto Protocol is a treaty adopted under the UNFCCC, and was the first international agreement to regulate GHG emissions. It has been estimated that if the commitments outlined in the Kyoto Protocol are met, global GHG emissions could be reduced by an estimated five percent from 1990 levels during the first commitment period of 2008 to 2012. Notably, while the U.S. is a signatory to the Kyoto Protocol, Congress has not ratified the Protocol and the U.S. is not bound by the Protocol's commitments.

In December 2009, the United Nations representatives met in Copenhagen to attempt to develop a framework for addressing global climate change issues in the future. The Copenhagen Accord was not ratified with a binding accord, however, and no further measures were adopted at that meeting.

Federal Greenhouse Gas Regulations

In the past, the USEPA has not regulated GHGs under the CAA. The U.S. Supreme Court, however, ruled on April 2, 2007 (in Massachusetts v. U.S. Environmental Protection Agency) that CO_2 is an air pollutant, as defined under the CAA, and that the USEPA has the authority to regulate GHG emissions. After a thorough examination of the scientific evidence and careful consideration of public comments, the USEPA announced on December 7, 2009 that GHGs threaten the public health and welfare of the American people (with the associated findings summarized below):

- Endangerment Finding: The USEPA Administrator finds that the current and projected concentrations of the six key well-mixed GHGs (CO_2, CH_4, N_2O, HFC, PFC, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The USEPA Administrator finds that the combined emissions of these well-mixed GHGs from motor vehicles and motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

The endangerment findings do not themselves impose any requirements on industry or other entities. This action was a prerequisite to the final USEPA's GHG emissions standards for light duty vehicles, which were jointly implemented by the USEPA and the U.S. Department of Transportation's National Highway Safety Administration on April 1, 2010.

Mandatory Reporting Rule of GHGs

On January 1, 2010, the USEPA started requiring large emitters of heat-trapping emissions to collect GHG data under a new reporting system. This new program covers approximately 85 percent of the nation's GHG emissions and applies to roughly 10,000 facilities. Fossil fuel and industrial GHG suppliers, motor vehicle and engine manufacturers, and facilities that emit 25,000 metric tons or more of CO_2 equivalent (CO_2e) per year, are required to report GHG emissions data to the EPA annually. This reporting threshold is equivalent to the annual GHG

emissions from approximately 4,600 passenger vehicles. Vehicle and engine manufacturers outside of the light-duty sector began phasing in GHG reporting with vehicle/engine model year 2011.

Corporate Average Fuel Economy Standards

The federal Corporate Average Fuel Economy (CAFE) standard determines the fuel efficiency of certain vehicle classes in the U.S. In 2007, as part of the Energy and Security Act of 2007, CAFE standards were increased to require new light-duty vehicles to meet an average fuel economy of 35 miles per gallon (mpg) by 2020. In May 2009, President Obama announced plans to increase CAFE standards to require light-duty vehicles to meet 35.5 mpg by 2016.

Prevention of Significant Deterioration/Title V Greenhouse Gas Tailoring Rule

The USEPA will apply a tailored approach to the applicability of major source thresholds for GHGs under the Prevention of Significant Deterioration (PSD) and Title V programs of the CAA by temporarily raising those thresholds and setting a PSD significance level for GHGs. The USEPA is anticipating that GHG emissions may soon be subject to regulation pursuant to the CAA. One consequence of subjecting GHG emissions to regulatory controls is that the requirements of existing air permit programs, namely the PSD preconstruction permitting program for major stationary sources and the Title V operating permits program, would be triggered for GHG emission sources. At the current applicability levels under the CAA, tens of thousands of projects every year would need permits under the PSD program, and millions of sources would become subject to the title V program. These numbers of permits are orders of magnitude greater than the current number of permits under these permitting programs and would vastly exceed the administrative capacity of the permitting authorities. By tailoring the applicability thresholds, actions can be taken by the EPA and states to build capacity and streamline permitting.

California Greenhouse Gas Regulations

California Code of Regulations, Title 24, Part 6

California Code of Regulations, Title 24, Part 6, is the California Energy Code. This code, originally enacted in 1978 in response to legislative mandates, establishes energy efficiency standards for residential and non-residential buildings to reduce California's energy consumption. The code is updated periodically to incorporate and consider new energy efficiency technologies and methodologies as they become available. The 2008 Standards went into effect January 1, 2010**,** and supersede the 2005 Standards. Projects that apply for a building permit on or after this date must comply with the 2008 Standards. The Building Energy Efficiency Standards will continue to be upgraded over time to reduce electricity and peak demand, and California recognizes the role of the Standards in reducing energy related to meeting the state's water needs and in reducing GHG emissions.

California Code of Regulations, Title 24, Part 11

California Code of Regulations, Title 24, Part 11, outlines the CalGreen code. The CalGreen code aims to make building designs more sustainable, and to incorporate more efficient and responsible practices into development. This code is intended to: reduce energy and water consumption; cause a reduction in GHG emissions from buildings; promote environmentally responsible, cost-effective, and healthier places to work and live; and respond to directives by the Governor. According to the California Air Resources Board, an estimated three-million metric ton reduction of greenhouse gases will occur by the year 2020 as a result of the mandatory provisions in the code. This number is expected to increase in the future, as it will apply to nonresidential additions and alterations. The current 2010 CalGreen Standards went into effect January 1, 2011. Prior to the updated 2010 edition, this code contained only voluntary standards. The 2010 version of the standards include both mandatory and voluntary standards related to the design and construction of buildings, as well as construction site management. A supplement to this code (effective July 1, 2012) modifies some of the incorporated provisions (both voluntary and mandatory) of the previously approved 2010 edition.

Executive Order D-16-00

This executive order (EO) was signed by Governor Gray Davis on August 2, 2000, and established a statewide sustainable building goal. Specifically, this goal is to "site, design, deconstruct, construct, renovate, operate, and maintain state buildings that are models of energy, water, and materials efficiency; while providing healthy, productive and comfortable indoor environments and long term benefits to Californians." As with the California Energy Code, reductions in energy usage provided by sustainable building design would result in reduced GHG emissions.

Senate Bill 1771

Senate Bill (SB) 1771 (Sher) was enacted on September 30, 2000, and requires the Secretary of the Resources Agency to establish a nonprofit public benefit corporation, to be known as the "California Climate Action Registry," for the purpose of administering a voluntary GHG emission registry. The Energy Commission is required to develop metrics for use by the Registry and to update the state's inventory of GHG emissions by January 1, 2002, and every five years thereafter.

Executive Order S-7-04

This EO, signed by Governor Schwarzenegger on April 20, 2004, designated California's 21 interstate freeways as the "California Hydrogen Highway Network," and directed the CalEPA and all other relevant state agencies to "plan and build a network of hydrogen fueling stations along these roadways and in urban centers that they connect, so that by 2010, every Californian will have access to hydrogen fuel, with a significant and increasing percentage from clean, renewable sources."

The EO also directed the CalEPA, in concert with the State Legislature and in consultation with the California Energy Commission [CEC] and other relevant state and local agencies, to develop California Hydrogen Economy Blueprint Plan by January 1, 2005. The plan is to be updated biannually, with recommendations to the Governor and State Legislature to include the following:

> Promoting environmental benefits (including global climate change) and economic development opportunities resulting from increased utilization of hydrogen for stationary and mobile applications; policy strategies to ensure hydrogen generation results in the lowest possible emissions of GHGs and other air pollutants.

Executive Order S-3-05

EO S-3-05, signed by Governor Schwarzenegger on June 1, 2005, calls for a reduction in GHG emissions to 1990 levels by 2020, and for an 80 percent reduction in GHG emissions below 1990 levels by 2050.

EO S-3-05 also calls for the CalEPA to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy. The first of these reports, "Scenarios of Climate Change in California: An Overview," was published in February 2006. The 2006 report used a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential warming ranges (i.e., temperature increases) that may occur in California during the 21st century. Specifically, these include a lower warming range (3.0 to 5.5°F); medium warming range (5.5 to 8.0°F); and higher warming range (8.0 to 10.5°F). The report then presents analyses of future climate in California under each warming range.

As noted above, each emissions scenario would result in substantial temperature increases for California. According to the report, these substantial temperature increases would result in a variety of impacts to the people, economy, and environment of California in association with a projected increase in extreme conditions. While the severity of these impacts would depend upon actual future emissions of GHGs and associated warming, identified potential impacts from global warming in California include, but are not limited to, public health, biology, rising sea levels, hydrology and water quality, and water supply.

Assembly Bill 32 – Global Warming Solution Act of 2006

In the fall of 2006, Governor Schwarzenegger signed California Assembly Bill (AB) 32, the Global Warming Solutions Act, into law. AB 32 required CARB to determine what the statewide GHG emissions level was in 1990, and to approve a statewide GHG emissions limit equivalent to that level. The determination of a statewide 1990 GHG levels was required to be completed by January 1, 2008, with the related emissions limit to be achieved by 2020. Key AB 32 milestones include:

- June 20, 2007 – Identification of "discrete early action GHG emission reduction measures."

- January 1, 2008 – Identification of 1990 baseline GHG emission levels and approval of a statewide limit equivalent to that level. Adoption of reporting and verification requirements concerning GHG emissions.
- January 1, 2009 – Adoption of a scoping plan for achieving GHG emission reductions.
- January 1, 2010 – Adoption and enforcement of regulations to implement the "discrete" actions.
- January 1, 2011 – Adoption of GHG emission limits and reduction measures by regulations.
- January 1, 2012 – GHG emission limits and reduction measures adopted in 2011 become enforceable.

Since the passage of AB 32, CARB published Proposed Early Actions to Mitigate Climate Change in California (2007c). There are no early action measures specific to development projects included in the list of 36 measures identified for CARB to pursue during calendar years 2007, 2008, 2009, and 2010. Also, this publication indicated that the issue of GHG emissions in CEQA and General Plans was being deferred for later action, so the publication did not discuss any early action measures generally related to CEQA or to land use decisions.

CARB has determined that the 1990 level of GHG emissions was 427 million metric tons (MMT) of CO_2e emissions (CARB 2007d). CARB estimated that a reduction of 169 MMT net CO_2e emissions below "business as usual" (BAU) levels of 596 MMT would be required by 2020 to meet 1990 levels. This amounts to a 15 percent reduction from today's levels, and a 28.3 percent reduction from projected BAU levels in 2020. Furthermore, CARB has initiated a series of "early action measures" to reduce GHG emissions in advance of the full implementation of AB 32 in 2012 (CARB 2007e). CARB also adopted its Scoping Plan in December 2008, which provided estimates of the year 1990 GHG emissions level, and identified sectors for the reduction of GHG emissions.

According to the CEC, transportation accounted for approximately 41 percent of California's GHG emissions in 2004 (CEC 2006). Growth in California has resulted in vehicle miles traveled (VMT) by state residents increasing three-fold during the period of 1975 to 2004. To reduce the use of carbon-based fuels, Governor Schwarzenegger signed EO S-01-07, calling for a 10 percent reduction in carbon intensity in fuels by 2020. In addition, President Bush signed new fuel efficiency standards (CAFE standards) that would increase vehicle mileage to 35 miles per gallon by 2020. All of these measures are designed to reduce emissions of GHGs.

In March 2011, a San Francisco Superior Court enjoined the implementation of CARB's Scoping Plan, finding the alternatives analysis and public review process violated both CEQA and CARB's certified regulatory program (*Association of Irritated Residents, et al v. California Air Resources Board*, Case No. CPF-09-509562, March 18, 2011). In response to this litigation, CARB adopted the new CEQA document (*Final Supplement to the AB32 Scoping Plan Functional Equivalent Document*) on August 24, 2011. CARB staff re-evaluated the baseline in light of the economic downturn and updated the projected 2020 emissions to 545 MMT CO_2e. Two reduction measures (Pavley I and the Renewables Portfolio Standard [12 to 20 percent]) not previously included in the 2008 Scoping Plan baseline were incorporated into the updated baseline, further reducing the 2020 Statewide emissions projection to 507 MMT CO_2e. The

updated forecast of 507 MMT CO_2e is referred to as the AB 32 2020 baseline. Reduction of an estimated 80 MMT CO_2e is necessary to reduce Statewide emissions to the AB 32 target of 427 MMT CO_2e by 2020 (CARB 2011).

Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases

In a response to the transportation sector's CO_2 emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493 requires CARB to set statewide GHG emission standards for passenger vehicles and light duty trucks (and other vehicles determined to be vehicles whose primary use is noncommercial personal transportation) manufactured in model year 2009 and all subsequent model years. These standards were adopted in September 2004, and considered cost effectiveness, technological feasibility, and economic impacts. When fully phased in, the near-term (2009 to 2012) standards would reduce GHG emissions by approximately 22 percent compared to the emissions from the 2002 fleet, while the mid-term (2013 to 2016) standards would result in a reduction of approximately 30 percent. Some currently used technologies that achieve GHG reductions include small engines with superchargers, continuously variable transmissions, and hybrid electric drives. To set its own GHG emissions limits on motor vehicles, California required a waiver from the USEPA, and this waiver was issued in June 2009. With this action, it was expected in 2008 that the new regulations (Pavley I and II) would reduce GHG emissions from California passenger vehicles by about 18 percent statewide.

Assembly Bill 75

AB 75 was passed in 1999, and mandates state agencies to develop and implement an integrated waste management plan to reduce GHG emissions related to solid waste disposal and diversion (recycling). In addition, the bill mandates that community service districts providing solid waste services report the disposal and diversion information to the appropriate city, county, or regional jurisdiction. Since 2004, the bill requires diversion of at least 50 percent of the solid waste from landfills and transformation facilities, with submittal of an annual report describing the diversion rates to the California Integrated Waste Management Board.

Senate Bill 1368

In 2006, the California Legislature passed SB 1368, which requires the Public Utilities Commission (PUC) to develop and adopt a "GHGs emission performance standard" by February 1, 2007 for the private electric utilities under its regulation. The PUC adopted an interim standard on January 25, 2007, but has formally requested a delay for the local publicly owned electric utilities under its regulation. On November 14, 2011, the Natural Resources Defense Council (NRDC) and Sierra Club jointly filed a Petition requesting the CEC initiate a rulemaking proceeding to ensure the current practices of California publicly owned utilities (POUs) meet the requirements of Senate Bill 1368 and California's Emission Performance Standard. On January 12, 2012, the CEC adopted the Emission Performance Standard. These standards apply to all long-term financial commitments (five years or longer) entered into by electric utilities and the emissions must be limited to 1,100 pounds of CO_2 per megawatt-hour of electricity delivered (California SB 2006).

Senate Bill 1505

Largely in response to EO S-7-04, SB 1505 (Lowenthal) requires CARB to adopt regulations by July 1, 2008 that ensure the production and use of hydrogen fuel for transportation purposes, thereby contributing to the reduction of GHG emissions, criteria air pollutants, and toxic air contaminants. SB 1505 was passed by the legislature and signed by the governor on September 30, 2006.

Executive Order S-01-07

This EO was signed by Governor Schwarzenegger on January 18, 2007 and directs that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It orders that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California, and directs CARB to determine if an LCFS can be adopted as a discrete early action measure pursuant to AB 32. The CARB approved the LCFS as a discrete early action item with a regulation adopted and implemented in 2010. It was expected to result in a reduction of 15 MMT CO_2e by 2020 (based on the original 2008 Scoping Plan estimates). On December 29, 2011, District Judge Lawrence O'Neill in the Eastern District of California issued a preliminary injunction blocking CARB from implementing LCFS for the remainder of the *Rocky Mountain Farmers Union* litigation. Plaintiffs argued that the LCFS is unconstitutional because it violates the interstate commerce clause, which was intended to stop states from introducing laws that would discriminate against businesses located in other states.

In January 2012, however, CARB appealed that decision to the Ninth Circuit Court of Appeals (Ninth Circuit), and then moved to stay the injunction pending resolution of the appeal. On April 23, 2012, the Ninth Circuit granted the CARB's motion for a stay of the injunction while it continues to consider CARB's appeal of the lower court's decision. Therefore, the LCFS enforcement injunction is lifted, and CARB is continuing to implement the LCFS statewide.

Senate Bill 97 – CEQA: Greenhouse Gas Emissions

In August 2007, Governor Schwarzenegger signed into law SB 97 – CEQA: Greenhouse Gas Emissions, stating: "This bill advances a coordinated policy for reducing GHG emissions by directing the Office of Planning and Research (OPR) and the Resources Agency to develop CEQA guidelines on how state and local agencies should analyze, and when necessary, mitigate GHG emissions." Specifically, SB 97 requires OPR to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, including but not limited to, effects associated with transportation or energy consumption. The Resources Agency certified and adopted the guidelines on December 31, 2009. The new CEQA guidelines provide the lead agency with broad discretion in determining what methodology is used in assessing the impacts of GHG emissions in the context of a particular project. This guidance is provided because the methodology for assessing GHG emissions is expected to evolve over time. Although the new CEQA Guidelines did not establish a threshold of significance, the OPR guidance also states that the lead agency can rely on qualitative or other performance-based standards for estimating the significance of GHG emissions.

Senate Bill 375

SB 375 was signed and passed into law on September 30, 2008 to enhance CARB's ability to reach AB 32 goals. Specifically, SB 375 requires CARB to set regional targets for the purpose of reducing GHG emissions from passenger vehicles for 2020 and 2035. If regions develop integrated land use, housing and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain CEQA review requirements. The targets apply to the regions in the state covered by 18 Metropolitan Planning Organizations (MPOs).

In accordance with SB 375, on January 23, 2009 CARB appointed a Regional Targets Advisory Committee (RTAC) to provide recommendations and methodologies to be used in the CARB's target setting process. The RTAC provided its recommendations in a report to the CARB on September 29, 2009. CARB released their draft targets on June 30, 2010, and adopted their final targets on September 23, 2010. For the San Diego area, CARB and SANDAG agreed to adopt 7 percent and 13 percent in per capita GHG emission reductions from passenger vehicles by the years 2020 and 2035, respectively. If MPOs had not met the GHG reduction targets, transportation projects would not have been eligible for funding programmed after January 1, 2012.

On December 4, 2012, Superior Court ruled that SANDAG violated state law by failing to fully account for, and take steps to reduce, climate change in its environmental review of the region's long-term transportation plan. At the time of this writing, the plan is being revised.

Executive Order S-13-08

EO S-13-08, signed by Governor Schwarzenegger on November 14, 2008, enhances the state's management of climate impacts from sea level rise, increased temperatures, shifting precipitation and extreme weather events. One key benefit of EO S-13-08 is that it has facilitated California's first comprehensive climate adaptation strategy. This strategy will improve coordination within state government so that better planning can more effectively address climate impacts to human health, the environment, the state's water supply and the economy. Another benefit of EO S-13-08 includes providing consistency and clarity to state agencies on how to address sea level rise in current planning efforts; reducing time and resources unnecessarily spent on developing different policies using different scientific information.

California Greenhouse Gas Programs and Plans

California Energy Commission: New Solar Homes Partnership

The New Solar Homes Partnership (NSHP) is a component of the California Solar Initiative, and has a goal to produce 400 megawatts of solar electricity on approximately 160,000 homes by 2017. To qualify for the program, a new home must achieve energy efficiency levels greater than the requirements of the 2005 Building Title 24 Standards. The builder can choose to comply with either of two tiers of energy efficiency measures: Tier I, which requires a 15 percent reduction from Title 24 Standards; or Tier II, which requires a 35 percent reduction overall and a 40 percent reduction in the building's space cooling (air conditioning) energy compared to Title 24 (CEC 2008). In addition, all appliances must have an Energy Star rating, which

indicates that the appliance is consistent with the international standard for energy efficient consumer products.

California Air Resources Board: Interim Significance Thresholds

In October 2008, CARB released draft interim guidance on significance thresholds for industrial, commercial, and residential projects (CARB 2008b). The draft proposal for residential and commercial projects states that a project would not be significant if it complies with a previously approved plan that addresses GHG emissions, or meets an energy use performance standard defined as CEC's Tier II Energy Efficiency goal (specified as 35 percent above Title 24 requirements). CARB, however, did not define performance standards for water, waste, and transportation; or develop threshold for GHG emissions in tons per year in the interim guidance. Work efforts were suspended on January 22, 2009, prior to identification of a threshold of significance.

California Air Resources Board: Scoping Plan

On December 11, 2008, CARB adopted a Scoping Plan (CARB 2008a), as directed by AB 32. The Scoping Plan proposes a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. The measures in the Scoping Plan approved by CARB are in place as of 2012, with further implementation details and regulations to be developed, followed by the rulemaking process to meet the 2012 deadline. Measures applicable to development projects include the following:

- Maximum energy efficiency building and appliance standards, including more stringent building codes and appliance efficiency standards, and solar water heating;
- Use of renewable sources for electricity generation, such as photovoltaic solar associated with the Million Solar Roofs program;
- Regional transportation targets, including integration of development patterns and the transportation network to reduce vehicle travel, as identified in SB 375; and
- Green Building strategy, including siting near transit or mixed use areas; zero-net-energy buildings; "beyond-code" building efficiency requirements; and the use of the CEC's Tier II Energy Efficiency goal.

Relative to transportation, the Scoping Plan includes nine measures or recommended actions. One of these is measure T-3, Regional Transportation-Related GHG Targets, which relies on SB 375 implementation to reduce GHG emissions from passenger vehicles through reducing VMT. The other measures are related to vehicle GHG emissions, fuel, and efficiency measures and would be implemented statewide rather than on a project-by-project basis.

In order to assess the scope of the reductions needed to return to 1990 emissions levels, CARB first estimated 2020 BAU GHG emissions. These are the GHG emissions that would be expected to occur in the absence of any state GHG reduction measures. In 2008, after estimating that statewide 2020 BAU GHG emissions would be 596 metric tons, CARB developed a Scoping Plan that identified measures to reduce BAU emissions by approximately 174 metric tons (an approximately 29 percent reduction) by 2020. As indicated in Table 3.1.1-2, CARB Scoping

Plan Recommended GHG Reduction Measures, the majority of reductions are directed at the sectors with the largest GHG emissions contributions (transportation and electricity generation) and involve statutory mandates affecting vehicle or fuel manufacture, public transit, and public utilities.

As noted above, CARB's revised estimate reflecting the economic downturn and other factors calculated that BAU 2020 emissions would be approximately 507 MMT CO_2e per year. Thus, in order to reach the 1990 emissions level of 427 MMT CO_2e, an 80 MMT CO_2e (16 percent) reduction was determined to be needed by 2020 (CARB 2011).

It was expected that the new regulations (Pavley I) would reduce GHG emissions from California passenger vehicles by about 31.7 MMT CO_2e (or 18 percent) counted toward the total statewide reduction target (CARB 2008) (see Table 3.1.1-2). However, the revised 2011 projections estimate that Pavley I will reduce GHG emissions from passenger vehicles by about 29.9 MMT CO_2e (or 17 percent), for 37 percent of the total 80 MMT CO_2e reduction target.

CARB has adopted a second, more stringent, phase of the Pavley regulations, termed "Pavley II" [now known as "Low Emission Vehicle (LEV) III"], that covers model years 2017 to 2025. Pavley II was estimated in 2008 to add an additional 4.0 MMT CO_2e for 2 percent of the then-estimated 174 MMT CO_2e reduction total. The revised 2010 projections estimate that Pavley II will reduce GHG emissions from passenger vehicles by 3.8 MMT CO_2e, for 5 percent of the total 80 MMT CO_2e reduction target (per CARB's 2010 revised projections). These reductions are to come from improved vehicle technologies such as small engines with superchargers, continuously variable transmissions, and hybrid electric drives.

A 18 percent reduction in the intensity of transportation fuels is expected to equate to a reduction of 16.5 MMT CO_2e in 2020 (based on the original 2008 Scoping Plan estimates). However, in order to account for possible overlap of benefits between LCFS and the Pavley GHG standards, CARB has discounted the contribution of LCFS to 15 MMT CO_2e (CARB 2008).

Local Policies and Plans: County of San Diego

County of San Diego General Plan

The County 2011 General Plan includes a plan to balance population growth and development with infrastructure needs and resource protection. The General Plan is based on smart growth and land planning principles that will reduce VMT, and thus result in a reduction of GHGs. This will be accomplished by locating future development within and near existing infrastructure. The General Plan also includes an implementation plan related to the reduction of GHGs, including the following actions:

- Preparation of a climate change action plan based on this inventory and emissions reduction targets for GHG emissions from all sources (adopted June 2012);
- Development of regulations and procedures to encourage the design and construction of new buildings in accordance with "green building" programs; and
- Development of regulations that encourage the use of energy recovery, as well as photovoltaic and wind energy in appropriate areas.

Specifically, the General Plan directs population capacity to the western portions of the County and reduces the potential for growth in the eastern areas. The general population distribution is intended to: (1) facilitate efficient, orderly growth by containing development within areas potentially served by SDCWA and in proximity to existing infrastructure; (2) protect natural resources through the reduction of population capacity in sensitive areas; (3) reduce overall VMT and associated GHG emissions that contribute to climate change; and (4) retain or enhance the character of communities within the unincorporated County.

County of San Diego: The Climate Action Plan

The County of San Diego developed and adopted (June 2012) the Climate Action Plan (CAP) to address the issues of climate change as it relates to growth in the County, and to protect the environment for visitors and residents alike. The plan will help reduce traffic congestion and solid waste generation, improve air quality, increase safety for pedestrians and cyclists, and encourage more efficient use of energy and water. Additionally, the CAP requires meaningful GHG reductions, in accordance with the guidelines of AB 32, the governor's executive order S-305, and CEQA guidelines, which will help improve the quality of life in the County. The implementation of the CAP will also help lead agencies to assess cumulative impacts of a project, and provide a means for future projects to address GHG impacts under CEQA in accordance with the 2011 statement by the Attorney General. A lead agency may conclude that a project's GHG impact is not cumulatively significant if the project demonstrates consistency with this CAP (CEQA Guidelines Section 15183.5[h][3]), thereby reducing overall project costs.

The CAP incorporates County goals related to climate change outlined in the General Plan and the 2009 County Strategic Energy Plan (SEP), and attempts to define a long-term strategy to tackle climate change. The CAP defines a baseline GHG inventory, utilizing 2005 for the County's unincorporated communities and 2006 for local government operations. The baseline is established in order to provide a starting point for the formation of emissions-reduction targets. Future projections of GHG emissions were determined for 2020, 2035 and 2050, along with the accompanying reduction goals. The CAP includes more specific approaches for the actions discussed in the General Plan, and outlines measures which would help the region attain the reduction goals. It details what specifically should be done, along with the community participation level required to see actual results.

San Diego Association of Governments: Climate Action Strategy

The SANDAG Climate Action Strategy serves as a guide to help policymakers address climate change as they make decisions to meet the needs of growing populations, as well as to maintain and enhance quality of life, and promote economic stability (SANDAG 2010). The purpose of the strategy is to identify land use, transportation, and other related policy measures that could reduce GHG emissions from passenger cars and light-duty trucks as part of the development of the Sustainable Communities Strategy for the 2050 Regional Transportation Plan, in compliance with SB 375. Additional policy measures are identified for buildings and energy use, protecting transportation and energy infrastructures from climate impacts, and assisting SANDAG and other local agencies in reducing GHG emissions from their operations.

Existing Greenhouse Gas Emission Levels

Worldwide GHG Inventory

The IPCC has concluded that a stabilization of GHGs at 400 to 450 ppm CO_2e concentration is required to keep global mean warming below 3.6ºF. This is projected to be the threshold necessary to avoid dangerous climate change (Association of Environmental Professionals 2007).

In 2004, total GHG emissions worldwide were estimated at 20,135 MMT CO_2e (UNFCCC 2006). The U.S. contributed the largest portion (35 percent) of global GHG emissions in 2004. The CEC (2006a) identifies the following breakdown of GHG emissions in California: approximately 84 percent of CO_2, 5.7 percent of CH_4, 6.8 percent of N_2O, and 2.9 percent of other pollutants. As noted above, the transportation sector is the single largest category of California's GHG emissions, accounting for 41 percent of statewide emissions. CARB estimates that the 1990 statewide CO_2e emissions level was 427 MMT (CARB 2007d). In 2004, California produced 492 MMT CO_2e emissions. The total U.S. GHG emissions was 7,260 MMT CO_2e emissions in 2005, of which 84 percent was CO_2 (USEPA 2006). On a national level, approximately 33 percent of GHG emissions were associated with transportation and about 41 percent were associated with electricity generation (USEPA 2006).

State and Regional GHG Inventory

CARB performed statewide inventories for the years 1990 to 2008. The inventory was divided into nine broad sectors of economic activity, including agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential, and transportation. Emissions are quantified in million metric tons of CO_2 equivalent (MMT CO_2e).

The statewide GHG source emissions totaled 433 MMT CO_2e in 1990, 458 MMT CO2e in 2000, 484 MMT CO_2e in 2004, and 478 MMT CO_2e in 2008. According to data from the CARB, it appears that statewide GHG emissions peaked in 2004, and are now beginning to decrease (CARB 2010a). Transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

The forestry sector is unique because it not only includes emissions associated with harvest, fire, and land use conversion (sources), but also includes removals of atmospheric CO_2 (sinks) by photosynthesis, which is then bound (sequestered) in plant tissues. As shown in Table 3.1.1-2, forestry sector consistently removes more CO_2 from the atmosphere statewide than it emits. As a result, although decreasing over time, this sector represents a net sink, removing a net 6.7 MMT CO_2e from the atmosphere in 1990, a net 4.7 MMT CO_2e in 2000, a net 4.3 MMT CO_2e in 2004, and a net 4.0 MMT CO_2e in 2008.

A San Diego regional emissions inventory was prepared by the University of San Diego School of Law, Energy Policy Initiative Center (EPIC) that took into account the unique characteristics of the region. According to the EPIC inventory, San Diego County emitted 34 MMT CO_2e emissions in 2006. The largest contributor of GHGs in the County was on-road transportation (46 percent or 16 MMT CO_2e). The second highest contributor was electricity, which

contributed 9 MMT CO_2e (25 percent). Together, the on-road transportation and electricity categories comprised 71 percent of the total GHG emissions for the County. The remaining amount was contributed by natural gas consumption, civil aviation, industrial processes, off-road equipment, waste, agriculture, rail, water-borne navigation, and other fuels. By 2020, regional GHG emissions are expected to be 43 MMT CO_2e (a 26 percent increase over 2006 levels and a 48 percent increase over 1990 levels).

On-Site GHG Inventory

In its largely vacant state, the Project site is not a source of GHG emissions. Natural vegetation and soils temporarily store carbon as part of the terrestrial carbon cycle. Carbon is assimilated into plants as they grow, and then dispersed back into the environment when they die. Soil carbon accumulates from inputs of plants, roots, and other living components of the soil ecosystem (i.e., bacteria, worms, etc.). Soil carbon is lost through biological respiration, erosion, and other forms of disturbance. Existing GHG emissions are considered negligible.

3.1.1.2 *Analysis of Project Effects and Determination as to Significance*

The following GHG analysis does not make a distinction between on- and off-site Project effects because GHG emissions attributable to such impacts would occur within the SDAB regardless of their location. With regard to operational GHG emissions, the analysis generally evaluates the worst-case of the two land use scenarios. If there are substantive differences between **Scenarios 1** and **2**, both land use scenarios are analyzed.

Greenhouse Gas Emissions

Guideline for the Determination of Significance

The Proposed Project would have a cumulatively considerable contribution to climate change impacts if it would:

1. Result in a net increase of construction and operational greenhouse gas emissions, either directly or indirectly, and if the project would incorporate mitigation that achieves less than a 16 percent total reduction compared to unmitigated emissions.

Guideline Source

This guideline is based on the County's Guidelines for Determining Significance for Climate Change (County of San Diego 2012).

The 16 percent threshold is based on current adjustments to the 2008 Scoping Plan forecasts for 2020 that adjusted the quantities of reductions coming from the Scoping Plan GHG reduction measures. Per the County's draft GHG guidelines, unmitigated project GHG emissions attributable to a project at full buildout in 2020 are compared to project GHG emissions with mitigation. "Unmitigated" GHG emissions assume a project complying with applicable standards and regulations. This would include effects on energy emissions due to current energy

code enforcements and the RPS (to 20 percent). In other words, electricity and natural gas emissions reductions (on the order of 15 percent) due to stricter energy efficiency standards in the current 2008 Title 24 energy code are accounted for in the emissions estimate and improvements over the 2008 code can be credited toward mitigated emissions.

Project mitigation identified toward the 16 percent requirement thus cannot also include the effects of the Pavley I or the 20 percent RPS because these programs are already included in the calculations that support the 16 percent reduction requirement. Other statewide measures, however, can be included without risk of double counting. This includes the RPS beyond 20 percent (up to 33 percent), LCFS, and Pavley II, all of which can be included toward the minimum 16 percent mitigation requirement for a project with mitigation.

Analysis

Effects of Climate Change

The increase in the earth's temperature is expected to have wide ranging effects on the environment. Although global climate change is anticipated to affect all areas of the globe, there are numerous implications of direct importance to California. Statewide average temperatures are anticipated to increase by between 3 and 10.5° F by 2100. Some climate models indicate that this warming may be greater in the summer than in the winter. This could result in widespread adverse impacts to ecosystem health, agricultural production, water use and supply, and energy demand. Increased temperatures could reduce the Sierra Nevada snowpack and put additional strain on the state's water supply. In addition, increased temperatures would be conducive to the formation of air pollutants, resulting in poor air quality.

It is also important to note that even if GHG emissions were to be eliminated or dramatically reduced, it is projected that the effect of those emissions would continue to affect global climate for centuries.

Future residents of the Proposed Project site could be exposed to increased risk of dehydration, heat stroke, heat exhaustion, heart attack, stroke, and respiratory disease. These risks, however, would be no different from those experienced by the San Diego region as a whole under the described scenario. Increased temperatures would result in more frequent use of air conditioning that would increase energy costs to residents, and could put a strain on the area's energy supplies. Because the Proposed Project is located inland well above sea level, no impacts related to sea level rise are anticipated.

Effects of GHG Emissions

In order to serve as a guide for determining when a project triggers the need for a GHG significance determination, the County has established a screening threshold for GHG emission analysis (County 2012).

For operational GHG emissions, the County recommends the above 2,500 MT CO_2e per year as a conservative threshold for requiring further GHG analysis and mitigation. Emissions

contributing to this number include those from vehicle trips, typical energy and water use, and other factors associated with projects. Given exceedances of the above two thresholds for construction, additional analysis was undertaken.

The method of quantifying GHG emissions in this analysis was based on methodologies recommended and used by several California air quality management districts (AQMDs), including the South Coast and Bay Area AQMDs, as well as by CARB. To evaluate the reductions in GHG emissions from Project design features relative to the unmitigated scenario, emissions from each source of GHGs were estimated for two methods: first, the Project without GHG-reducing design features (i.e., the unmitigated Project- Equivalent) and; second, the project with GHG-reducing green building design.

Construction Greenhouse Gas Emissions. As noted in Chapter 1.0 of this EIR, construction scheduling and phasing are not known with precision at this time. Project land uses (i.e., the order of residential, mixed use, general commercial, and/or limited industrial uses) would be implemented subject to economic conditions and need. Project-related emissions, however, have been projected assuming maximum amounts of activity within short time frames (see detail provided in Subchapter 2.2, Air Quality). The reader also is referred to Appendix H of this EIR for additional detail related to GHGs.

The Project would emit GHGs during its construction phases from combustion of fossil fuels in construction equipment, worker vehicles, and delivery vehicles accessing the Project site. Construction emissions were estimated using CalEEMod, with anticipated construction start date of January 2015, based on information provided by the Project Applicant. Table 3.1.1-3, Estimated Construction Emissions (Option 1), presents a summary of the GHG emissions resulting from construction activities under Option 1, where Phase 1 would involve the mass grading of the entire Project site area and Phase 2 would involve the utility installation at the Project site. Table 3.1.1-4, Estimated Construction Emissions (Option 2), presents a summary of the GHG emissions resulting from construction activities under Option 2, where mass grading would occur in two phases. (See detail provided in Subchapter 2.2, Air Quality) These estimates use default construction equipment and construction vehicle trip length assumptions built into CalEEMod. In addition, the CARB off-road equipment standards identified below would be implemented as part of Project design during construction. This control measure can be accounted for within the CalEEMod model as mitigation measures. Some of the measures are available in CalEEMod to analyze the emission reductions, and the output files are labeled as mitigated construction emissions. It is mandatory for all construction equipment to comply with CARB emission standards for implementing BMPs to minimize impacts and therefore the following measure would be included in Project design:

- All off-road diesel construction equipment operating on the Project site would meet USEPA-Certified Tier 4 emissions standards. In addition, all construction equipment would be outfitted with best available control technology (BACT) devices certified by the CARB. Any emissions control device used by the contractor would achieve emissions reductions that are no less than what could be achieved by a Level 2 diesel emissions control strategy for a similarly sized engine as defined by the CARB regulations.

As shown in Tables 3.1.1-3 and 3.1.1-4, the Project-related construction activities for mass grading Options 1 and 2 are estimated to generate approximately 20,138 and 19,484 metric tons

of CO_2e emissions, respectively. For construction emissions, the County guidance recommends that the emissions be amortized over 20 years and added to operational emissions, as appropriate. Amortized over 20 years, construction equipment would contribute 1,006.91 and 974.22 metric tons per year of CO_2e emissions to the Project's total under Options 1 and 2, respectively. The higher of these emissions estimates are added to the expected annual operational GHG emissions below.

Operational Greenhouse Gas Emissions. Direct GHG emissions from operation of the Project would include those associated with vehicle trips, natural gas combustion (furnace), use of other fuel-consuming equipment, refrigeration, emergency stand-by generators, etc. Indirect emissions would be associated with electrical generation, water consumption, and solid waste disposal. Table 3.1.1-5, Scenario 1 - Estimated Unmitigated Operational Emissions, and Table 3.1.1-6, Scenario 2 - Estimated Unmitigated Operational Emissions, present the summary of unmitigated GHG emissions for Operational Scenarios 1 and 2, respectively, based on the CalEEMod modeling results. The methodology used to calculate vehicle, electricity and natural gas GHG emissions are discussed below.

Energy Emissions. Electric power generation accounted for the second largest sector contributing to both inventoried and projected statewide GHG emissions, comprising 24 percent of the projected total 2020 statewide BAU emissions (CARB 2008b). Buildings use electricity for lighting, heating and cooling. Electricity generation entails the combustion of fossil fuels, including natural gas and coal, which are then stored and transported to end users. A building's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant). Due to the nature of the electrical grid, it is not possible to say with certainty where energy consumed will be generated. Therefore, GHG emissions resulting from electricity generation were estimated using the CalEEMod default values for the San Diego Gas and Electric (SDG&E) region. The electricity energy use is in kilowatt hours per size metric for each land use subtype and natural gas use is in kiloBritish Thermal Units (kBTU) per size metric for each land use subtype. The CalEEMod model default values are based on the CEC sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

For Project calculations with GHG-reducing design features, a 15 percent improvement in building energy efficiency over Title 24, 2008 was factored into the projections.

*Water Use Emissions***.** The provision of potable water consumes large amounts of energy associated with source and conveyance, treatment, distribution, end use, and wastewater treatment. This type of energy use is known as embodied energy. The electricity intensities are multiplied by the utility intensity factors for the GHGs and are classified as indirect emissions. The default electricity intensity is from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California. GHG emissions associated with water use are calculated by multiplying the embodied energy in a gallon of potable water by the total number of gallons projected to be consumed by the Project and then by the electricity generation GHG emissions factors.

Solid Waste Emissions. The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. For Project calculations with and without GHG-reducing design features, a County-wide average waste disposal rate was used that was obtained from the California Department of Resources Recycling and Recovery (CalRecycle). While the Proposed Project would implement lumber and other materials conservation (see Section 2.2 of this EIR) and likely generate less landfill waste than average, these savings cannot be estimated at this time.

CalRecycle maintains a list of different waste generation rates for residential, commercial, and industrial uses from a variety of sources. The single-family residential waste generation rates range from 7.8 to 11.4 pounds per unit per day (CalRecycle 2009). To be conservative, the higher generation rates of 11.4 pounds per unit per day were used to determine the total volume of waste by weight. This value was then multiplied by emissions factors obtained from the USEPA report *Solid Waste Management and Greenhouse Gases* (USEPA 2006) for the different material classes (glass, metal, plastic, etc.) and two different waste streams (to landfill or to recycling). For the landfill estimates, landfill gas recovery for energy was assumed for both the landfill and recycling estimates. Local recycling and disposal (to landfill) percentages (of total waste generated) were also obtained from CalRecycle and reflect current waste disposal practice in accordance with the statutory 50 percent diversion mandate.

As shown in Table 3.1.1-2, the CARB Scoping Plan includes recycling and waste measures that would reduce statewide emissions by roughly 1.0 MMT CO_2e by 2020. This is to be achieved through improved landfill methane capture. Also, while not shown in Table 3.1.1-2, the CARB Scoping Plan includes other waste sector reduction strategies not counted toward the statewide 2020 emissions reduction target. CARB estimates that these additional waste and recycling sector measures would provide up to an additional 10 MMT CO_2e reduction by 2020. Thus, it is possible that the embodied energy and emissions resulting from disposing of the Proposed Project's solid waste would be reduced by approximately 126 MT CO_2e by 2020 due to these measures.

Transportation Emissions. Transportation-related GHG emissions comprise the largest sector contributing to both inventoried and projected statewide GHG emissions, with estimates assuming it will account for 38 percent of the projected total statewide 2020 BAU emissions. On-road vehicles alone are assumed to account for 35 percent of forecasted statewide 2020 BAU emissions. GHG emissions from vehicles come from the combustion of fossil fuels (primarily gasoline and diesel) in vehicle engines. The quantity and type of transportation fuel consumed determines the amount of GHGs emitted from a vehicle. Therefore, not only are vehicle engine and fuel technology of importance, but so too are the amount of vehicle trips and trip distances that motorists travel.

The Project without GHG-reducing design features would generate 36,206 ADT (LLG Engineers 2014). As identified in the Section 3.1.1.1, Regulatory Background, there are several plans, policies, and regulations aimed at reducing transportation-related GHG emissions statewide by 2020. These regulations would reduce statewide transportation-related GHG emissions by increasing average vehicle fuel economy, decreasing engine combustion emissions, and decreasing average VMT and trip length.

The key regulations affecting vehicle emissions include the national CAFE Standards that would increase average fuel economy to 35 mpg by 2020; the state Pavley I and II GHG Vehicle Emissions Standards that require improved vehicle engine technologies to reduce GHG emissions from vehicles, and the LCFS which reduce the carbon content of the fuel vehicles burn. These actions have been approved by either the national or state legislatures and are coming into effect on a staggered timeline, with 2016 being the earliest vehicle model year affected. As shown in Table 3.1.1-2, CARB estimates that an approximate 46.7 MMT CO_2e reduction, or 32 percent of the reduction target for capped sources and 27 percent of the total 174 MMT CO_2e reduction target specified in the Scoping Plan, would be achieved through just these two transportation-related regulatory actions. A third action, the Vehicle Efficiency Measure, is estimated by CARB to add another 4.5 MMT CO_2e, or 2.5 percent, to the total statewide reductions. The national CAFE Standards, while not quantified in the CARB Scoping Plan, would likely contribute to further reductions in statewide vehicle GHG emissions.

It can be assumed that vehicles associated with the Project would benefit from the new regulations, and associated vehicle emissions would accordingly decrease. These transportation-related emissions reductions would be achieved through mandatory regulations applicable to all vehicle emissions within the state and are not attributable to specific GHG reduction features of the Project.

Per the County's Guidelines, it is acceptable to apply the reductions attributed from Pavley II and LCFS towards the required 16 percent GHG emission reduction requirement for the Project. The CalEEMod program includes the impact of LCFS in its default emission factors. Consequently, the CalEEMod emission estimates for both unmitigated and mitigated conditions were adjusted to reflect the allowed reductions for the Project. The reduction associated with Pavley I is not allowed to be applied towards the reduction target, but is already accounted for in the CalEEMod defaults, therefore, no adjustment was made to either the unmitigated or mitigated condition.

CalEEMod assumed an annual total of 60,668,556 miles would be traveled each year by Project residents. Based on the annual VMT estimates, the unmitigated Proposed Project Scenario 1 would result in the GHG vehicle emissions of 25,278 MT CO_2e each year and Scenario 2 would generate 25,950 MT CO_2e each year.

Total GHG Emissions with Implementation of Project Design Features

The Proposed Project would incorporate design features to conserve energy and water; promote recycling and waste reduction; and make development accessible to public transit users, bicyclists, and pedestrians. Such environmental design considerations are presented in Table 1-3 of this EIR. In addition, the Proposed Project would obtain electricity from SDG&E, which is increasing its share of energy generated by renewable sources as mandated by AB 32. Table 3.1.1-7, Scenario 1 – Estimated Operational Emissions with Project Design Features and Table 3.1.1-8, Scenario 1 – Estimated Operational Emissions with Project Design Features, summarize the Proposed Project with project design features under both scenarios.

Vehicle Emissions. The Project would have a gross trip generation rate of 36,206 ADT. As discussed above, Pavley II and LCFS can be included toward the minimum 16 percent mitigation

requirement. Further, the Project would incorporate a mix of uses that would reduce overall VMT and corresponding GHG vehicular emissions. According to the CAPCOA methodology, a land use index measurement can be applied to the Proposed Project, based on Measure LUT-3 (CAPCOA 2010). The land use index measurement is based on the mix of land uses associated with a development. The Proposed Project would change the land use from a single commercial office land uses into a mix of industrial office, commercial retail, and residential land uses. The combined Pavley II (2.3%) and land use reductions (31%) would result in 32.3% reduction in vehicular emissions. However, since 30% is the maximum reduction credit allowed, the mitigated condition only reflects a reduction of 6,894 MT CO_2e towards vehicular emissions. This would result in the emission of 16,086 MT CO_2e annually from the Project for Scenario 1 and 16,514 MT CO_2e for Scenario 2.

Energy Emissions. The Proposed Project would be constructed in accordance with the current 2008 Title 24. The RPS beyond 20 percent (up to 33 percent) can be included toward the minimum 16 percent mitigation requirement. Therefore, the electricity emissions calculated for the unmitigated project were reduced by an additional 13 percent to account for further implementation of the RPS. Additionally, the project would exceed the current 2008 California Energy Code's energy efficiency standards by 15 percent. This would result in the emission of 4,022 MT CO_2e annually for Scenario 1 and 4,031 MT CO_2e for Scenario 2.

Water Emissions. Since the unmitigated Project would be constructed in accordance with current Title 24, the unmitigated Project water emissions were adjusted to account for the recent CalGreen mandate to reduce water consumption by 20 percent. This would result in the emission of 2,993 MT CO_2e annually for Scenario 1 and 3,707 MT CO_2e for Scenario 2.

Solid Waste Emissions. The Proposed Project solid waste emissions would be the same as the emissions calculated in Tables 3.1.1-5 and 3.1.1-6. This would result in the emission of 1,020 MT CO_2e annually under either scenario.

The Project has been designed in accordance with the Building Industry Association's CGB program, a professionally recognized green building program that identifies building performance standards to achieve improved energy efficiency, water conservation, sustainable materials use, waste reduction, lumber conservation, indoor air quality, and heat island avoidance. The key project CGB design features accounted for in the project GHG reduction estimates include: 15 percent greater energy efficiency than the current Title 24 2008 energy code; and 20 percent greater water savings than the current plumbing code. Incorporation of the following design measures (refer to Table 1-3 of this EIR) would ensure that the Proposed Project meets the reductions discussed above.

- The Project would exceed the current 2008 California Energy Code's residential and nonresidential energy efficiency standards by 15 percent as a mandatory project design feature. It would accomplish this through improved heating, ventilation and air condition (HVAC) systems and duct seals; enhanced ceiling, attic and wall insulation; Energy Star appliances; high-efficiency water heaters; energy-efficient three-coat stucco exteriors; energy-efficient lighting; and high-efficiency window glazing. These energy features would undergo independent third party inspection and diagnostics as part of the CGB

verification and commissioning process. The energy features would also be demonstrated/verified in the Project's Title 24 Compliance Report submitted during the building permit process.

- The Project's construction plans and specifications shall indicate in the general notes or individual detail drawings the advanced water conservation features such as advanced plumbing systems (e.g., parallel hot water piping or hot water recirculation systems, and fixtures such as ultra-low flow toilets, water-saving showerheads and kitchen faucets, and buyer-optional high-efficiency clothes washers), product specifications and methods of construction and installation that are required to surpass the state plumbing code by a minimum of 20 percent, to achieve a minimum 20 percent reduction in water usage. In accordance with CGB criteria, verification of the 20 percent reduction in potable water use shall be demonstrated by verifying each plumbing fixture and fitting meets the 20 percent reduced flow rate or by calculating a 20 percent reduction in the building water use baseline. This documentation shall be provided by the project applicant to the County prior to issuance of the first building permit. The performance of the water conservation design shall be verified through final inspection prior to issuance of a final certificate of occupancy.

  In addition to these indoor water use conservation features, the Project's outdoor landscaping plan minimizes turf, maximizes drought-tolerant plants, and incorporates weather-based irrigation controllers, multi-programmable irrigation clocks, and a high efficiency drip irrigation system. At the time of final inspection, a manual shall be placed in each building that includes, among other things, information about water conservation.

- In accordance with CalGreen criteria and state and local laws, at least 50 percent of on-site construction waste and ongoing operational waste would be diverted from landfills through reuse and recycling. To further minimize waste, the Project would incorporate recycled materials for flooring, and certified sustainable wood products and other recycled or rapidly renewable building materials where possible. Areas for storage and collection of recyclables and yard waste would be provided for each residence.

- To maximize shade and reduce heat island effects, the landscape plan includes strategic location of deciduous trees and other vegetation. Impervious surfaces, including paved parking areas, would also be minimized and pervious pavers used instead where practical. No CFC-based refrigerants would be used, and interior finishes, adhesives, sealants, paints and coatings, and carpet systems would be low in VOCs, and they would meet the testing and product requirements of one or more nationally recognized green product labeling programs. Compliance with these requirements of the CGB program shall be verified through documentation.

As evaluated per the County's GHG guidelines, the Project would achieve GHG reductions associated with statewide measures and project design features of 28 percent under Scenario 1 and 26 percent under Scenario 2. These reductions would meet the County's GHG reduction targets, and would therefore be consistent with the goals and strategies of local and state plans,

policies, and regulations aimed at reducing GHG emissions from land use and development. Impacts would be **less than significant**.

Applicable Plans, Policies, and Regulations

Guideline for the Determination of Significance

The Proposed Project would result in a significant impact associated with climate change if it would:

2. Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Guideline Source

This guideline is based on Appendix G of the State CEQA Guidelines.

Analysis

The regulatory plans and policies discussed extensively in Section 3.1.1.1 above aim to reduce national, state, and local GHG emissions by primarily targeting the largest emitters of GHGs: the transportation and energy sectors. Plan goals and regulatory standards are thus largely focused on the automobile industry and public utilities. For the transportation sector, the reduction strategy is generally three pronged: to reduce GHG emissions from vehicles by improving engine design; to reduce the carbon content of transportation fuels through research, funding and incentives to fuel suppliers; and to reduce the miles these vehicles travel through land use change and infrastructure investments.

For the energy sector, the reduction strategies aim to reduce energy demand, impose emission caps on energy providers, establish minimum building energy and green building standards, transition to renewable non-fossil fuels, incentivize homeowners and builders, fully recover landfill gas for energy, expand research and development, etc.

Local Plans

The Proposed Project would achieve substantial GHG reductions through green building design that includes improved energy efficiency, water conservation, sustainable materials use, and waste reduction. In addition to the County's discretionary review process, the CAP compliance checklist was prepared that compares the Project consistency with the measures in the CAP. The CAP compliance checklist is presented in Attachment B of the Climate Change Analysis Report (Appendix H of this EIR). Verification and commissioning of these features would occur through independent third party inspection and diagnostics. The Project would be consistent in achieving a 16 percent reduction relative to an unmitigated project, and would thus be consistent with the County's General Plan and anticipated CAP goals for private land use development.

State Plans

EO S-3-05 established GHG emission reduction targets for the state, and AB 32 launched the Climate Change Scoping Plan that outlined the reduction measures needed to reach these targets. The Scoping Plan and its implementing and complementary regulations are discussed at length in Section 3.1.1.1. As discussed above, the Project, evaluated relative to an unmitigated/baseline project, would be consistent in achieving the 16 percent reduction. As described in Section 4.1.1.1, the 16 percent reduction in GHG emissions goal relative to an unmitigated/baseline project is derived from CARB's 2010 updated 2020 emissions projections and revised 2011 Scoping Plan. The revised projections and Scoping Plan account for less overall growth and less energy/fuel consumption due to the long-term dampened economic conditions. CARB's revised baseline 2020 projection also accounts for the Pavley I and RPS 20 percent GHG reductions, which are two Scoping Plan measures that have since been adopted as regulations. Given a lower 2020 projected total emissions, and a fixed 1990 emissions level (as the target for 2020), CARB reduced the needed statewide reduction from 174 MMT CO_2e to 80 MMT CO_2e. Thus, by achieving a 16 percent reduction relative to unmitigated/baseline project emissions, the Project would be considered consistent with the revised 2011 Scoping Plan and AB 32's 2020 reduction target.

Summary

The Project design features would conform to the primary regulations and policies governing the control of GHG emissions stated above. Accordingly, with implementation of the Project design measures identified above, impacts associated with GHG emissions would be **less than significant**.

3.1.1.3 *Cumulative Impact Analysis*

As described in Section 3.1.1.1 of this discussion, the entire issue of global climate change requires cumulative review. As a result, additional discussion is not required.

3.1.1.4 *Significance of Impacts*

Based on the analysis provided above, Proposed Project climate change impacts related to Project construction and operation were found to be less than significant, based on the implementation of identified Project design measures and conformance with applicable regulatory requirements.

3.1.1.5 *Conclusion*

The Project would be compliant with federal, state, and local orders, ordinances, and regulations related to reductions in GHG and minimization of contribution to climate change. As noted above, the Project would be consistent with the County's 16 percent reduction target. The Project would comply with any state-mandated requirements resulting from AB 32 and the statewide emissions inventory, as well as County requirements resulting from the General Plan update process. Project-specific reductions beyond the AB 32 guidelines and compliance with future statewide and County programs would avoid both Project-direct and cumulatively considerable impacts.

Table 3.1.1-1
GLOBAL WARMING POTENTIALS (GWP) AND ATMOSPHERIC LIFETIMES (Years)

Gas	Atmospheric Lifetime (years)	100-year GWP*
CO_2	50-200	1
CH_4**	9-15	21
N_2O	120	310
HFC-23	264	11,700
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
HFC-152a	1.5	140
HFC-227ea	36.5	2,900
HFC-236fa	209	6,300
HFC-4310mee	17.1	1,300
CF_4	50,000	6,500
C_2F_6	10,000	9,200
C_4F_{10}	2,600	7,000
C_6F_{14}	3,200	7,400
SF_6	3,200	23,900

Source: USEPA 2010
* GWPs used here are calculated over a 100-year time horizon.
** The methane GWP includes direct effects and those indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

Table 3.1.1-2
CARB SCOPING PLAN RECOMMENDED GHG REDUCTION MEASURES

Recommended Reduction Measures	Estimated 2020 Reductions (MMT CO_2e)/Percent[1]
California Light-Duty Vehicle Greenhouse Gas Standards	31.7 (18.22%)
• Implement Pavley I Standards	
• Develop Pavley II light-duty vehicle standards	
Energy Efficiency	26.3 (15.11%)
• Building/appliance efficiency, new programs, etc.	
• Increase CHP generation by 30,000 GWh	
• Solar Water Heating (AB 1470 goal)	
Renewables Portfolio Standard (33% by 2020)	21.3 (12.24%)
Low Carbon Fuel Standard	15 (8.62%)
Regional Transportation-Related GHG Targets[2]	5 (2.87%)
Vehicle Efficiency Measures	4.5 (2.59%)

Table 3.1.1-2 (cont.)
CARB SCOPING PLAN RECOMMENDED GHG REDUCTION MEASURES

Recommended Reduction Measures	**Estimated 2020 Reductions (MMT CO_2e)/Percent[1]**
Goods Movement	3.7 (2.13%)
• Ship Electrification at Ports	
• System-wide Efficiency Improvements	
Million Solar Roofs	2.1 (1.21%)
Medium/Heavy Duty Trucks	1.4 (0.80%)
• Heavy-Duty Vehicle GHG Reduction (Aerodynamic Efficiency)	
• Medium- and Heavy-duty Vehicle Hybridization	
High Speed Rail	1.0 (<1.0%)
Industrial Measures (for sources covered under cap & trade program)	0.3 (<0.5%)
• Refinery Measures	
• Energy Efficiency and Co-benefits Audits	
Additional Reductions Necessary to Achieve the Cap	34.4 (20%)
Industrial Measures (for sources not covered under cap & trade program)	1.1 (<1%)
• Oil and Gas Extraction and Transmission	
High Global Warming Potential Gas Measures	20.2 (12%)
Sustainable Forests	5.0 (3%)
Recycling and Waste (landfill methane capture)	1.0 (0.6%)
TOTAL ESTIMATED REDUCTIONS COUNTED TOWARDS 2020 TARGET [3]	**174**
Other Recommended Measures	**Estimated 2020 Reductions (MMT CO_2e)/Percent**
State Government Operations	1-2%
Local Government Operations	TBD
Green Building	26 (14.94%)
Recycling and Waste	9 (5.17%)
Water Sector Measures	4.8 (2.76%)
Methane Capture at Large Dairies	1.0 (<1%)

Source: CARB 2008

Note: CARB's 2010 revised BAU 2020 projections of 507 MMT CO_2e, based on the economic downturn and incorporation of Pavley I and 20 percent RPS, indicate that the total reduction for the recommended measures is now 80 MMT CO_2e.

[1] Percentages are relative to the total of 174 MMT CO_2e, and may not total 100 due to rounding.

[2] This number represents an estimate of what may be achieved from local land use changes. It is not the SB 375 regional target. CARB will establish regional targets for each MPO following input of the Regional Targets Advisory Committee and a public stakeholders consultation process per SB 375.

[3] The total reduction for the recommended measures slightly exceeds the 169 MMT CO_2e of reductions estimated in CARB's BAU 2020 Emissions Forecast of 596 MMT CO_2e made in 2008. This is the net effect of adding several measures and adjusting the emissions reduction estimates for some other measures.

Table 3.1.1-3
ESTIMATED CONSTRUCTION EMISSIONS
(OPTION 1) (MT/YR)

		CO_2	CH_4	N_2O	CO_2e
PA	**Year**	**MT/yr**			
Mass Grading for All PAs	2015	6,069.48	0.50	0.00	6,079.94
4 & 5	2016	409.98	0.04	0.00	410.81
2, 4 & 5	2017	3,137.59	0.22	0.00	3,142.24
2	2018	3,526.92	0.23	0.00	3,531.69
2	2019	3,356.96	0.20	0.00	3,361.12
2	2020	338.99	0.02	0.00	339.48
2 & 3	2021	1,805.23	0.10	0.00	1,807.50
2 & 3	2022	663.24	0.05	0.00	664.18
1	2023	785.92	0.03	0.00	786.59
1	2024	14.53	0.00	0.00	14.55
TOTAL CONSTRUCTION GHG EMISSIONS					20,138.10

Source: HELIX 2013c

Table 3.1.1-4
ESTIMATED CONSTRUCTION EMISSIONS
(OPTION 2) (MT/YR)

		CO_2	CH_4	N_2O	CO_2e
PA	**Year**	**MT/yr**			
Mass Grading 1st Part	2015	4,576.12	0.38	0.00	4,584.20
4 & 5	2016	409.98	0.04	0.00	410.81
2, 4 & 5	2017	3,137.59	0.22	0.00	3,142.24
2	2018	3,526.92	0.23	0.00	3,531.69
2	2019	3,356.96	0.20	0.00	3,361.12
2	2020	338.99	0.02	0.00	339.48

Table 3.1.1-4 (cont.)
ESTIMATED CONSTRUCTION EMISSIONS
(OPTION 2) (MT/YR)

		CO_2	CH_4	N_2O	CO_2e
PA	**Year**	**MT/yr**			
Mass Grading 2nd Part	2020	840.73	0.06	0.00	841.96
2 & 3	2021	1,805.23	0.10	0.00	1,807.50
2 & 3	2022	663.24	0.05	0.00	664.18
1	2023	785.92	0.03	0.00	786.59
1	2024	14.53	0.00	0.00	14.55
TOTAL CONSTRUCTION GHG EMISSIONS					19,484.32

Source: HELIX 2013c

Table 3.1.1-5
SCENARIO 1 - ESTIMATED UNMITIGATED OPERATIONAL EMISSIONS (MT/YR)

Source	CO_2	CH_4	N_2O	CO_2e
	MT/yr			
Amortized Construction	1,005.44	0.07	0.00	1,006.91
Area	1,209.30	0.02	0.05	1,226.71
Energy	4,213.23	0.15	0.06	4,235.49
Mobile	25,256.44	1.04	0.00	25,278.46
Waste	454.95	26.89	0.00	1,019.57
Water	3,124.73	19.86	0.53	3,707.32
TOTAL	35,264.09	48.03	0.64	36,474.46

Source: HELIX 2013c – CalEEMod results are provided in Attachment A of EIR Appendix H.

Table 3.1.1-6
SCENARIO 2 - ESTIMATED UNMITIGATED OPERATIONAL EMISSIONS (MT/YR)

Source	CO_2	CH_4	N_2O	CO_2e
	MT/yr			
Amortized Construction	1,005.44	0.07	0.00	1,006.91
Area	1,209.30	0.02	0.05	1,226.71
Energy	4,221.85	0.15	0.06	4,244.16
Mobile	25,927.35	1.078	0.00	25,950.10
Waste	454.95	26.89	0.00	1,019.57
Water	3,124.73	19.86	0.53	3,707.32
TOTAL	35,943.62	48.068	0.64	37,154.77

Source: HELIX 2013c – CalEEMod results are provided in Attachment A of EIR Appendix H.

Table 3.1.1-7
SCENARIO 1 - ESTIMATED OPERATIONAL EMISSIONS WITH PROJECT DESIGN FEATURES (MT/YR)

Source	CO_2	CH_4	N_2O	CO_2e
	MT/yr			
Amortized Construction	1,005.44	0.07	0.00	1,006.91
Area	1,209.30	0.02	0.05	1,226.71
Energy	4,001.22	0.14	0.06	4,022.32
Mobile	16,072.28	0.91	0.00	16,086.29
Waste	454.95	26.89	0.00	1,019.57
Water	2,526.58	15.89	0.43	2,992.79
TOTAL	25,269.77	43.92	0.54	26,354.59

Source: HELIX 2013c – CalEEMod results are provided in Attachment A of EIR Appendix H.

Table 3.1.1-8
SCENARIO 2 - ESTIMATED OPERATIONAL EMISSIONS WITH PROJECT DESIGN FEATURES (MT/YR)

Source	CO_2	CH_4	N_2O	CO_2e
	MT/yr			
Amortized Construction	1,005.44	0.07	0.00	1,006.91
Area	1,209.30	0.02	0.05	1,226.71
Energy	4,009.58	0.14	0.06	4,030.73
Mobile	16,499.22	0.98	0.00	16,513.70
Waste	454.95	26.89	0.00	1,019.57
Water	3,124.73	19.86	0.53	3,707.32
TOTAL	26,303.22	47.97	0.64	27,504.94

Source: HELIX 2013c – CalEEMod results are provided in Attachment A of EIR Appendix H.

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3.1.2 Geologic Hazards

The 1981 Sycamore Springs and 1983 Hewlett Packard EIRs identified geological impacts to developed uses as significant but mitigable. Technical reports prepared for the 1981 and 1983 EIRs are incorporated by reference and available for review at the County PDS office.

A Geotechnical Reconnaissance was conducted for the Proposed Project by Geotechnics in 2004, and updated in 2008 to assess Project site, regulatory, industry and proposed design conditions at that time (Geotechnics 2004, 2008). A Geotechnical Investigation of the Proposed Project was also conducted by Leighton and Associates (Leighton) in 2012. This investigation includes more detailed analyses of site geotechnical conditions and currently proposed development, based on information such as site plans, subsurface exploration (e.g., borings) and laboratory testing, and is provided as Appendix I to this EIR. The results of the referenced geotechnical analyses are summarized below along with other pertinent data (including applicable information from the previous studies), with the complete reports included in Appendix I.

Portions of the previous geotechnical and related EIR analyses can be carried forward to the current evaluation as noted, including appropriate information related to stratigraphy, fault locations and activity status, and potential hazards associated with liquefaction, settlement, and expansive soils. These discussions are supplemented, however, with applicable information and conclusions from the 2012 Geotechnical Investigation prepared for the Proposed Project to reflect updated and more detailed technical analysis (e.g., field/laboratory evaluations), industry standards, regulatory requirements, and Project design revisions.

3.1.2.1 *Existing Conditions*

Geological Setting

Regional Geology/Topography

The Project site and vicinity are located within the coastal subprovince of the Peninsular Ranges Geomorphic Province, a region characterized by northwest-trending structural blocks with intervening fault zones and a relatively level coastal plain. Typical lithologies in the Peninsular Ranges include a variety of igneous intrusive (i.e., formed below the surface) rocks associated with the Cretaceous (between approximately 65 and 135 million years old) Southern California Batholith (a large igneous intrusive body), with such igneous bodies typically intruded into older metavolcanic and/or metasedimentary units in western San Diego County. Basement rocks in the coastal portion of San Diego County are locally overlain by a sequence of primarily Tertiary (between approximately 2 and 65 million years old) marine and non-marine sedimentary strata, with most of these deposits associated with several sea level advance/retreat cycles over approximately the last 55 million years. Tertiary sedimentary rocks are generally not present in the Project site vicinity, but occur in coastal areas to the west. The described geologic sequence is locally overlain with Quaternary (less than approximately two million years old) materials such as alluvial deposits, colluvium, and topsoil.

Topographically, the Peninsular Ranges are composed of generally parallel ranges of steep-sloped hills and mountains separated by alluvial valleys. More recent uplift and erosion has produced the characteristic canyon and mesa topography present today in western San Diego County, as well as the deposition of Quaternary deposits noted above.

Site Geology/Topography

Geologic and surficial units observed or expected to occur within the Project site and applicable off-site areas include Cretaceous-age granitic and/or gabbroic igneous intrusive rocks, Quaternary-age alluvial terrace deposits, alluvium, residual topsoil/colluvium, and undocumented fill. Basement igneous rocks within the site and vicinity are uncomformably overlain by Quaternary-age materials and historic fill. Additional description of geologic and surficial units within the Project site and vicinity is provided below under Stratigraphy.

On-site topography is characterized by generally level to moderately rolling terrain, with gentle to moderate slopes in most areas north of SR-76 and predominantly level conditions to the south near the San Luis Rey River and in larger drainages. On-site elevations range from approximately 266 feet amsl in low-lying alluvial areas near the San Luis Rey River, to 320 feet amsl along portions of the northern slopes. Surface drainage from the Project site flows primarily south to the San Luis Rey River, with internal drainage also moving generally to the south although somewhat variable with topography.

Stratigraphy

Surficial and geologic exposures within or underlying the Project site and vicinity are described below in order of increasing age, with principal geologic units shown on Figure 3.1.2-1, Geologic Map.

Historic Undocumented Fill (Map Symbol Afu). Undocumented fill deposits (i.e., undocumented for conformance with applicable geotechnical regulatory standards) are present in various portions of the site, primarily in association with Pankey Road (although other localized occurrences may also be present). In addition, off-site areas proposed for improvements such as roadway modifications and utility extensions consist predominantly of previously developed sites that encompass documented and/or undocumented fill. These materials were likely derived from local sources and encompass soil and/or alluvial deposits as described below.

Holocene (less than approximately 11,000 years old) Native Topsoil/Colluvium (not mapped). The U.S. Natural Resources Conservation Service (NRCS; formerly the U.S. Soil Conservation Service) has conducted topsoil mapping within the site and vicinity (1973). Four soil series (Grangeville, Ramona, Visalia, and Tujunga) represented by seven individual soil types are mapped within the Project site, with a summary description of soil series characteristics provided in Table 3.1.2-1, Summary Description of Soil Series Properties within the Project Site and Applicable Off-site Areas. Topsoil deposits within portions of the Project site and applicable off-site areas that have been previously graded or disturbed have likely been removed or altered, although intact soils are assumed to be present in undisturbed areas. Previous studies conducted

for adjacent parcels have determined that local topsoils typically extend to depths of one to five feet, although deeper soils may be present locally.

Colluvium (or slope wash) is locally associated with native topsoils, and consists of weathered material transported chiefly by gravity. Colluvial deposits generally tend to accumulate along slope faces or bottoms, and are typically composed of larger and more angular materials than topsoils.

Quaternary Alluvium (Map Symbol Qal). Alluvium within the Project site and vicinity is associated with deposition from larger active stream courses, including the San Luis Rey River and Horse Ranch Creek. Alluvial materials occur widely in the southern portion of the site (south of SR-76) and in larger drainage courses to the north. In the northern areas, alluvial deposits generally consist of poorly consolidated (loose) deposits of clay, silt and sand, while in the southern areas alluvium is comprised of loose to medium dense, fine- to coarse-grained sand, silty fine- to medium-grained sand, and sandy silt. On-site alluvium is expected to extend to average depths of approximately 5 to 10 feet north of SR-76, while the southern area may include alluvial deposits extending to depths of 70 feet.

Quaternary Terrace Deposits (Map Symbol Qt). Terrace deposits are associated with much of the rolling terrain present in the northern Project site. These materials are differentiated from alluvium by a greater degree of consolidation, and typically exhibit higher silt and clay content. The upper portions of these deposits are more highly weathered, with this weathered zone generally extending to depths of between 2 and 10 feet.

Cretaceous Granitic and/or Gabbroic Rocks. Granitic rocks are not exposed within the Project site, but occur in nearby surrounding areas and likely underlie the entire site at depth. These deposits are associated with the Southern California Batholith, and include rocks of variable granitic composition as well as the San Marcos Gabbro. Local igneous rocks weather to a distinctive bouldery appearance, and are typically light gray to light brown in color.

Groundwater

Groundwater was observed on site at depths of between 13 and 18 feet below the surface in all four exploratory borings conducted as part of the 2012 Geotechnical Investigation. Observed groundwater depths generally decrease to the north, with previous geotechnical investigations encountering groundwater as shallow as three feet below the surface of alluvial deposits in the northern portion of the Project site (Appendix I). The reader is also referred to Section 3.1.4, Hydrology and Water Quality, of this subchapter for additional detail on this topic.

Structure/Seismicity

The alluvial and terrace deposits observed during the 2012 Geotechnical Investigation are generally massive (i.e., not encompassing distinctive geologic structure, such as bedding), with localized cross-bedding and predominantly flat bedding where present (Appendix I).

The Project site, like all of southern California, is located within a broad, seismically active region characterized by a series of northwest-trending faults associated with the San Andreas Fault System. No active or potentially active faults are mapped or known to occur within or adjacent to the Project site. Active faults are defined as those that exhibit Holocene displacement or historic activity, while potentially active faults displace Pleistocene, but not Holocene, strata. The closest such structures are located within the Elsinore-Temecula Fault Zone, approximately 7.8 miles to the north. Several additional major active faults are also located in the Project region, with location and seismicity data for major faults within approximately 50 miles of the site summarized in Table 3.1.2-2 (and additional data provided in Appendix I). Estimated peak horizontal ground acceleration (or ground shaking) values associated with proximal active faults are also shown, with an estimated maximum peak acceleration value of 0.34 g (where g equals the acceleration due to gravity) identified for the Project site in association with a magnitude 7.1 event along the Elsinore-Julian Fault Zone. Based on 2010 California Building Code (CBC) procedures and the U.S Geological Survey Earthquake Hazard Program (GMT), the 2012 Geotechnical Investigation identifies a design earthquake with a magnitude of 7.6 and a corresponding peak ground acceleration of 0.4g for the Project site (Appendix I). This design ground acceleration value is used to evaluate related site-specific hazards such as liquefaction.

No fault-rupture hazard zones or other seismic hazard designations identified by the California Geologic Survey (CGS, formerly the California Division of Mines and Geology [CDMG]) are present within the Project site or the immediate vicinity (CGS 2007). The closest CGS Fault-Rupture Hazard Zone designations are located along the previously noted portion of the Elsinore-Temecula Fault Zone. The described CGS fault-rupture hazard designations are generally intended to "[r]egulate development near active faults so as to mitigate the hazard of surface fault rupture" (CGS 2007). The Project site is also not located within a County-designated Special Study Fault Zone or Near-Source Shaking Zone, as identified in the *Guidelines for Determining Significance, Geologic Hazards* (County 2007e). Similar to all of San Diego County, Campus Park West is within a Seismic Zone 4 designation. Seismic Zone 4 is the highest risk category of the four nationwide seismic zones, and generally exhibits a 10 percent chance of experiencing an earthquake-generated peak ground acceleration of 0.4g within the next 50 years. For comparison purposes, Seismic Zone 1 (the lowest risk category) exhibits a 10 percent chance of experiencing an earthquake-generated peak ground acceleration of 0.1g within the next 50 years.

Geologic Hazards

Seismic Ground Rupture. Seismic ground rupture is the physical surface (or near surface) displacement (typically along a fault structure) resulting from earthquake-induced movement. Based on the absence of known active and potentially active faults within the Project vicinity, the potential for associated seismic ground rupture is considered low (Appendix I).

Seismic Ground Acceleration (Ground Shaking). Seismically generated ground shaking typically represents the most substantial hazard associated with earthquakes, and can affect the integrity of surface and subsurface facilities such as structures, foundations and utilities. Based on technical analysis conducted as part of the 2012 Geotechnical Investigation (and as previously described), a design peak ground acceleration value of 0.4g has been assumed for the Project site

and vicinity. Associated potential effects can occur directly from vibration-related damage to rigid structures, or indirectly through associated hazards including liquefaction (as described below).

Liquefaction/Dynamic Settlement and Related Hazards. Liquefaction and dynamic settlement of soils can be caused by seismic ground shaking. Loose, saturated and granular soils are the most susceptible to these effects, which result in a loss of shear strength and result in soils behaving as a viscous liquid. Surface manifestations from these events can include loss of support for structures/foundations, excessive (dynamic) settlement, the occurrence of sand boils (i.e., sand and water ejected at the surface), and other effects such as lateral spreading (horizontal displacement on sloped surfaces as a result of underlying liquefaction). The Project geotechnical investigations identify the potential for on-site liquefaction and related effects (including lateral spreading) in portions of the southern site. Specifically, this includes proposed improvements south of Pala Road and the Pankey Road realignment/bridge, as well as the area southwest of PAs 4 and 5. The referenced County significance guidelines for Geologic Hazards also identify the San Luis Rey River as one of several primary areas for potential liquefaction hazard, and map the River valley near the Project site as a potential liquefaction area (County 2007e). Based on these considerations, the potential for liquefaction/dynamic settlement and related effects in applicable portions of the Project site and vicinity in association with a design earthquake is generally high.

Landslides. The 2012 Geotechnical Investigation included evaluation of landslide potential based on efforts such as field investigation and review of aerial photographs, previous investigations and technical literature. From this analysis, it was concluded that no mapped landslide deposits or topographic features indicative of landslides were present within or adjacent to the site, and the potential for associated landslides or large-scale slope instabilities is considered low. Potential landslide and/or rock fall hazards were identified for off-site areas along Horse Ranch Creek Road that are associated with utilities (subsurface water and sewer lines) identified as part of the proposed Project.

Expansive Soils. Expansive (or shrink-swell) behavior is attributable to the water-holding capacity of clay minerals and can adversely affect the integrity of facilities such as pavement or structure foundations. Based on field investigation and laboratory analysis, the 2012 Geotechnical Investigation concludes that on-site soils generally have a low expansion potential, although it is noted that "Localized deposits of highly expansive soils may also be present." As shown in Table 3.1.2-1, the soil types mapped on the Project site typically have low to moderate expansion potential, and are not on the list of clay soils in the County guidelines for geologic hazards. The site also is not within any "Expansive Soil Areas" as mapped in the County guidelines (2007e). Accordingly, the potential for expansive soils to occur on the Project site and applicable off-site areas is considered low, although localized deposits may be present. Specifically, as noted above under the discussion of Landslides, this could potentially include portions of the off-site area along Horse Ranch Creek Road associated with utilities (subsurface water and sewer lines) identified as part of the proposed Project.

Non-seismic Compression/Settlement. A number of surficial materials present within the site and vicinity may be subject to compression and settlement under load (i.e., after site

development) and/or if saturated, including undocumented fill, topsoil/colluvium, alluvium and weathered terrace deposits. Compression and settlement can result in damage to surface and subsurface facilities (e.g., pipelines) through effects such as displacement, cracking or differential settlement (i.e., variable degrees of settlement over short distances). Based on the described considerations, the potential for non-seismic compression and settlement at the Project site is considered high.

Shallow Groundwater. As previously described, shallow groundwater is expected to occur on site at depths as shallow as three feet below the surface. While the presence of shallow groundwater is not a geologic hazard per se, it can contribute to other potential hazards (e.g., liquefaction) as outlined in this section, and may necessitate temporary dewatering to accommodate Project-related grading and excavation. If dewatering is required, it would be subject to associated regulatory compliance requirements under the National Pollutant Discharge Elimination System (NPDES), with additional discussion provided in Section 3.1.4 of this subchapter.

Tsunamis, Seiches and Earthquake-induced Flooding. Due to the site location and distance relative to open water bodies and containment facilities (e.g., dams), as well as the distance from and barriers between the site and the coast (e.g., topography), the potential for on-site tsunamis, seiches, or earthquake-induced flooding is considered nil (Appendix I). Based on this assessment, potential hazards and related Project impacts associated with tsunamis, seiches and earthquake-induced flooding are not discussed further in this section.

Oversize Materials. Project-related grading and excavation can potentially result in the generation of oversize materials (i.e., greater than approximately eight inches in maximum dimension). Such materials could pose potential development hazards if improperly handled or placed on site. Specifically, the presence of oversize materials in engineered fills can result in effects such as differential settlement, with related issues including adverse effects to overlying structures, pavement, or drainage. Based on the described geologic conditions and the fact that igneous granitic/gabbroic rocks are unlikely to be encountered during construction, the potential to generate oversize materials during Project implementation is considered generally low.

Corrosive Soils. The 2012 Geotechnical Investigation included an assessment of potential corrosive soil hazards related to soluble sulfate concentrations, pH levels, resistivity values (i.e., the ability to restrict, or resist, electric current), and chloride content. Long-term exposure to corrosive soils can result in deterioration and eventual failure of underground concrete and metal structures, including foundations or utility lines. Based on field and laboratory analyses, the following conclusions were provided for corrosive soils in the Project site and vicinity: (1) the potential for corrosion hazards to concrete from soluble sulfate concentrations and pH levels is considered low; (2) the potential for corrosion hazards to buried and uncoated metals from chloride content is considered low; and (3) the potential for corrosion hazards to buried and uncoated metals from resistivity values is considered very high.

Regulatory Framework

Development of the Proposed Project is subject to a number of regulatory requirements and industry standards related to potential geologic/soil hazards. Geologic/soil requirements and standards typically involve measures to evaluate risk and minimize potential hazards through design and construction techniques. Specific guidelines with geologic/soil criteria that may be applicable to the design and construction of the Proposed Project include the following: (1) San Diego County General Plan Seismic Safety Element (1991); (2) County Guidelines for Determining the Significance – Geologic Hazards (2007e); (3) Title 8, Division 4 (Design Standards and Performance Requirements) and Division 7 (Excavation and Grading), and Title 5, Division 1 (Amendments to the State Building Standards Code) of the San Diego County Code of Regulatory Ordinances; (4) the International Code Council (ICC) International Building Code (IBC, most recent update) and related California Building Code (CBC); and (5) the Greenbook Committee of Standard Specifications for Public Works Projects (most recent update). Summary descriptions of these guidelines are provided below, with specific elements applicable to the Proposed Project discussed in Section 3.1.2.2.

County Standards

The San Diego County General Plan Seismic Safety Element is intended to identify and evaluate seismic hazards in San Diego County and to provide policies to reduce the loss of life and property damage related to seismic hazards. Associated policies in the Seismic Safety Element applicable to the Proposed Project include requirements for submittal and approval of appropriate geotechnical investigations, as well as conformance with applicable laws and standards such as County Hazard Maps, the Alquist-Priolo Act (for Fault-Rupture Hazard Zones), and the IBC/CBC.

The County Guidelines for Determining the Significance of Geologic Hazards provide direction for evaluating environmental effects related to geologic hazards. Specifically, these guidelines address potential adverse effects to life and property (pursuant to applicable CEQA standards) from hazards, including fault rupture, ground shaking, liquefaction, landslides, rockfalls, expansive soils, and tsunamis/seiches. The Geologic Hazard Guidelines identify significance guidelines for the noted issues, as well as related regulatory standards, methodologies, for identifying/evaluating impacts and related potential mitigation/design measures, and reporting requirements.

International Building Code and Greenbook Standards

The ICC publishes the IBC, which replaced the Uniform Building Code, or UBC, in 2000. Publication of the *Greenbook, the Standard Plans for Public Works Construction,* is under the oversight of Public Works Standards, Inc. (PWSI), a nonprofit mutual benefit corporation whose members include the American Public Works Association, Associated General Contractors of California, and Engineering Contractors Association. The Greenbook and IBC provide standard specifications for engineering and construction activities, including measures to address geologic and soil issues for roads and structures. Specifically, these measures encompass issues such as seismic parameters (e.g., classifying seismic zones and faults), engineered fill specifications

(e.g., compaction and moisture content), expansive soil characteristics, and pavement design. The referenced guidelines, while not comprising formal regulatory requirements per se, are widely accepted by regulatory authorities and are routinely included in related standards, such as municipal grading codes. The IBC and Greenbook guidelines are regularly updated to reflect current industry standards and practices, including criteria from sources such as ASTM International (ASTM, formerly known as the American Society for Testing and Materials). The previously noted CBC guidelines are derived from the IBC and encompass criteria specific to California, such as geologic and seismic characteristics.

3.1.2.2 *Analysis of Project Effects and Determination as to Significance*

As previously described, a number of geotechnical investigations have been conducted for the Proposed Project. While all of these analyses identify potential geotechnical concerns, appropriate measures are identified to address related hazards identified in association with the proposed development. Specifically, all of the noted studies conclude that the Project is feasible form a geotechnical perspective, including the most current and detailed report (Appendix I), which states "[t]he site is suitable for the proposed development provided that the recommendations presented herein are incorporated into the design, grading and construction of the site." The discussion of potential impacts provided below is applicable to both Project development scenarios (**Scenarios 1** and **2**). Similarly, because of the consistency of geologic issues relative to the Project area, the discussion of on-site impacts is also directly applicable to proposed off-site road and utility development unless specifically noted otherwise.

Fault Rupture

Guideline for the Determination of Significance

A significant geologic impact would occur if:

1. The Project proposes any building or structure to be used for human occupancy over or within 50 feet of the trace of an Alquist-Priolo fault or County Special Zone fault.

Guideline Source

This guideline is based on the County Guidelines for Determining the Significance – Geologic Hazards (July 30, 2007).

Analysis

No known active or potentially active faults are located within or adjacent to the Project site. While the potential for on-site ground rupture and related effects (e.g., lurching) associated with off-site seismicity cannot be totally discounted, the potential occurrence of these types of effects onsite is identified as "not likely" in the 2012 Geotechnical Investigation. Thus, implementation of the Proposed Project, as related to seismic ground rupture, would result in a **less than significant impact**.

Ground Shaking

Guideline for the Determination of Significance

A significant geologic impact would occur if:

2. The Project site is located within a County Near-Source Seismic Shaking Zone or within Seismic Zone 4, and the Project would not conform to the IBC.

Guideline Source

This guideline is based on the County Guidelines for Determining the Significance – Geologic Hazards (July 30, 2007).

Analysis

While the Project site and vicinity are not located within a County Near-Source Seismic Shaking Zone, they are (like all of San Diego County) within a Seismic Zone 4 designation. Accordingly, the site and vicinity may be subject to substantial ground shaking from larger earthquake events along one or more major regional faults. Based on these conditions, the 2012 Geotechnical Investigation has assumed a design peak ground acceleration value of 0.4g for the Project (Appendix I), with such ground shaking levels capable of producing substantial damage and related effects to Project structures and other facilities. The 2012 Geotechnical Investigation identifies a number of standard design measures to address these potential impacts, including the following: (1) use of the noted design ground acceleration level; (2) other related considerations such as appropriate subsurface profile types, acceleration and velocity coefficients, and seismic source (including type and distance); and (3) applicable seismic elements of the IBC/CBC and County Building Code. Specifically, these measures would involve incorporating the noted factors into the design of facilities such as structures, foundations/slabs, pavement and utilities, as well as related activities including remedial grading (e.g., removal and/or reconditioning liquefiable soils), manufactured slope/retaining wall design, site drainage, and fill composition/placement. Implementation of the noted design measures and related efforts would be verified through standard plan review and on-the-ground geotechnical observations and testing during Project excavation, grading, and construction activities, as outlined in the 2012 Geotechnical Investigation. Based on these efforts, site-specific modifications to the described recommendations would be implemented as necessary to ensure conformance with all applicable regulatory requirements and industry standards. Implementation of and conformance with such recommendations and standards would effectively avoid or reduce potential seismic ground acceleration hazards to a **less than significant** level.

Liquefaction/Dynamic Settlement and Related Hazards

Guideline for the Determination of Significance

A significant geologic impact would occur if:

3. The Project site has the potential to expose people or structures to substantial adverse effects because: (1) the Project site has potentially liquefiable soils; (2) the potentially liquefiable soils are saturated or have the potential to become saturated; and (3) in-situ soil densities are not sufficiently high to preclude liquefaction.

Guideline Source

This guideline is based on the County Guidelines for Determining the Significance – Geologic Hazards (July 30, 2007).

Analysis

The southern portion of the Project site and applicable off-site areas located near SR-76 contain soils susceptible to liquefaction and related effects such as dynamic settlement and lateral spreading. These potential hazards would be addressed through standard measures to reduce the potential for liquefaction and related effects, including removal/replacement of unsaturated soils, vibro-compaction of saturated materials, deep soil mixing (i.e., introducing cement to consolidate loose soils), and the use of stone or sand columns and/or vibro-replacement/densification techniques. As noted above under the discussion of Ground Shaking, site-specific conditions and remedial efforts associated with liquefaction hazards would be verified through standard plan review and on-the-ground geotechnical observations and testing during Project excavation, grading, and construction activities. As a result, site-specific modifications would be implemented as necessary to ensure conformance with all applicable regulatory requirements and industry standards. Implementation of and conformance with geotechnical investigation recommendations and standards would effectively avoid or reduce associated potential liquefaction and related hazards to a **less than significant** level.

Landslides

Guidelines for the Determination of Significance

A significant geologic impact would occur if:

4. The Project site would expose people or structures to substantial adverse effects, including the loss, injury, or death involving landslides;

5. The Project is located on a geologic unit or soil that is unstable or would become unstable as a result of the Project, potentially resulting in an in- or off-site landslide; and

6. The Project site lies directly below or on a known area subject to rockfall that could result in collapse of structures.

Guideline Source

These guidelines are based on the County Guidelines for Determining the Significance – Geologic Hazards (July 30, 2007).

Analysis

The Project geotechnical investigations did not identify any evidence of historic landslide deposits or other on-site conditions, such as topographic features, indicative of landslide hazards. In addition, while some potential for landslides and/or rock falls was identified for off-site areas along Horse Ranch Creek Road associated with Project utilities (i.e., water and sewer lines), no associated adverse effects are anticipated due to the subsurface location of these facilities. Accordingly, potential landslide-related impacts and associated risks to life and structures from implementation of the Proposed Project would be **less than significant**.

Expansive Soils

Guideline for the Determination of Significance

A significant geologic impact would occur if:

7. The Project is located on expansive soil, as defined in Section 1802.32 of the IBC (2006) and does not conform to the IBC.

Guideline Source

This guideline is based on the County Guidelines for Determining the Significance – Geologic Hazards (July 30, 2007).

Analysis

While the potential for expansive soils to occur within the Project site and vicinity is low, localized deposits of expansive materials potentially could be encountered during Project development, including off-site areas along Horse Ranch Creek Road associated with Project utilities (i.e., water and sewer lines). As previously described, site-specific conditions and remedial efforts associated with geologic hazards (including expansive soils) would be verified through standard plan review and on-the-ground geotechnical observations and testing during Project excavation, grading, and construction activities. As a result, site-specific measures would be implemented as necessary to ensure conformance with all applicable regulatory requirements and industry standards. For expansive soils, this may include standard measures such as mixing with non-expansive material, burial in deeper fills, use of stiffer slab/foundation design, presaturation, overexcavation, or other IBC/CBC-recommended measures. Implementation of such design and construction recommendations, as well as conformance with

applicable County, IBC/CBC or other pertinent guidelines, would avoid or reduce impacts from expansive soils to a **less than significant** level.

Other Potential Geotechnical Impacts

Guideline for the Determination of Significance

A significant geologic impact would occur if:

8. The Project would be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project, and potentially would result in on- or off-site structure loss, injury, or death.

Guideline Source

This guideline is derived from CEQA Guidelines Appendix G.

Analysis

Potential geologic hazards addressed under this threshold include compression/settlement, oversize materials, and corrosive soils. As previously described, the potential occurrence of shallow groundwater is not a geologic or geotechnical hazard per se, and is therefore not specifically addressed here (although it is addressed in the context of related hazards, such as liquefaction, as well as in Section 3.1.4 of this subchapter). The Project site and vicinity site also contain a number of surficial materials with moderate or high erosion potential (e.g., topsoils and alluvium). Due to the relationship with water quality concerns, however, potential erosion and sedimentation issues associated with the Proposed Project are discussed in Section 3.1.4 of this subchapter.

Compression/Settlement. The Project geotechnical investigations identify a number of surficial and underlying materials that may be susceptible to compression and settlement, including fill, topsoil/colluvium, alluvium and weathered terrace deposits. A number of standard measures are identified to address these concerns, including removal and recompaction or replacement of compressible deposits with engineered fill. The 2012 Geotechnical Investigation also notes that "Saturated alluvium that is left in-place may consolidate/settle under proposed fill loads…there will be some ongoing settlement after grading is complete." Accordingly, it is recommended that standard settlement monuments and monitoring be used in applicable areas after completion of Project grading, and prior to construction of proposed improvements, to verify when settlement of saturated alluvium ceases or is no longer a hazard to Project facilities. Thirteen preliminary settlement monument locations have been identified in areas of substantial alluvial deposits (Figure 3.1.2-1, Geologic Map), with associated monitoring anticipated to extend over a period of approximately three to six months (and potentially extending up to one year locally). Once it is determined that significant settlement is no longer occurring in the monitored areas, proposed construction of Project improvements would commence. Based on the implementation of standard remedial measures, as well as site-specific settlement monitoring and related

schedule restrictions as described for areas of saturated alluvium, associated potential compression/settlement impacts effects would be **less than significant.**

An additional area of potential compression/settlement identified in the 2012 Geotechnical Investigation involves the proposed Pankey Road bridge. Specifically, the proposed bridge design would encompass a deep foundation consisting of driven plies or cast-in-drilled-hole (CIDH) piles. Based on the occurrence of deep alluvium in this area, the noted foundation design and related construction efforts would be verified through standard plan review and on-the-ground geotechnical observations and testing to be conducted during Project excavation, grading, and construction activities (as previously described under the discussion of Ground Shaking and outlined in the 2012 Geotechnical Investigation). As a result, site-specific modifications to the noted foundation design are expected to be minor and limited to the length of the foundation piles, with any such modifications to be implemented as necessary to ensure conformance with all applicable regulatory requirements and industry standards. Implementation of and conformance with the described recommendations and standards would effectively avoid or reduce potential compression/settlement hazards related to the Pankey Road bridge foundation to a **less than significant** level.

Oversize Material. While the generation of oversize materials from Project construction is generally not anticipated as previously described, specific measures that could be used to address associated potential impacts, if necessary, include selective disposal (e.g., burial in deeper fills), use in landscaping/decorative efforts or off-site disposal. Implementation of these types of measures, as well as conformance with other pertinent geotechnical recommendations and applicable standards (e.g., the IBC), would avoid or reduce potential effects related to disposal of oversize materials to a **less than significant** level.

Corrosive Soils. The 2012 Geotechnical Investigation identifies potential corrosion hazards to buried, uncoated metallic facilities in association with observed resistivity values. These potential effects would be addressed through standard industry remedial measures, including efforts such as: (1) removal of unsuitable deposits and replacement with non-corrosive fill; (2) use of corrosion-resistant construction materials (e.g., coated or non-metallic facilities); and (3) installation of cathodic protection devices (e.g., use of a more easily corroded "sacrificial metal" to serve as an anode and draw current away from the structure to be protected). Implementation of such measures, or other applicable techniques in conformance with related industry standards and regulatory guidelines, would avoid or reduce associated potential corrosion impacts to a **less than significant** level.

3.1.2.3 *Cumulative Impact Analysis*

As noted above, all potential Project-specific geotechnical impacts would be avoided or reduced below identified significance guidelines through conformance with geotechnical recommendations and established regulatory requirements as part of the Project design. Potential geology and soils effects are inherently restricted to the areas proposed for development and would not contribute to cumulative impacts associated with other planned or proposed development. That is, issues including seismic ground acceleration and liquefaction/dynamic settlement, as well as expansive soils, compression/settlement, oversize

materials, and corrosive soils, would involve effects to (and not from) the proposed development and/or are specific to on-site conditions. Accordingly, addressing these potential hazards for the proposed development would involve using standard geotechnical measures to comply with existing requirements, and/or site-specific design and construction efforts that have no relationship to, or impact on, off-site areas. Avoiding liquefaction impacts through efforts such as removing/replacing unsuitable materials or vibro-compaction, for example, would not affect or be affected by similar deposits/hazards in off-site areas. Because of the site-specific nature of these potential hazards and the measures to address them, there would be no connection to similar potential issues or cumulative effects to or from other properties. Accordingly, a **less than significant** cumulative geologic hazard impact would occur from implementation of the Proposed Project.

3.1.2.4 *Significance of Impacts*

Based on the analysis provided above, the Proposed Project would have **less than significant** impacts related to geologic hazards.

3.1.2.5 *Conclusion*

Based on the analysis provided above, no significant Project-specific or cumulative impacts related to geologic hazards would result from implementation of the Project.

Table 3.1.2-1
SUMMARY DESCRIPTION OF SOIL SERIES PROPERTIES WITHIN THE PROJECT SITE AND APPLICABLE OFF-SITE AREAS

Soil Series	Physical Characteristics/Location	Expansion Potential	Reactivity	Erosion Potential
Grangeville	Poorly drained fine sandy loam derived from granitic alluvium. Occurs on level terrain in the southern, north-central and easternmost site areas.	Low	Moderately alkaline (pH 7.9 to 8.4)	Low
Ramona	Well-drained sandy loam with a sandy clay loam subsoil, derived from granitic alluvium. Occurs on shallow to moderate slopes in the central and northern site areas.	Moderate	Moderately acidic to neutral (pH 5.6 to 7.3)	Low to moderate
Visalia	Moderately well-drained sandy loam derived from granitic alluvium. Occurs on shallow to moderate slopes in the south-central and southwestern portions of the site.	Low	Slightly acidic (pH 6.1 to 6.5)	Low to moderate
Tujunga	Excessively drained sands derived from granitic alluvium. Occurs on level areas in the southern portion of the site near the San Luis Rey River.	Low	Neutral (pH 6.6 to 7.3)	Low

Source: NCRS; formerly U.S. Soil Conservation Service (SCS) 1973

Table 3.1.2-2
SUMMARY OF REGIONAL FAULT LOCATIONS AND SEISMICITY DATA

Fault Zone	Distance From Site (miles)	Direction From Site	Maximum Earthquake Magnitude[1]	Estimated Peak Site Acceleration (g)[2]
Elsinore-Temecula	7.8	N	6.8	0.31
Elsinore-Julian	8.7	ESE	7.1	0.34
Newport-Inglewood	20.4	WNW	7.1	0.16
Rose Canyon	21.6	SSW	7.2	0.16
Elsinore-Glen Ivy	23.6	NNW	6.8	0.10
San Jacinto-Anza	30.4	ENE	7.2	0.10
San Jacinto-San Jacinto Valley	31.1	NNE	6.9	0.08
Earthquake Valley	34.8	ESE	6.5	0.05
Coronado Bank	37.3	WSW	7.6	0.10
Elsinore - Chino	41.0	NNW	6.7	0.06
Palos Verdes	45.4	WNW	7.1	0.06
San Diego Trough	46.0	WSW	7.7	0.09
Newport-Inglewood	47.8	W	7.1	0.05
San Andreas - Southern	49.1	ENE	7.4	0.7

Source: Leighton 2012; Geotechnics 2004; CGS 2010
[1] Moment magnitude, derived from various sources.
[2] Median peak horizontal ground acceleration, where g equals the acceleration due to gravity.

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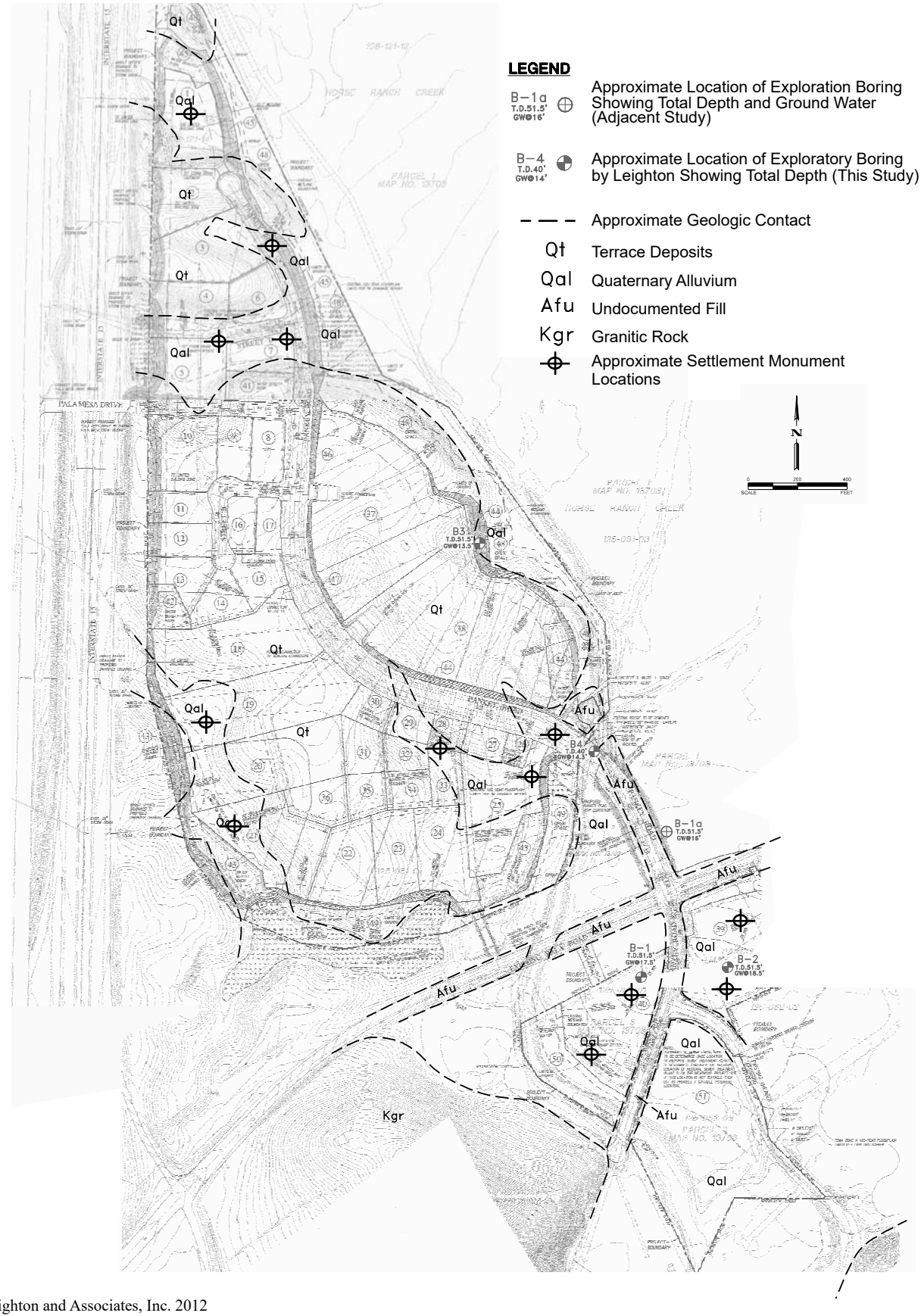

Source: Leighton and Associates, Inc. 2012

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Geologic Map

CAMPUS PARK WEST

Figure 3.1.2-1

HELIX Environmental Planning

3.1.3 Hazards and Hazardous Wastes

The 1981 Sycamore Springs EIR did not discuss hazards and hazardous materials. The 1983 EIR identified the handling and storage of chemicals associated with the Hewlett Packard development to be less than significant due to appropriate handling procedures. The two types of hazardous materials identified in the 1983 Hewlett Packard EIR would have included raw chemicals used for processes and plant maintenance and waste from plant operations. Since the previous EIRs were certified, there have been changes in the circumstances under which the Project was undertaken related to hazards. The Project site is located within the declared Urban-Wildland interface (UWI) area. Additionally, considering the major fires that have affected the County, the EIR analyzes the potential risk to future development from wildfire. In addition, a potential public safety risk exists due to the potential exposure to pesticides and herbicides, which may have accumulated in the soil due to past agricultural operations. As agriculture has occurred on the property, the potential for this public safety risk must be addressed.

These issues lead to the need for new subsequent analysis to hazards and hazardous materials. The reader is referred to text below for a new evaluation of hazards and hazardous materials for the Project.

A Phase I Environmental Site Assessment Report (ESA) was prepared for the Proposed Project by Leighton and Associates, Inc. in 2009, with a focused update to that report and Limited Phase II ESA completed in 2012 (Leighton 2012a and 2012b). The reports assess the potential for "recognized environmental conditions" (RECs) to occur at the Proposed Project site through site reconnaissance, examination of databases and government document sources, review of historical records, and property owner interviews. Additionally, a Fire Protection Plan (FPP; Firewise 2000, Inc. 2014) was prepared for the Project. These studies are summarized below, with the complete reports included in Appendices J and K, respectively of this EIR.

3.1.3.1 *Existing Conditions*

Hazardous Materials

Site Reconnaissance

A site reconnaissance was conducted on August 18, 2009 to observe and document existing property conditions and the nature of the neighboring property development within 0.25 mile of the property. Hazardous substances and other chemical containers observed on the southern portion of the property north of SR-76, including a polyacrylamide emulsion container, and one empty unlabelled 55-gallon drum. Trash and debris on the western parcel south of SR-76 contained chemical resistant gloves and goggles, empty 5-gallon buckets, and empty household cleaning bottles. No other hazardous substances or chemical containers were observed on the property. No evidence of underground storage tanks (USTs; such as vent lines, fill or overfill ports) or aboveground storage tanks (ASTs) was observed on the property. An additional visit was conducted on October 1, 2012 during the above-noted limited Phase II ESA activities at the site. Neither the polyacrylamide emulsion container, nor the unlabelled 55-gallon drum, was

present at that time. As the 55-gallon drum had been empty, and polyacrylamide is non-toxic, neither location is considered an REC. A material safety data sheet for polyacrylamide is included in Appendix J to this EIR.

Also during the additional October site reconnaissance, Leighton was granted access to the three storage containers on the property. Food, a barbeque and associated propane tanks, approximately five gallons of glow fuel, and remote-controlled planes and helicopters were observed in the storage container south of the airstrip. Glow fuel is used as fuel for the recreational planes and helicopters. The storage of small amounts of glow fuel at the subject site is not considered a REC because it is composed primarily of methanol. A material safety data sheet (MSDS) for glow fuel is included in Appendix J.

Two of the storage containers are located adjacent to the west of main dirt road that accesses the northern portion of the subject site, on a concrete slab with a service pit trench. A lawnmower, less than five gallons of paint, and canopy polls and spare parts for canopy assembly were observed in the western container. A tractor was observed in the eastern container. The tractor was observed to be leaking oil. Cat litter was spread over the bottom of the storage container, beneath the tractor to absorb the oil; no cracks or signs of corrosion were observed on the storage container floor.

Polychlorinated biphenyls (PCBs) were once used as industrial chemicals whose high stability contributed to both their commercial usefulness and their long-term deleterious environmental and health effects. PCBs can be present in coolants or lubricating oils used in older electrical transformers, hydraulic systems, and other similar equipment. In 1979, USEPA generally prohibited the domestic use of PCBs in electrical capacitors, electrical transformers, vacuum pumps, hydraulic pumps and gas turbines. Three pole-mounted transformers were observed in the northern portion of the property, although it is not known if the transformers contain PCBs.

While wetlands are known to exist on site, evidence of pits, ponds, lagoons, septic systems, wastewater, cisterns and sumps were not observed. One runoff drain was observed in the northern portion of the subject property. Abandoned piping and a possible drain were observed in the northern portion of the property.

Pesticides were not observed on the property; however, records on file at the San Diego County Department of Environmental Health (DEH) indicate that the adjacent property to the east was historically used for citrus farming, and pesticide use was identified on that property. Similarly, the Proposed Project property has historically been used for citrus grove farming and pesticides were likely used on the property. Due to the historical citrus farming, historical horse facilities, and the presence of irrigation plumbing throughout the farmed area, water wells may exist within the property boundaries, although no wells of any kind (oil, gas production, groundwater monitoring or water wells) were observed or reported at or adjacent to the property.

No other potential indicators of hazardous substances on site, including stained, discolored and/or corroded soils, stressed vegetation, or unusual odors were observed.

During the October 2012 site visit, 15 soil borings were made and 28 soil samples were collected in areas planned for residential and mixed use core development in order to check for possible presence of herbicides, pesticides and/or rodenticides. Results of the testing are described in Section 3.1.3.2 of this subchapter, below.

Database and Document Review

A series of federal, state, local, Tribal, proprietary, and regulatory agency data sources were reviewed to determine the presence of hazardous materials sites in the vicinity of the Proposed Project. Database listings were reviewed within the specified radii established by the ASTM. Five of these sources identified a total of three risk sites around the Project site.

The EPA maintains lists of information pertaining to reported leaking underground storage tanks (LUSTs) in the state. The database search identified one LUST facility within 0.5 mile of the property. This site was also identified in the California RWQCB SLIC database. Mobile Station 18-034, located at 4730 Highway 76 (at the corner of Pala Road and Old Highway 395), is a San Diego DEH LUST case and is undergoing quarterly monitoring as of 2012 (Leighton 2012c: pers.comm.). Responsible parties have been identified, and there are no concerns that the site will not be properly addressed to the satisfaction of regulatory agencies. Further review of documents from GeoTracker public database indicates that groundwater in the immediate vicinity below the site was affected with petroleum. Campus Park West is 0.5 mile east of the Mobile site and the groundwater gradient at the site is to the southwest. As a result, the groundwater is flowing away from the Project and **no impacts** would be anticipated.

The Historical UST Registered Database search identified one Historical UST facility at 4775 Via Belmonte (the Pala Mesa Market) within 0.25 mile of the property. The facility historically had three USTs which were removed according to the San Diego DEH Hazardous Materials website. Based on the distance from the property (0.25 mile), and the fact that there is no open case with the DEH, there is low potential for this facility to adversely impact the property. This site was also identified in the SWEEPS UST database.

Files from the DEH describe activities related to a Voluntary Assistance Program cleanup for parcel 108-120-47-00, located to the north of the Project site, which was used for citrus tree farming. This parcel has been subsumed by the northern portion of the Campus Park development, and is more than 0.25 mile from the Campus Park West Project northernmost boundary. Soil samples collected in 2006 revealed the presence of DDT, and an additional work plan for additional assessment was submitted to the DEH. The survey involved collection of eight on-site soil samples collected from existing earth materials. Based on a list of 18 Hazardous Agricultural Substances generated by the County DEH, sample chemical testing included testing for the following substances:

- Chlorinated pesticides
- Organophosphorous pesticides
- Chlorinated herbicides
- Total organic lead
- Total petroleum hydrocarbons
- pH (measure of acidity or alkalinity)

Concentrations of chlorinated pesticides – DDT/DDD/DDE (i.e., $DDT_{(Total)}$) – were detected in laboratory tests in six of the samples, ranging from 0.0024 milligrams per kilogram (mg/kg) to 0.894 mg/kg. For comparison purposes, the regulatory action level for hazardous waste criteria for $DDT_{(Total)}$ is 1.0 mg/kg.

Laboratory test results were reported as "less than detection levels" for organophosphorus pesticides, chlorinated herbicides, total organic lead, and total petroleum hydrocarbons. Laboratory test results for pH indicated that the soils were slightly acidic to slightly basic (pH of 6.5 to 8.0).

Historical Land Use

A summary of historical land use is provided in Table 3.1.3-1, Historical Land Use, based on historical records. Aerial photographs were reviewed for the years 1939, 1946, 1953, 1963, 1974, 1989, 1994, 2002, and 2005 for information regarding past subject property uses. Historical topographic maps were reviewed for the years 1901, 1904, 1942, 1949 and 1968. The property has historically been used for dry farming and citrus grove farming, and more recently as a remote control model airplane airfield.

Interviews

The current property owner was interviewed to gather first-hand historical data about the Project site. The owner noted that past property use was raw land, agricultural, and a model airplane flying club. The owner is not aware of any hazardous materials concerns associated with the subject property.

Wildland Fire Hazards

An FPP was prepared for the Proposed Project to evaluate the potential adverse effects to the Project that could result from a wildland fire that occurs on or adjacent to the Project, as well as the positive environmental effects that may occur by developing this particular property. The FPP addresses water supply, access, structural ignitability and fire resistive building features, fire protection systems and equipment, impacts to existing emergency services, defensible space, and vegetation management.

The Proposed Project is located within areas served by the North County Fire Protection District (NCFPD). NCFPD's capacity to provide fire protection services to the Proposed Project is discussed in Section 3.1.8, Public Services, of this subchapter.

The Project area is located in a moderately high fire hazard severity zone. Several characteristics of the Project location, including topography, vegetation, and climate zone contribute to risk of fire at the site. Data from the California Fire Alliance Fire Planning and Mapping Tools were used to determine the fire history of wildland fire in the vicinity of the Project. Several large fires of over 100 acres have occurred on or near the Project.

3.1.3.2 *Analysis of Project Effects and Determination as to Significance*

Excluding the issue of wildfire, hazards information and impacts are the same for both **Scenario 1** and **Scenario 2** of the Proposed Project.

Release of Existing Hazardous Substances

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

1. The Proposed Project is located on or within one-quarter mile from a site identified in one of the regulatory databases compiled pursuant to Government Code Section 65962.5 or is otherwise known to have been the subject of a release of hazardous substances, and as a result the Project may result in a significant hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (July 30, 2007).

Analysis

On-site Resources

As stated above, the search of government records databases in July 2009 (Leighton 2009a) identified a total of three risk sites around the Project site. Two of these sites (the Mobile Station located at the corner of Pala Road and Old Highway 395, and the Pala Mesa Market at 4775 Via Belmonte), were determined to have a low potential to adversely impact the Project. These conclusions were based on the status of the cases and the distance of the sites from the Project (more than one-quarter mile distant). The third site involved a record of DDT found in soil samples collected in 2006 on a parcel located north of the Project site in the northern Campus Park property. This site is also more than one-quarter mile distant from the Project (also more than one-quarter mile distant).

As noted above for the Campus Park development, testing was conducted in 2002 and 2009 on water and soil to address this issue. Total DDT levels detected in the soil samples were less than the regulatory action level of 1.0 mg/kg for hazardous waste criteria. Levels of organophosphorus pesticides, chlorinated herbicides, total organic lead, and total petroleum hydrocarbons were reported as "less than detection levels." The results of the 2002 water sample test indicated that observed levels of organophosphorus pesticides, chlorinated pesticides/herbicides, petroleum hydrocarbons, and lead were all below detection limits.

Regarding the three pole-mounted transformers observed in the northern portion of the property, such facilities are not likely to contain high concentrations of PCBs, and should any leaks from these transformers develop, SDG&E would be responsible for site cleanup.

In consideration of the field reconnaissance, review of government documents and databases, and results of testing on the adjacent Campus Park property, it is anticipated that hazards impacts to and from the Project site related to pesticide residue in soils would be **less than significant**.

Off-site Effects

Pipelines would be installed as part of the Project, as would potential pump stations. The pipelines would be located within disturbed road bed, with engineered soils. **No impact** would occur as those soils have already been disturbed and treated as necessary. With regard to the adjacent Campus Park pump station, no hazardous materials issues were documented for that site during environmental review completed as part of the certified EIR (County 2011a). The locations of the potential small RMWD pump stations are in existing disturbed areas with no known history of active agriculture or gas stations, etc. Potential impacts are assessed as **less than significant.**

Human or Environmental Exposures to Hazardous Materials

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

2. The Proposed Project could result in human or environmental exposure to soils or groundwater that exceed the U.S. Environmental Protection Agency Region 9 Preliminary Remediation Goals, California Environmental Protection Agency California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants and the exposure would represent a hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (July 30, 2007).

Analysis

On-site Effects

The Proposed Project would not result in human or environmental exposure to soils or groundwater that exceeds the USEPA Region 9 Preliminary Remediation Goals, California Environmental Protection Agency (CalEPA) California Human Health Screening Levels, or Primary State or Federal Maximum Contaminant Levels for applicable contaminants.

Specific businesses occupying the proposed commercial, limited-impact industrial or office professional buildings are unknown at this time. These uses could include automotive and equipment cleaning, customer manufacturing, laundries, etc., and swimming pools could be associated with residential uses. It is possible that future commercial/industrial/office uses and HOA-maintained swimming pool uses would require the use, storage, transport, and/or disposal

of potentially hazardous materials. Should such uses be proposed, they would be subject to a number of regulatory requirements governing the handling, storage, and disposal of hazardous materials used on site. For such uses, a risk assessment in conformance with all pertinent agency regulations, as listed in Table 3.1.3-2, Summary of Regulations Potentially Applicable to Campus Park West Commercial/Industrial/Office Professional and Wastewater Treatment Uses, would be required. Applicable permits also would have to be obtained from regulatory agencies (i.e., DEH, USEPA and CalEPA). The permitting process would involve design review to ensure proper materials handling and containment facilities for normal operations and potential emergency release conditions would be provided. Acquisition of applicable permits and compliance with applicable regulatory standards would avoid potentially significant hazardous materials impacts associated with proposed commercial/industrial/office professional or wastewater treatment uses, and **no impacts** would occur.

Regarding potential exposure to pesticides, herbicides and rodenticides in soils, the limited residue survey for the adjacent Campus Park development identified no exceedances of allowed concentrations. Similar findings resulted from the on-site soil tests.

No organochlorine pesticides were detected in 20 of the 28 soil samples collected and analyzed and no reportable concentrations of organochlorine pesticides were detected in the soil samples collected from 9 of the 14 soil borings. Low concentrations of 4,4'-DDD, Dieldrin and/or chlordane were detected at 5 of the 14 borings. Detected concentrations of all organochlorine pesticides were below their respective CalEPA California Human Health Screening Levels for residential use in all the samples collected with the exception of Dieldrin in two soil samples (B-4 and B-10), which slightly exceeded the residential use CHHSL. The low number of locations with slightly elevated the residential use CHHSL relative to the total number of samples, however, indicates that Dieldrin level at the subject site is not of concern overall. Following statistical review, there is 95 percent upper confidence level that all site soils as a whole would be below residential CHHSLs for Dieldrin. The organochlorine pesticide results are summarized in Tables 1 and 2 of Appendix J to this EIR, Phase II report. A copy of the Associated Laboratories analytical report on this testing is provided in Appendix B to that report, and the statistical analysis regarding Dieldrin is provided in Appendix C to that report.

Two soil samples were tested for Total Petroleum Hydrocarbons carbon chain identification (TPHccid). Detected concentrations of TPH are below the California RWQCB – San Francisco Bay Region's (SFRWQCB) Environmental Screening Levels (ESLs). The TPH results are summarized in Table 1 of Appendix J, Phase II report, with a copy of the Associated Laboratories analytical report on this testing is provided in Appendix B to that report.

In summary, regarding potential exposure to pesticides, herbicides and rodenticides in soils, the limited Phase II tests at Campus Park West identified either no exceedances, or exceedances that were within statistically safe percentages of allowed concentrations. Furthermore, the Project would incorporate a design feature requiring further testing to determine contamination of Dieldrin if proposed grading at the residential site (corresponding to Bore Site B-4) requires a cut of two feet or more. If soil removal is required based on the outcome of this testing, it would be completed according to USEPA and/or DTSC standards. Potential impacts are identified as **less than significant.**

As described in Section 3.1.3.1, above, a tractor leaking oil was noted during site reconnaissance. Although located within a storage unit with a concrete floor and subject to some level of control (kitty litter to absorb the dripping), the tractor was noted as having potential to impact the subject property and was therefore identified as a potential REC. The RC Flyers Club is being notified to either repair the tractor so that it is not leaking oil or remove it from the premises as a matter of Project design. Project impacts are therefore identified as **less than significant**.

If hazardous materials were identified, for example during detailed geotechnical investigations for future project development activities, conformance with all pertinent agency regulations listed in Table 3.1.3-2 would be required thereby avoiding human or environmental exposure, and **no impacts** would occur.

Off-site Effects

Pipelines would be installed as part of the Project, as would potential pump stations. The pipelines would be located within disturbed road bed, with engineered soils. **No impact** would occur as those soils have already been disturbed and treated as necessary. With regard to the adjacent Campus Park pump station, no contaminated soils issues were documented for that site during environmental review completed as part of the certified EIR (County 2011a). The locations of the potential small RMWD pump stations are in existing disturbed areas with no known history of active agriculture. Potential impacts are assessed as **less than significant.**

Demolition of Structures that May Contain ACM, LBP, and/or Other Hazardous Materials

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

3. The Proposed Project would involve the demolition of commercial, industrial or residential structures that may contain asbestos containing materials (ACM), lead based paint (LBP) and/or other hazardous materials and as a result, the Project would represent a significant hazard to the public or the environment.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Hazardous Materials and Existing Contamination (July 30, 2007).

Analysis

On- and Off-site Resources

Asbestos was used extensively in the United States, especially from the 1940s until the late 1970s. The material was used in buildings for fireproofing, acoustical insulation, condensation control, and decoration. It can be found in products such as asphalt roofing products, insulation inside fuse boxes and old wire insulation, shingles and siding, and floor tile. Its use was largely

discontinued after 1980. Lead based paint was used up until 1978 in paint and other products, and is found on the walls, woodwork, windows and doors of many older structures. Stained soils, pitted concrete, and leaking containers/drums on sites can indicate the presence of other sources of contamination.

The only structures remaining on site include recent shade structures and portable/temporary storage units. Demolition of these structures would simply require dismantling. They are not anticipated to contain any hazardous materials that would require conformance to applicable federal, state and local regulations enacted to prevent or reduce damage to public health and safety and the environment. No structures are located where Project-evaluated pipelines or sewage pump stations would be placed. **No impacts** would occur.

Wildland Fire Hazards

Guideline for the Determination of Significance

A significant impact to public safety or the environment would occur if:

4. The Proposed Project would expose people or structures to a significant risk of loss, injury, or death involving wildfires if it would:

    a. Be unable to demonstrate compliance with the following fire regulations: California Fire Code, CCRs, County Fire Code, and the County Consolidated Fire Code.
    b. Require the preparation of a comprehensive FPP and the Project is inconsistent with its recommendations including fuel modification.

Guideline Source

This guideline is based on County Guidelines for Determining Significance – Wildland Fire and Fire Protection (December 19, 2008).

Analysis

On-site Resources

A comprehensive FPP was prepared for the Project (Appendix K). The report found that the Project complies with all applicable fire regulations, including the County Consolidated Fire Code and the fire requirements of the NCFPD. The comprehensive FPP and the Project are consistent with the County recommendations, including fuel modification.

In the FPP, several scenarios were developed to determine the potential fire behavior of a wildland fire that might occur in the vicinity of the Project. Fire Behavior Calculations were used to determine clearance requirements, allowable distances of vegetation and maintenance requirements. Design measures that would minimize the risk from wildland fires are discussed below. In addition, the reader is referred to Section 3.1.8, Public Services, of this subchapter for

a discussion of wildfire impacts as they relate to fire protection services (e.g., station locations, capacities, response times, etc.).

Fuel Modification Zones. In most cases, there are two fuel modification zones required, each one 50 feet in width, for a total of 100 feet of fuel treatment around each building. A minimum of 100 feet of fuel treatment generally would be placed around all structures that abut flammable native vegetation located north and east of the Project. The first 50 feet from a structure would be landscaped and irrigated, with an additional 50 feet of fuel treatment (non-irrigated thinning zone). Adjacent to the I-15 corridor, 50 feet of Zone 1 fuel treatment and 25 feet of Zone 2 would provide fire protection and reduce the fire threat to less than significant levels. In addition, a six-foot fire wall would be constructed generally along the southwestern and southern boundary of the northern portion of the site (north of SR-76), and, for **Scenario 1**, along the northern boundary of PA 5 (south of SR-76). Under **Scenario 2**, the fire wall at the northern extent of PA 5 would not be built—the lot would extend further to the north and proximity to a four-lane paved road would support fire suppression. These fuel modification zones would be established prior to bringing potentially combustible building materials on site.

Below are the definitions and required treatments for fuel modification zones. In addition, the edge of each driveway and along roadways would be fuel treated to significantly reduce ignition starts. It would simultaneously provide relatively safe ingress and egress should a wildfire occur for both residents and emergency responders. Each of these zones is discussed below and described in greater detail in Appendix K.

- Zone 1. This zone comprises the first 50 feet around a structure (front, back and side yards) and is commonly called the defensible space zone. It is an irrigated zone, free of combustible construction and materials.

- Zone 2. Fuel Modification Zone 2 is the area beginning at the outer edge of Zone 1, 50 feet from each structure. It is a non-irrigated thinning zone, typically 50 feet in width and including all natural and manufactured slopes. Thinning zones are utilized to reduce the fuel load of a wildland area adjacent to urban developments, thereby reducing the radiant and convective heat of wildland fires. The intent is to achieve and maintain an overall 50 percent reduction of the canopy cover spacing and a 50 percent reduction of the original fuel loading by reducing the fuel in each remaining shrub or tree without substantially decreasing the canopy cover or the removal of tree holding root systems. In addition, all dead and dying plant material is removed. Combustible construction (i.e., gazebos, trellises, shade covers etc.) is not allowed in Zone 2.

- Roadways. Clearance of brush or vegetative growth along new and existing on- and off-site roadways would comply with the Consolidated Fire Code. The requirements were amended and became effective on October 28, 2011, and permit the fire authority with jurisdiction to require a property owner to engage in fuel modification in the area 20 feet from each side of the driveway, public street or private road adjacent to the property.

- Proposed Plant Species. Only plant species listed in the County PDS Approved Plant List would be used. Other recommended plant species meeting the criteria for fire-resistive plant characteristic may be planted within any fuel treatment zone only after these plants have been certified by the Applicant's landscape architect and fire consultant in conjunction with the NCFPD fire marshal.

- Building Setbacks. Per the Fire Code Amendments of January 28, 2008, all buildings and structures would be set back a minimum of 30 feet from the property line unless the County Zoning Ordinance requires a greater minimum. When the property line abuts a roadway, the setback would be measured from the centerline of the roadway. All buildings located along the western Project boundary would be set back from the boundary a minimum of 75 feet to allow space for fuel treatment as discussed above. All buildings would be located outside of fuel treatment zones.

- Building Heights. Buildings would be no more than 35 feet in height above grade, unless otherwise approved by NCFPD. Architectural projections may extend above the cited height restriction, subject to NCFPD review and approval. Unless NCFPD acquires upgraded facilities/equipment or otherwise determines greater heights may be safely allowed, residential structures with pitched roofs would be limited to a top of fascia height of 24 feet and a topmost ridgeline of 35 feet, and non-residential buildings with flat roofs over 24 feet would require an exterior ladder at that point in order to reach the roof.

- Building Materials. All newly constructed structures would be built to "Enhanced" building requirements, as specified in the FPP. The installation of automatic interior sprinkler systems (National Fire Protection Association – NFPA Standard 13R - Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height) would be required. Tempered glass would be used in at least one panel of all windows and openings in the outer walls.

- Continued Maintenance. Each lot owner would be individually responsible for fuel treatment on property lots, including all measures included in the FPP. Property owners would be members of a legally constituted HOA which would support the maintenance of common areas (including roadsides) in perpetuity. Please refer to Appendix K for specific requirements for the ongoing fuel modification maintenance.

- Other Design Measures. Additional features of the Proposed Project that would reduce risks from wildland fires include minimum street widths and turning radii for streets and cul-de-sacs, all-weather road paving capable of supporting fire apparatus, fire access roadways throughout the development free of speed control devices, clear street signs and marking, a lighted directory map at each driveway entrance, minimum setbacks if gates are proposed, and a continuous water supply. Furthermore, the Project road improvements provide for rapid ingress and egress by residents, workers, and emergency responders on the two primary roads into the Campus Park West development; Pala Mesa Drive and Pankey Road provide access to either the Old Highway 395 or SR-76, respectively.

Off-site Resources

Project-related pipelines would be subsurface following installation and would not be subject to substantial impacts related to wildfire. Potential pump station structures would be treated similarly to on-site elements and also would be easily served by the adjacent fire station. Impacts would be **less than significant**.

FPP Conclusions

The FPP concluded that any wind- or topography-driven wildfire burning under a northeastern (Santa Ana) wind pattern from the north, northeast or east would create a moderate-to-high wildland fire hazard. Also, a "rare event" strong southwest wind of 30 mph fire day would create a low-to-moderate wildland wildfire hazard depending on the particular vegetation type burning. The fuel modification treatments, "firewise" landscaping, and the use of "enhanced" fire resistive building construction standards proposed for the Project were identified as measures that would reduce the wildfire threat to less than significant levels. As a result, the potential for loss of any building due to direct fire impingement, wind driven embers, or radiant heat was concluded to be extremely low. The FPP also found that the Project's proposed features would assist the NCFPD in their wildland firefighting mission by providing a break in native fuel continuity, constructing additional emergency vehicle access, and obtaining a water supply that would be available during a potential wildland fire. Further, the Project would specify maintenance requirements to provide fire safety.

Based on the above-noted Project design features and considerations, impacts associated with wildland fire hazards would be **less than significant**.

3.1.3.3 *Cumulative Impact Analysis*

No impacts were identified for the issues of potential groundwater contamination or asbestos-containing structures. As a result, there is no potential for a cumulatively considerable contribution to cumulative conditions and these issues are not further addressed. Also as noted, the Proposed Project would not result in significant impacts related to hazardous materials or wildland fire hazards. The less than significant potential impacts identified for hazardous materials and wildfire do have a potential to combine with other projects' impacts for these issues. These public interest issues, however, are strictly regulated and reviewed. As with the Proposed Project, any future projects in the site vicinity noted in Table 1-4 of this EIR would be required to implement, as appropriate, similar site-specific measures to address potential impacts from hazardous materials or wildfires. Based on these requirements and the less than considerable contribution associated with the Proposed Project, cumulative impacts from hazardous materials or wildfire hazards would be **less than significant**.

3.1.3.4 *Significance of Impacts*

Based on the analysis provided above, impacts related to hazardous materials or wildfire hazards would be **less than significant**.

3.1.3.5 *Conclusion*

Based on the field reconnaissance, review of government documents and databases, and results of adjacent site testing, it can be concluded that hazards impacts to and from the Project site would be less than significant. Potentially significant hazardous materials impacts associated with proposed and currently undefined commercial/industrial/office professional or wastewater treatment uses (as well as potential hazardous materials in existing structures to be demolished) would be avoided through conformance with all pertinent agency regulations, as cited on Table 3.1.3-2. Conformance would be demonstrated during the permitting processes required to allow handling, storage, and disposal of hazardous materials, if such uses would be proposed. The recommendations and requirements included in the FPP have been incorporated into Project design to ensure that Project implementation would result in less than significant impacts relating to wildfire hazards. As all impacts associated with hazards were identified as **less than significant,** no mitigation measures are necessary.

Table 3.1.3-1
HISTORICAL LAND USE

Time Period	Land Usage	Source
Prior to 1939	Unknown; site and surrounding land appear to be undeveloped	Aerial Photographs and Topographic Maps
Approximately 1939 to prior to 1949	At least one structure and up to five structures, possible dry farming, horse racing track and corrals	Aerial Photographs and Topographic Maps
Prior to 1949 to prior to 1963	At least three structures, dry farming, track removed	Aerial Photographs and Topographic Maps
Prior to 1963 to prior to 2002	At least three structures, citrus grove farming	Aerial Photographs and Topographic Maps
Prior to 2002 to present	One structure, remote control airplane airfield	Aerial Photographs and Topographic Maps, and Site reconnaissance

Source: Leighton 2009

Table 3.1.3-2
SUMMARY OF REGULATIONS POTENTIALLY APPLICABLE TO CAMPUS PARK WEST COMMERCIAL/INDUSTRIAL/OFFICE PROFESSIONAL AND WASTEWATER TREATMENT USES

Regulation	Administering Agency	Requirements/ Compliance
Federal Jurisdiction		
CERCLA ("Superfund") 42 USC 9601 et seq. As amended by SARA, Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) 42 USC §11001 et seq.; 40 Code of Federal Regulations (CFR) Parts 350, 355, and 370	USEPA Region IX, National Response Center, and San Diego County Environmental Health Division	CERCLA – release notification requirements; SARA Title III – requirements for emergency planning and community right-to-know for storage, handling, or production of significant quantities of hazardous or acutely toxic substances
Resource Conservation and Recovery Act (RCRA); 42 USC §6901 et seq.; 40 CFR Parts 260-272	USEPA Region IX, California DTSC	Sets forth standards for the generation and management of solid waste; requires application to the Department of Toxic Substances Control (DTSC) for an USEPA identification number in the event occupants are hazardous waste generators
29 USC §651, 29 CFR § 1910 et seq., and §1926 et seq.	California Division of Occupational Safety and Health (Cal-OSHA)	Meet requirements for equipment used to store and handle hazardous materials to protect workers

Table 3.1.3-2 (cont.)
SUMMARY OF REGULATIONS POTENTIALLY APPLICABLE TO CAMPUS PARK WEST COMMERCIAL/INDUSTRIAL/OFFICE PROFESSIONAL AND WASTEWATER TREATMENT USES

Regulation	Administering Agency	Requirements/ Compliance
Federal Jurisdiction (cont.)		
40 CFR, Parts 172, 173, and 179	U.S. Department of Transportation (DOT), California Highway Patrol, Department of Motor Vehicles, and Caltrans	Meet standards for labels, placards, and markings on hazardous materials and hazardous waste shipments
Federal Atomic Energy Act 40 USC 2021	Nuclear Regulatory Commission and California Department of Health Services	Meet requirements for handling of radioactive materials and radioactive materials licensing
40 CFR, Part 68	Federal Risk Management Plan	Requires a Risk Management Plan for facilities handling acutely hazardous materials in amounts over the threshold planning quantity for that material
State/Regional/Local Jurisdiction		
8 CCR §339, §3200 et seq., 5139 et seq., and 5160 et seq.	Cal-OSHA	Addresses control of hazardous substances in the workplace
California Water Code §§13260-13269; 23 CCR §2S10 Article 9 et seq.	RWQCB	Addresses waste discharge requirements and will apply to any storage or disposal or solid and liquid wastes to the extent that such action may affect the quality of the waters of the state
Hazardous Waste Control Act of 1972 as amended; California Health & Safety Code §25100 et seq.; 22 CCR § 25100 et seq.	USEPA Region IX, DTSC, and San Diego County Hazardous Materials Division (HMD)	Addresses the generation, storage, and preparation for shipment of hazardous wastes, if generated by tenants
California Health and Safety Code §§ 25500-25543.3, CCR §2720-2734	San Diego County HMD	Requires preparation of Hazardous Materials Business Plan
California Code of Regulations, Title 19, Division 2, Chapter 4.5	San Diego County HMD	Requires preparation of a California Accidental Release Prevention Program (including a Risk Management and Prevention Program) for hazardous chemicals stored or used on site in excess of the state threshold quantities

Table 3.1.3-2 (cont.)
SUMMARY OF REGULATIONS POTENTIALLY APPLICABLE TO CAMPUS PARK WEST COMMERCIAL/INDUSTRIAL/OFFICE PROFESSIONAL AND WASTEWATER TREATMENT USES

Regulation	Administering Agency	Requirements/ Compliance
State/Regional/Local Jurisdiction (cont.)		
Uniform Fire Code and California Fire Code, Article 80, 79, 4	San Diego County Fire Department	Meet requirements for the storage and handling of hazardous materials (Article 80) and flammable and combustible liquids (Article 79)
California Building Code	California Building Standards Commission	Meet requirements for building construction for facilities handling hazardous materials and/or biohazards
California Health and Safety Code §25800 et seq.	California Department of Health Services	California Radiation Control Law requires compliance with requirements for handling radioactive materials and limits exposures to emissions from radioactive materials use
California Environmental Quality Act Statutes PRC §21154.4	Office of Planning and Research (OPR)	Requires notification of schools within 0.25 mile of all facilities containing hazardous materials or waste

FUEL TREATMENT LOCATION
For
CAMPUS PARK WEST - SAN DIEGO COUNTY, CALIFORNIA

LOT FRONT, SIDE AND BACK YARDS. Each individual land owrer will be responsible for establishing and maintaining their lotparcel to the North County Fire Protection District's Irrigated Zone 1 criteria. When the area is located within an multi-family residential common area, the H.O.A. shall perform the required maintenance. Alternatively, the area shall be kept clear of all combustible vegetation unless erosion is a concern.

FUEL MODIFICATION ZONE 1/LIMITED BUILDING ZONE (H.O.A. MAINTAINED). Common areas where the H.O.A. is responsible for maintenance of the landscape to Irrigated Zone 1 critera and the area is designated as a Limited Building Zone (LBZ). Zone 1 shall extend 50 feet from a building. All native plants shall be removed and replaced with plants from the custom San Diego County approved plant list found in the Campus Park West Fire Prctection Plan. The area shall be provided with a permanent irrigation system. No combustible structures shall be built within this zone.

FUEL MODIFICATION ZONE 2/LIMITED BUILDING ZONE (H.O.A. MAINTAINED). Areas where prohibited wildland vegetation has been cleared and replaced with plants from the approved plant list and maintained to Zone 2 criteria. The zone is 25 feet in width along the western and south boundary and 50 feet in width on the northern and eastern boundary. The H.O.A. shall maintain these areas. Access to these areas will be provided and maintained by the H.O.A.

ROADWAYS (H.O.A. MAINTAINED). An area along a road located within the project where the vegetation shall be maintained to Irrigated Zone 1 criteria. All roads shall be maintained within 20 feet of the roadway edge.

SPECIAL FIRE PROTECTION FEATURE - Non-combustible solid wall, six feet in height installed at the locations shown. The wall may contain a view wall in the upper half where tempered glass is installed as long as the wall remains solid and non-combustible.

November 28, 2008, Revised May 20, 2010 and August 21, 2012

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OPTION 2 - CALTRANS DECERTIFICATION AREA ALTERNATIVE

Source: PDC 2012

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Fuel Modification Location Plan

CAMPUS PARK WEST

3.1.4 Hydrology/Water Quality

This section describes existing hydrologic and water quality conditions within the Project site and vicinity, identifies regulatory requirements and industry standards associated with hydrologic and water quality issues, and evaluates potential impacts and mitigation measures related to implementation of the Proposed Project.

The 1981 and 1983 EIRs identified flood control impacts as significant but mitigable and impacts to water quality as less than significant.

The 1981 EIR noted that: (1) during construction, exposed ground surfaces potentially would lead to increased erosion and increased siltation in downstream areas; (2) approximately one-third of the site would be impervious post development, and (3) the project would contribute to an overall cumulative effect of increased pollutants in runoff. Mitigation within the 1981 EIR included erosion control measures and runoff baffling devices to serve as mini-siltation basins.

Within the 1983 EIR, a number of facilities were identified as being located within the 100-year floodplain for the San Luis Rey River and/or Horse Ranch Creek, including several proposed structures and portions of Pankey Road, Pala Mesa Drive and local access roads. Similar to the 1981 EIR, the 1983 EIR concluded that development of the project would create imperious surfaces that would result in increased runoff and peak flows in downstream watercourses. Due to the small nature of the increase, however, these impacts were identified as less than significant. Mitigation identified for impacts associated with flooding included elevating all building pads and roadways above the 100-year floodplain and precluding development within the floodway. As stated in the 1983 document, water quality would be impacted by runoff from primarily pesticides and fertilizers associated with agricultural use of the property, as well as petroleum products and detergents associated with urban land uses. The property also would be subject to erosion and increased sedimentation. Water quality impacts were not assessed as significant in the 1983 EIR.

Since certification of the 1981 and 1983 EIRs, the specific proposed uses and layout of the site have changed, as has the regulatory framework. The San Diego RWQCB Water Quality Control Plan for the San Diego Basin (1994) has been prepared and updated annually as appropriate. NPDES requirements for municipal, construction and groundwater effects are new since 1983. In addition, pursuant to the NPDES Municipal Permit requirements, the County now addresses storm water management under new sources such as the Standard Urban Storm Water Mitigation Plan (SUSMP; most recently updated in September 2012). New ordinances related to storm water management and water quality control are in effect, as well as associated design practices. These changed conditions have resulted in the need for new evaluation of these issues specific to the current Proposed Project, as discussed below.

A number of technical studies related to hydrology and water quality have been prepared for the Proposed Project, including the following: (1) Preliminary CEQA Hydrology/On-site Drainage Study (Hydrology Study, PDC 2013a); (2) Preliminary Major Storm Water Management Plan (SWMP, PDC 2013b); (3) Horse Ranch Creek Floodplain Study (PDC 2013c); (4) San Luis Rey River Floodplain Study (Chang Consultants [Chang] 2013a); (5) Preliminary Hydromodification

Management Study (PHMS, PDC 2013d); and (6) Hydromodification Screening for Campus Park West (Chang 2013b). These studies are summarized below along with other applicable data, with the complete reports included in Appendices L (Hydrology Study, PHMS and Hydromodification Screening), M (SWMP), N (Horse Ranch Creek Floodplain Study), and O (San Luis Rey River Floodplain Study) of this EIR.

3.1.4.1 *Existing Conditions*

Watershed and Drainage Characteristics

The Project site is located within the San Luis Rey Hydrologic Unit (HU), one of 11 major drainage areas identified in the San Diego RWQCB *Water Quality Control Plan for the San Diego Basin* (Basin Plan, 1994 as amended). The San Luis Rey HU is a generally rectangular-shaped area encompassing approximately 565 square miles, and extends from near the San Diego/Riverside county line and Volcan Mountain along the eastern boundary of the San Diego Basin to the City of Oceanside on the coast (Figure 3.1.4-1, Project Location within Local Hydrologic Designations). The San Luis Rey HU is divided into a number of hydrologic areas and subareas based on local drainage characteristics, with the Project site located within the Lower San Luis Hydrologic Area (HA) and the Bonsall Hydrologic Subarea (HSA). Drainage within the San Luis Rey HU is predominantly through the San Luis Rey River and associated tributaries, with the river located adjacent to the southernmost portion of the Project site. The San Luis Rey River continues generally west and south from the site vicinity, and enters the Pacific Ocean in the city of Oceanside approximately 16 miles to the southwest (with related on- and off-site drainage patterns outlined below). Average annual precipitation in the Project site vicinity (Fallbrook) is approximately 13.2 inches, with much of this (approximately 83 percent) occurring during the period of November through March (weather.com, last reviewed April 2013).

The Project site is primarily undeveloped, with on-site land use consisting of previously disturbed and undisturbed vacant land, minor agricultural activities (orchards), and facilities associated with a radio-controlled model airplane club (e.g., parking areas and take-off/landing strips). Existing drainage facilities located within the Project site and adjacent areas include five culverts extending beneath I-15, two bridge crossings of Horse Ranch Creek along Pankey Road (including one each on the north and south sides of SR-76), a bridge crossing of Horse Ranch Creek along SR-76, and a culvert extending beneath SR-76 from a natural on-site sump area (with additional discussion provided below). Downstream drainage facilities include several bridge crossings along the San Luis Rey River at roadways including I-15, Old Highway 395, SR-76, and I-5.

Surface drainage within the Project site and related watershed areas flows generally west to east, and occurs as both confined (point) and unconfined (sheet) flow. The entire Project site is tributary to the San Luis Rey River, either directly or via Horse Ranch Creek, which is adjacent to portions of the site. Specifically, Horse Ranch Creek flows generally south along the eastern site boundary north of SR-76, and crosses under both Pankey Road (North Pankey Bridge) and SR-76 via existing bridge structures. South of SR-76, drainage in the creek continues generally south along the western Project site boundary, flows beneath an existing bridge structure in Pankey Road (South Pankey Bridge), and enters the San Luis Rey River near the southernmost

portion of the Project site. Existing site drainage is divided generally into four watershed areas (or systems) in the Project Hydrology Study, designated as Systems 100E through 400E (with 100E through 300E located entirely north of SR-76, and 400E located entirely south of SR-76). The four Project drainage systems are summarized below, and are depicted on Exhibits A-1 and A-2 of the Project Hydrology Study (PDC 2013a in Appendix L).

System 100E

System 100E includes approximately 275 acres, and is located primarily in off-site areas west of I-15. Off-site drainage in this watershed flows into the northern portion of the site (north of Pala Mesa Drive) through a number of the existing culverts extending beneath I-15. Flows in System 100E within the site (including drainage from the described off-site areas) moves generally east through several small natural drainages, which discharge into Horse Ranch Creek along the eastern site boundary upstream (north) of an existing bridge on Pankey Road (North Pankey Bridge). Existing peak 100-year storm flow[1] from System 100E is approximately 370.2 cubic feet per second (cfs).

System 200E

This area includes approximately 40.3 acres located in the southeastern portion of the site (north of SR-76). This area drains generally southeast through the site via a number of small drainage courses, and enters Horse Ranch Creek downstream (south) of the North Pankey Bridge, but north of SR-76. Existing peak 100-year storm flow from System 200E is approximately 48.6 cfs.

System 300E

System 300E encompasses approximately 95.5 acres, including on-site areas in the southwestern portion of the site (north of SR-76) and off-site areas west of I-15. Off-site drainage in this watershed flows into the southwestern portion of the site via a number of the existing culverts extending beneath I-15. Within the site, drainage in this watershed flows generally east-southeast, and enters a natural sump area in the southwestern corner of the property, just north of SR-76. Based on analyses conducted as part of the Project Hydrology Study and a previous investigation associated with the adjacent SR-76 corridor (URS 2007), this sump has adequate capacity to retain flows from smaller storm events, and has a single outlet consisting of a 72-inch diameter culvert that extends under SR-76. During larger storm events, flows from the on-site sump discharge through the noted culvert and flow east-southeast for approximately 150 feet before entering Horse Ranch Creek. Existing peak 100-year storm flow from System 300E is approximately 151.3 cfs.

System 400E

This system includes approximately 11.9 acres located south of SR-76. Runoff within this area consists entirely of overland (sheet) flow that drains directly into nearby portions of Horse Ranch Creek and the San Luis Rey River. A portion of this runoff enters a concrete channel that discharges into Horse Ranch Creek south of the SR-76 bridge, with this channel constructed in

[1] A 100-year storm is defined as an event with a one percent chance of occurring in any given year.

association with recent improvements to SR-76. Existing peak 100-year storm flow from System 400E is approximately 24.5 cfs.

Flood Hazards

The Federal Emergency Management Agency (FEMA) has mapped flood hazards on the Project site and vicinity. The northern portion of the Project site (north of SR-76) is designated as Zone X, or areas determined to be outside the 500-year (and 100-year) floodplain (FEMA 2012a and 2012b). Portions of the site located south of SR-76 (including areas proposed for commercial use) are within the identified 100-year FEMA floodplain boundary associated with the San Luis Rey River.

In addition to the described FEMA mapping, pre-development 100-year floodplains have been mapped along local segments of Horse Ranch Creek and the San Luis Rey River in the floodplain analyses conducted for the Proposed Project (refer to PDC 2013c and Chang Consultants 2013a in Appendices N and O). These floodplain studies involved preparation of Hydrologic Engineering Center-River Analysis System (HEC-RAS) models for the noted areas, with the following conclusions (refer to Figure 3.1.4-2, Existing Conditions Floodplain Map): (1) the mapped 100-year floodplain along Horse Ranch Creek encroaches into portions of the Project site both north and south of SR-76, including areas proposed for development; and (2) the mapped 100-year floodplain along the San Luis Rey River encroaches into the project site south of SR-76, including areas proposed for development.

Groundwater

While no known information regarding active or abandoned groundwater wells is available for the Project site, groundwater was observed on site at depths of between 13 and 18 feet below the surface in all four exploratory borings conducted as part of the 2012 Geotechnical Investigation (Appendix I). This investigation also notes that observed groundwater depths generally decrease to the north, with previous geotechnical investigations encountering groundwater as shallow as three feet below the surface of alluvial deposits in the northern portion of the Project site (Leighton 2012).

Shallow groundwater was also reported at several nearby locations during geotechnical and hazardous material investigations of the adjacent Campus Park property, including areas near the San Luis Rey River and Horse Ranch Creek (GeoSoils 2002; Shepardson 2007, 2006, 2005 and 2003). Observed groundwater in these areas was present at depths ranging between approximately 1.5 and 12 feet below the surface in alluvium, and 28 to 56 feet below surface grade in bedrock deposits. A number of abandoned wells located along nearby sections of the San Luis Rey River were reportedly used for irrigation of agricultural operations conducted on the Campus Park site between the 1940s and early 1980s (Pankey 2005). In addition, several abandoned wells are present on off-site properties to the north and northeast (including the Campus Park property), with these wells also associated with previous agricultural operations and/or domestic use. Production rates for historic use of the described wells along the San Luis Rey River were estimated at up to 1,000 gallons per minute (gpm, Pankey 2005), although no

associated documentation is known to be available (and no known production data are available for any of the other noted off-site wells).

Water Quality

On-site and Vicinity Water Quality

Surface water within the Project site consists of intermittent flows from storm events and runoff from agricultural or landscape irrigation. No known surface water quality data are available for the Project site, with storm and irrigation flows typically subject to variations in water quality due to local conditions such as runoff rates/amounts and land use. A summary of typical pollutants sources and loadings for various land use types is provided in Table 3.1.4-1, Summary of Typical Pollutant Sources for Urban Storm Water Runoff, and Table 3.1.4-2, Typical Loadings for Selected Pollutants in Runoff from Various Land Uses.

Known water quality data for off-site areas in the immediate Project site vicinity are limited to two samples collected in 2002 and 2009 at the adjacent Campus Park property to the northeast (GeoSoils 2009, 2002). Both samples were taken from an outlet pipe originating in an adjacent mixed use (avocado/citrus) orchard. The 2002 sample was tested for pollutants including agricultural pesticide residue, total petroleum hydrocarbons (gas and diesel), pH, organic lead, and nitrates, while the 2009 sample was tested for nitrates only. The results of the 2002 test indicated that observed levels of organophosphorus pesticides, chlorinated pesticides/herbicides, petroleum hydrocarbons, and lead were all below detection limits, with an observed pH of 6.7, or neutral (GeoSoils 2002). The observed nitrate level from the 2002 sample was 43 mg/l, while the nitrate level from the 2009 sample was 9.5 mg/l. Both of these sample results are below the Basin Plan nitrate standard identified in the referenced GeoSoils reports. The Maximum Pollutants Level relative to drinking water standards for nitrate is 10 mg/l, with the described outlet pipe not known (or proposed) to be used as a potable water source. While flows from the off-site outlet on the Campus Park property are not directly tributary to the Project site, they ultimately drain to either Horse Ranch Creek or the San Luis Rey River, both of which are adjacent to (and receive runoff from) the Project site.

Based on the nature and generally low to moderate intensity of existing development within the Project site and upstream areas, as well as the described off-site sampling data, local surface water quality is expected to be generally moderate. This anticipated condition is qualified somewhat by the presence of local agricultural operations, which are considered the likely source of nitrate levels observed in the off-site surface water samples.

No documented data on groundwater quality within the Project site and immediate vicinity are known to be available. The previously noted off-site wells along the San Luis Rey River reportedly exhibited total dissolved solids (TDS) levels of approximately 400 to 500 mg/l during the 1960s. In addition, one of the described off-site wells located on the adjacent Campus Park property was reportedly drilled in the 1970s but never used for irrigation due to “high TDS levels” (Pankey 2005).

Off-site Water Quality

Receiving waters associated with the Project site include Horse Ranch Creek, the San Luis Rey River and the Pacific Ocean. Existing water quality data for these areas include quantitative and qualitative monitoring and/or testing results, biological assessment (bioassessment) studies, and 303(d) impaired water evaluations conducted by the State Water Resources Control Board (SWRCB) and RWQCB. An overview of monitoring and reporting data from a number of representative sources is provided below, followed by a summary evaluation of overall water quality conditions within the Project site and related watersheds.

Surface Water Quality Monitoring Data

Historic and current water quality monitoring has been/is being conducted within the San Luis Rey River watershed in association with local, regional and statewide water agency programs; as well as requirements under the federal CWA, NPDES, and the associated Municipal Storm Water Permit (refer to the discussion of Regulatory Framework below for additional information).

Wet weather monitoring at the San Luis Rey River Yuma site (located approximately 10 miles downstream of the Project site) was conducted between 1993 and 1998 for numerous physical, chemical and biological parameters. These tests documented that applicable water quality objectives were regularly exceeded for fecal coliform, semi-volatile compounds, and total petroleum hydrocarbons; frequently exceeded for metals (including copper and zinc), nitrogen, and total suspended solids (TSS); and occasionally exceeded for biochemical oxygen demand (BOD) and chemical oxygen demand (COD, MEC Analytical Systems, Inc. [MEC] 2001). Wet weather monitoring has been conducted at the San Luis Rey River mass loading station (MLS, located approximately 15 miles downstream of the project site) between 2001 and 2009, and in 2010/2011 (with no monitoring conducted in 2009/2010 or 2011/2012). Additional wet weather monitoring along the San Luis Rey River was conducted at two temporary watershed assessment stations in 2010/2011 (TWAS-1 and TWAS -2, located approximately 4.5 and 9.3 miles downstream of the project site, respectively). Monitoring efforts at the MLS and TWAS sites involved a similar suite of pollutants as noted above, along with additional parameters such as chemical pesticides/herbicides and toxicity to select aquatic organisms (and no monitoring conducted at these sites in 2011/2012). The resulting data indicate that applicable water quality objectives were exceeded most recently at a high or medium frequency for TDS, fecal coliform, pH, TSS, turbidity, toxicity, total phosphorus and pesticides (diazinon and malathion); and were exceeded at a low frequency for pollutants including nutrients (Weston Solutions, Inc. [Weston] 2013, 2012, 2011, 2010).

Jurisdictional dry weather sampling was conducted most recently in 2011 at a number of locations both up- and downstream of the Project site. These efforts documented that water quality objectives were most commonly exceeded for nitrate, turbidity and MBAS (methylene blue active substances, including surfactants from sources such as detergents); and less commonly for pollutants including conductivity, ammonia, and enterococcus and total coliform bacteria (Weston 2013).

Bioassessment studies have been conducted at two downstream locations as part of the NPDES Municipal Storm Water Permit requirements between 2001 and 2011 (with only one site tested in 2001). Bioassessment testing involves evaluation of the taxonomic richness and diversity of benthic macroinvertebrate (BMI) communities, with all tested sites ranked for the condition of BMI communities. Test results for all samples at the noted locations exhibited poor or very poor ratings, reflecting (at least in part) generally poor local water quality conditions (Weston 2012, 2011, 2010, 2008, 2007 and 2005; MEC 2005, 2004 and 2003).

Sampling was conducted in 2004 at two sites along the San Luis Rey River under the California Surface Water Ambient Monitoring Program (SWAMP). The two noted sites include one location each up- and downstream of the Proposed Project, with the upstream sample exceeding turbidity standards and the downstream sample exceeding standards for sulfate and manganese (Weston 2008).

The City of Oceanside conducted water quality monitoring between November 1993 and July 2001 at three locations along the San Luis Rey River, including the SR-76 crossing and the previously described Yuma and MLS sites. Data from these efforts identified "[p]arameters that exhibited consistently high concentrations…" including bacterial indicators, TDS, chloride, magnesium, iron, and manganese (City of Oceanside 2003).

Ambient bay and lagoon monitoring was conducted for a number of coastal waters between 2002 and 2005, including the San Luis Rey River Estuary. The intent of this program was to document conditions including sediment chemistry, toxicity, and ecological community structure, as well as to provide indications of the overall status of marine life and determine priorities for additional investigations and remedial actions. Samples from the San Luis Rey River Estuary exhibited generally high individual and overall (i.e., relative to other sampled embayments) quality rankings for sediment chemistry and toxicity, and low to moderate rankings for benthic community structure (Weston 2007).

Groundwater Quality Monitoring Data

Available information on groundwater quality includes historic and/or recent data for the Mission and Bonsall HSA Groundwater Basins, as well as the San Luis Rey River Valley Basin. The Bonsall HSA Basin encompasses the project site and proximal downstream areas (and coincides with the Bonsall HSA boundary depicted on Figure 3.1.4-1), while the Mission HSA Basin includes areas further downstream within the San Luis Rey River HU. An evaluation of potential groundwater storage capabilities conducted for the SDCWA identified TDS ranges of 1,000 to 3,100 mg/l in the Mission HSA Basin, and 600 to 3,100 mg/l for the Bonsall HSA Basin (Woodward-Clyde Consultants 1990). These levels represent generally moderate to poor water quality conditions, although local variation was present. More recent data for the Mission HSA Basin also indicate generally moderate to poor groundwater quality conditions, as characterized by typical TDS levels of 1,200 to 1,600 mg/l (SDCWA 1997). The described groundwater quality conditions are likely associated, at least in part, with extensive agricultural use in the associated watersheds.

Historic groundwater quality in the southwestern portion of the San Luis Rey Valley Basin was described as exhibiting magnesium, sulfate, chloride, nitrate, iron and TDS levels that were unsuitable for domestic use, as well as chloride and TDS levels unsuitable for irrigation (California Department of Water Resources [DWR] 2003). An additional assessment of groundwater quality conducted for the San Luis Rey Valley Basin identified a TDS range of 530 to 7,060 mg/l (with an average of 1,258 mg/l), and documented a number of incidents where water quality objectives (or maximum pollutants levels [MCLs]) were exceeded for pollutants including nitrates and pesticides (SWRCB 2003). The described data indicate generally moderate to poor quality within the southwestern potion of the San Luis Rey Valley Basin, with these conditions associated with factors including urban/agricultural development and seawater intrusion in coastal areas.

Section 303(d) Impaired Water Bodies and Total Maximum Daily Loads

The SWRCB and RWQCBs produce bi-annual qualitative assessments of statewide and regional water quality conditions. These assessments are focused on CWA Section 303(d) impaired water listings and scheduling for assignment of total maximum daily load (TMDL) requirements. States are required to identify and document any and all polluted surface water bodies, with the resulting documentation referred to as the *Clean Water Act Section 303(d) List of Water Quality Limited Segments*, or more commonly the 303(d) list. This list of water bodies identifies the associated pollutants and TMDLs, along with pollutant sources and projected TMDL implementation schedules/status. A TMDL establishes the maximum amount of an impairing substance or stressor that a water body can assimilate and still meet water quality standards, and allocates that load among pollution contributors. TMDLs are quantitative tools for implementing state water quality standards, based on the relationship between pollution sources and water quality conditions. The most current (2010) approved 303(d) list identifies the following impaired waters in downstream watersheds (SWRCB 2012):

- The lower portion of the San Luis Rey River (west of I-15) is listed as impaired for chloride, enterococcus and fecal coliform bacteria, phosphorus, total nitrogen, toxicity and TDS. Potential sources for chloride, bacterial, phosphorus, nitrogen and toxicity impairments include urban runoff/storm sewers, and unknown point and non-point runoff. Potential sources identified for TDS impairment include agricultural runoff, surface mining, golf course activities, industrial point runoff/wastewater, flow regulation/modification, natural sources, urban runoff/storm sewers, and point and non-point runoff of unknown origin. The proposed TMDL completion date for chloride and TDS is identified as 2019, with a TMDL completion date for all other listed pollutants of 2021.

- The upper portion of the San Luis Rey River (east of I-15) is listed as impaired for total nitrogen. Potential sources include unknown non-point runoff, with an associated TMDL completion date of 2021.

- The Pacific Ocean shoreline at the San Luis Rey River mouth is listed for enterococcus and fecal coliform bacteria, with potential pollutants sources including urban runoff/storm sewers and unknown point/non-point runoff. An associated TMDL was adopted by the RWQCB on February 10, 2010, under Order No. R9-2010-0001.

Water Quality Summary

Based on the above information, surface water quality within the Project site and immediate vicinity is assumed to be generally moderate. This conclusion is based on the described data sources, as well as the fact that associated upstream watersheds include primarily low to moderate density development. Monitoring data indicate generally poor water quality conditions in downstream portions of the San Luis Rey River and associated coastal waters, with some variation among individual pollutants. These conditions are associated with the higher level of urban development and associated pollutant generation, as well as the ongoing implementation of water quality control measures. Specifically, the 2010/2011 Urban Runoff Monitoring Report associated with NPDES requirements documents the following long-terms trends at the San Luis Rey MLS: (1) concentrations of bacterial indicators, dissolved phosphorus, ammonia, pH and turbidity are increasing; and (2) concentrations of TDS, total hardness and conductivity are decreasing (Weston 2013, 2012).

Based on the available historic and recent data described above, groundwater quality within the project site and downstream portions of the Bonsall, Mission, and San Luis Rey Valley basins is characterized as generally moderate to poor.

Regulatory Framework

The Proposed Project is subject to a number of regulatory requirements associated with federal, state and local guidelines, as summarized below.

National Pollutant Discharge Elimination System Requirements

The Proposed Project is subject to applicable elements of the CWA, including the NPDES. Specific NPDES requirements associated with the Proposed Project include conformance with the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit, NPDES No. CAS000002, SWRCB Order 2009-0009-DWQ), General Permit for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region Except for San Diego Bay (Groundwater Permit; RWQCB Order No. R9-2008-0002, NPDES No. CAG919002), NPDES Municipal Storm Water Permit (Municipal Permit, NPDES CAS 0108758, RWQCB Order No. 2007-0001), and related County standards as outlined below.

General Construction Activity Storm Water Permit

Conformance with the Construction General Permit is required prior to development of applicable sites exceeding one acre, with this permit issued by the SWRCB under an agreement with the USEPA. Specific conformance requirements include implementing a Storm Water Pollution Prevention Plan (SWPPP), an associated Construction Site Monitoring Program (CSMP), employee training, and minimum best management practices (BMPs), as well as a Rain Event Action Plan (REAP) for applicable projects (e.g., those in Risk Categories 2 or 3, as outlined below). Under the Construction General Permit, project sites are designated as Risk Level 1 through 3 based on site-specific criteria (e.g., sediment and receiving water risk), with

Risk Level 3 sites requiring the most stringent controls. Based on the site-specific risk level designation, the SWPPP and related plans/efforts identify detailed measures to prevent and control the off-site discharge of pollutants in storm water runoff. Depending on the risk level, these may include mandatory technology-based action levels, effluent limitations, and advanced treatment systems (ATS). Specific pollution control measures require the use of best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT) levels of treatment, with these requirements implemented through applicable BMPs. While site-specific measures vary with conditions such as risk level, proposed grading, and slope/soil characteristics, detailed guidance for construction-related BMPs is provided in the permit and related County standards (as outlined below), as well as additional sources including the *EPA National Menu of Best Management Practices for Storm Water Phase II – Construction* (USEPA 2012), and *Storm Water Best Management Practices Handbooks* (California Stormwater Quality Association [CASQA] 2009). Specific requirements for the Proposed Project under this permit would be determined during SWPPP development, after completion of Project plans and application submittal to the SWRCB.

General Groundwater Extraction Waste Discharge Permit

The Project would need to apply for coverage under the General Groundwater Extraction Waste Discharge Permit only if construction would discharge extracted groundwater into the receiving water. Conformance with the noted Groundwater Permit is generally applicable to all groundwater discharge regardless of volume, with certain exceptions as noted in the permit text. Specific requirements for permit conformance include: (1) implementing an appropriate sampling and analysis/monitoring program; (2) providing at least 30 days notification to the appropriate local agency prior to discharging to a municipal storm drain system; (3) conforming with applicable water quality standards, including (but not limited to) the Basin Plan, CWA, and State Porter-Cologne Water Quality Control Act; and (4) submittal of applicable monitoring reports.

Municipal Storm Water Permit

This permit identifies waste discharge requirements for urban runoff related to applicable new development, redevelopment, and existing development sites under the jurisdiction of co-permittees (e.g., the County of San Diego). The intent of these requirements is to protect environmentally sensitive areas and provide conformance with pertinent water quality standards, including the CWA and the RWQCB Basin Plan. Identified requirements involve using a number of planning, design, operation, treatment and enforcement measures to reduce pollutant discharges from individual development projects (and the municipal storm drain system as a whole) to the maximum extent practicable (MEP). Specifically, these measures include: (1) using jurisdictional planning efforts (such as discretionary general plan approvals) to provide water quality protection; (2) requiring coordination between individual jurisdictions to provide watershed-based water quality protection; (3) implementing applicable low impact development (LID), site design, source control, priority project, and/or volume- or flow-based (as defined in the permit text) treatment control BMPs to avoid, reduce and/or mitigate effects including

increased erosion and sedimentation, hydromodification[2] and the discharge of pollutants in urban runoff; and (4) using appropriate monitoring, reporting and enforcement efforts to ensure proper implementation, documentation and (as appropriate) modification of permit requirements. The Municipal Permit also requires co-permittees to fund and implement urban runoff management plans (URMPs) to reduce runoff and pollutants discharges to the MEP. The URMPs were conducted on a jurisdictional basis for the first two years, and were expanded to include a watershed-based approach for subsequent efforts. The watershed-based approach is being implemented for the Project site and applicable downstream watersheds through the current San Luis Rey River Watershed URMP (City of Oceanside 2008).

Pursuant to the described Municipal Permit requirements, the County (along with other applicable co-permittees) participated in developing the SUSMP (approved by the RWQCB on June 12, 2002) to address storm water quality issues, and adopted related storm water standards and ordinances as described below under County Requirements. An updated Countywide Model SUSMP was adopted by the co-permittees on February 9, 2010. The County adopted a local (County-specific) SUSMP on February 10, 2003 (per Municipal Permit requirements), with the most recent update of this document adopted in September 2012 to reflect current requirements including the revised 2007 Municipal Permit.

It should also be noted that an update to the current Municipal Permit is pending, and is anticipated to be adopted by the RWQCB sometime in 2013. The updated permit would be more regional in scope, encompassing applicable portions of San Diego, Riverside and Orange counties now covered by separate municipal permits. The new Municipal Permit, while still in draft form as of this writing, may also involve additional and/or modified requirements related to efforts including monitoring/assessment and reporting, use of LID BMPs, hydromodification and runoff management, discharge prohibitions, effluent and receiving water limitations, action levels, and related remedial efforts.

Basin Plan Requirements

The RWQCB Basin Plan establishes a number of beneficial uses and water quality objectives for surface and groundwater resources. Beneficial uses are generally defined in the Basin Plan as "the uses of water necessary for the survival or well-being of man, plus plants and wildlife." Identified existing and potential beneficial uses for the Project site and applicable downstream areas of the Mission and Bonsall HSAs (including coastal waters) include: agricultural supply (AGR); industrial service supply (IND); contact and non-contact water recreation (REC 1 and REC 2); biological habitats of special significance (BIOL); warm freshwater habitat (WARM); wildlife habitat (WILD); rare, threatened or endangered species (RARE); marine habitat (MAR); and migration of aquatic organisms MIGR). Identified beneficial uses for groundwater in the Lower San Luis HA include municipal and domestic supply (MUN), AGR and IND. Water quality objectives identified in the Basin Plan are based on established beneficial uses, and are defined as "the limits or levels of water quality constituents or characteristics which are

[2] Hydromodification is defined in the Municipal Permit as the change in natural watershed hydrologic processes and runoff characteristics (infiltration and overland flow) caused by urbanization or other land use changes that result in increased stream flows, sediment transport, and morphological changes in the channels receiving the runoff.

established for the reasonable protection of beneficial uses." Water quality objectives identified for surface and groundwater resources in the Lower San Luis HA and the Bonsall HSA are summarized in Table 3.1.4-3, Surface and Groundwater Quality Objectives for the Lower San Luis Hydrologic Area and the Bonsall Hydrologic Subarea.

County of San Diego Requirements

Pursuant to the described NPDES Permit requirements, the County has adopted and/or updated the following related standards: (1) the Watershed Protection, Storm Water Management and Discharge Control Ordinance (Storm Water Ordinance, No. 10096); (2) the associated Storm Water Standards Manual (Storm Water Manual, 2003a) and LID[3] Handbook (2007g); (3) the previously described County SUSMP; (4) the County Jurisdictional URMP (JURMP, 2010d); and (5) the County Grading Ordinance (No. 10179). These sources provide, among other things, direction for applicants to determine if and how they are subject to County and related Municipal Storm Water Permit standards, and identify requirements for the inclusion of permanent LID and site design, source control and/or LID/treatment control BMPs to provide regulatory conformance for applicable projects. The County Storm Water Ordinance/Storm Water Manual also requires construction-related BMPs to address issues including erosion and sedimentation. The County may, at its discretion, require the submittal and approval of a SWPPP to address construction-related storm water issues prior to site development (with such requirements in addition to the NPDES SWPPP criteria described above).

The San Diego County Hydrology Manual (County 2003b) provides uniform procedures for analyzing flood and storm water conditions in the County. Specific elements of these procedures include methods to estimate storm flow peaks, volumes and time distributions. These data are used in the design of storm water management facilities to ensure appropriate dimensions and capacity (typically 100-year storm flow volumes), pursuant to applicable requirements in the San Diego County Drainage Design Manual (County 2005b).

The County Guidelines for Determining Significance – Hydrology (County 2007h), provide direction for evaluating environmental effects to and from hydrologic conditions and hazards. Specifically, these guidelines address potential adverse effects to hydrologic resources, life and property (pursuant to applicable CEQA standards) from issues including drainage alteration, increased water surface elevations, increased runoff velocities and peak flow rates, and flooding. The Hydrology Guidelines identify significance guidelines for the noted issues, as well as related regulatory standards, typical adverse effects, standard mitigation/design considerations, and reporting requirements.

The County Guidelines for Determining Significance, Surface Water Quality (County 2007i), provide direction for evaluating environmental effects related to water quality issues, pursuant to related CEQA standards. The Water Quality Guidelines give an overview of hydrologic resources, local watershed conditions, related regulatory standards and typical adverse effects, and provide guidance for identifying significance guidelines and standard mitigation/design considerations.

[3] The LID process is intended to mimic predevelopment hydrologic conditions by using design practices and techniques to effectively capture, filter, store, evaporate, detain and infiltrate runoff close to its source.

3.1.4.2 A*nalysis of Project Effects and Determination as to Significance*

The discussion of potential impacts provided below is applicable to both Project development scenarios (**Scenarios 1** and **2**). Similarly, because of the consistency of hydrology/water quality issues relative to the Project area, the discussion of on-site impacts is also directly applicable to proposed off-site road and utility development unless otherwise noted.

Drainage Alteration

Guideline for the Determination of Significance

A significant impact related to drainage alteration would occur if the Proposed Project would:

1. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on or off site.

Guideline Source

Guideline No. 1 is from Section 4.0 of the County Guidelines for Determining Significance – Hydrology (County 2007b).

Analysis

As described in Section 3.1.4.1, surface flows within the portion of the Project site and associated off-site watersheds located north of SR-76 drain generally west to east. The majority of this flow moves through the site and enters Horse Ranch Creek along the eastern property boundary. Flows associated with smaller storm events in the southwestern portion of the site (and related off-site areas) are retained in an existing on-site sump; while flows in this area from larger events are discharged to Horse Ranch Creek through an existing outlet structure. Flows in Horse Ranch Creek drain generally to the south and enter the San Luis Rey River near the southernmost site boundary. The portion of the Project site located south of SR-76 drains directly into either Horse Ranch Creek to the west, or the San Luis Rey River to the south. The San Luis Rey River continues generally west from the Project site area and enters the Pacific Ocean in the City of Oceanside. Project implementation would result in some modification of the described on-site drainage patterns and directions through proposed grading and construction. These modifications would not substantially alter the overall described on- and off-site drainage patterns, however, with the Project Hydrology Study concluding that "The Project's drainage patterns mimic the existing conditions…Existing drainage patterns will be maintained." Specifically, the Project design would encompass a number of appropriately designed and located drainage facilities to retain the overall existing drainage features, including the use of similar outlet points for flows discharged from the site. Based on the described conditions, Project-related impacts to drainage alteration would be **less than significant**, including associated erosion and siltation effects (with additional information on potential erosion concerns provided below under the discussion of water quality).

Runoff Rates/Amounts and Related Drainage System and/or Flood Hazards

Guideline for the Determination of Significance

A significant impact related to runoff, drainage systems and related flooding would occur if the Proposed Project would:

2. Result in increased velocities and peak flow rates exiting the Project site that would cause flooding downstream or exceed the storm water drainage system capacity serving the site.

Guideline Source

Guideline No. 2 is from Section 4.0 of the County Guidelines for Determining Significance – Hydrology (County 2007b).

Analysis

Implementation of the Proposed Project would result in the construction of impervious surfaces including pavement and structures, with such areas increasing both the rate and amount of runoff within the site by reducing infiltration capacity and concentrating flows. Proposed on-site storm drain facilities include a series of graded pads, public/private streets, gutters, curb inlets and catch basins, all of which would be tied to an underground storm drain system of pipelines and related structures. The proposed storm drain system would accommodate peak 100-year storm flows and be designed so that off-site flows from the west do not comingle with on-site flows (except for minor drainage from the northernmost Caltrans storm drain tributary to the site). This design is intended to allow applicable portions of on-site flows (in addition to those from the noted Caltrans facility) to be treated prior to off-site discharge, per applicable regulatory requirements (as outlined below under the discussion of water quality). The Project Hydrology Study (Appendix L) includes an assessment of pre- and post-development runoff rates and amounts within and from the site, including analyses of Project-related effects to existing/proposed storm drain systems, off-site flows, and related downstream flooding hazards. Calculated post-development flows from the Project site are summarized below for the proposed drainage systems, along with the previously described existing flows (refer to Figure 2 of the Project Hydrology Study in Appendix L for a depiction of post-development drainage system boundaries). In addition, a number of minor modifications to existing off-site drainage structures are proposed in association with off-site project roadway facilities, with these modifications discussed separately below.

System 1000P/100P

This system includes proposed flows from both on-site (1000P) and off-site (100P) areas, and corresponds to existing System 100E described in Section 3.1.4.1. The combined peak 100-year flow in System 1000P/100P is calculated at 358.9 cfs, which represents a net reduction of 11.3 cfs from the existing flow of 370.2 cfs in System 100E. This reduction results from changes in the time of concentration (TOC) associated with the two respective hydrographs. The TOC is generally defined as the time required for water to travel from the hydraulically most distant

point in a watershed to the outlet. Based on the fact that the Proposed Project would result in a net reduction of peak 100-year flows in System 1000P/100P, no associated detention is proposed. The Project design includes the use of appropriate energy dissipation facilities (e.g., riprap aprons) at the two proposed discharge locations in this system to address the Project-related increase in flow velocity.

System 2000P

This system includes proposed flows from on-site development areas that drain southeast to Horse Ranch Creek, and corresponds to existing System 200E described in Section 3.1.4.1. The calculated peak 100-year flow in System 2000P is 280.1 cfs, which represents a net increase of 231.5 cfs from the existing flow of 48.6 cfs in System 200E. The Project Hydrology Study concludes that detention for 100-year peak flows in this system would not be warranted, based on the following considerations (with additional discussion provided in Sections 3.5 and 3.6 of the Project Hydrology Study in Appendix L): (1) the Project site is located at the downstream end of the Horse Ranch Creek watershed, with the peak flow entering the creek from the Project to occur prior to the peak flow in the overall creek watershed (and therefore resulting in only a minimal increase of overall peak flows in Horse Ranch Creek); and (2) based on the timing of peak flow conditions described in item 1, detention (i.e., delayed discharge) of peak flow from the Project site would actually increase the overall peak flow in Horse Ranch Creek. The Project design also includes the use of appropriate energy dissipation facilities at the three proposed discharge locations in this system to address the Project-related increase in flow velocity.

System 3000P/300P

This system includes proposed flows from both on-site (3000P) and off-site (300P) areas, and corresponds to existing System 300E described in Section 3.1.4.1. The combined peak 100-year flow in System 3000P/300P is calculated at 159.2 cfs, which represents a net increase of 7.9 cfs from the existing flow of 151.3 cfs in System 300E. The Project Hydrology Study concludes that detention for peak 100-year flow in this system would not be warranted for similar reasons as noted above for System 2000P, as well as the fact that Project-related grading would reduce the overall area draining to the on-site sump in this system (refer to Section 3.1.4.1). Accordingly, post-development flows would not exceed the capacity of the 72-inch outlet pipe from this sump. The Project design also includes the use of appropriate energy dissipation facilities at this proposed discharge point to address the Project-related increase in flow velocity.

System 4000P

This system includes proposed flows from on-site development in areas located south of SR-76, and corresponds to existing System 400E described in Section 3.1.4.1. The calculated peak 100-year flow in System 2000P is 67.5 cfs, which represents a net increase of 43 cfs from the existing flow of 24.5 cfs in System 400E. The Project Hydrology Study concludes that detention for peak 100-year flow in this system would not be warranted, for similar reasons as described above for System 2000P. Post-development flows from this system would be discharged directly into Horse Ranch Creek via an outlet pipe located south of the SR-76 Bridge. This would entail an increase in flow concentration relative to the existing system runoff, which sheet flows

directly into Horse Ranch Creek and the San Luis Rey River. The Project Hydrology Study concludes that this is not a major concern, however, due to the minor amount of this flow relative to flows in Horse Ranch Creek, as well as the fact that flows are discharged directly into the creek (i.e., without having to flow through any adjacent properties). The Project design also includes the use of appropriate energy dissipation facilities at this proposed discharge point to address the Project-related increase in flow velocity. Under **Scenario 2** for the Project, the calculated peak 100-year flow in System 2000P would be 76.6 cfs, or a net increase of 52.1 cfs over the existing flow in System 400E. For similar reasons as noted above for **Scenario 1**, however, the Project Hydrology Study concludes that detention for peak 100-year flow in this system under **Scenario 2** would not be warranted (and that appropriate energy dissipation facilities would be provided).

Off-site Drainage Modifications

Proposed off-site facilities involve roadway modifications including widening Old Highway 395 near the Pala Mesa Drive intersection, widening SR-76, and realigning the Shearer Crossing/Pankey Road intersection. The existing drainage patterns and associated facilities in these areas would be preserved to the maximum extent practicable, although some minor modifications may be required, including: (1) widening near Old Highway 395 would likely require adjustments to inlets and other collection points due to the revised curb locations, although existing drainage conditions would not change substantially; and (2) the SR-76 improvements would require minor revisions to associated drainage facilities (overside drains) to accommodate the new edge of pavement locations and collect associated runoff from the elevated roadway.

Summary of Drainage Alteration Impacts

As noted above, Project drainage facilities (including the proposed North Pankey Bridge and improvements associated with off-site roadway modifications) would accommodate peak 100-year storm flows, and the capacity of the existing 72-inch culvert under SR-76 would not be exceeded by Project implementation. The Project Hydrology Study also notes that "[h]ydraulic modeling for the Project's proposed widening of the…Caltrans SR-76 Horse Ranch Creek Bridge indicates that peak existing condition flows exceed the bridge capacity." Based on this condition and the fact that the Proposed Project would result in only a minor increase (0.08 percent) to peak flows in the creek, detention was determined not to be warranted for any of the proposed drainage systems as previously described. It should also be noted, however, that the Project would incorporate four on-site hydromodification/water quality basins as described below in this section. These facilities, while not designed as detention basins for peak 100-year flows (or factored into the associated modeling for Horse Ranch Creek), would provide substantial detention capacity for smaller storm events, with the result that peak 100-year storm flow at the downstream SR-76 bridge crossing would be at or below the existing level (PDC 2013c).

Based on the above discussions, the Project Hydrology Study concludes that the overall peak 100-year flow from the Project site (and applicable off-site areas) into Horse Ranch Creek would represent an increase of approximately 0.08 percent over existing peak flow levels (i.e., without

consideration of the hydromodification/water quality basins, as noted above), and would not adversely increase downstream flooding hazards or the capacity of downstream storm drain systems/facilities. As a result of these considerations and the fact that the on- and off-site drainage system would be designed to accommodate peak 100-year storm flows, potential Project-related impacts associated with increased flow peak flow rates and amounts, associated downstream flooding hazards, and the capacity of existing or planned storm drain systems would be **less than significant.**

Hydromodification

Guidelines for the Determination of Significance

A significant impact related to hydromodification would occur if the Proposed Project would:

3. Exceed applicable hydromodification requirements or conflict with the County's Final Hydromodification Management Plan (HMP; County 2011).

Guideline Sources

Guideline No. 3 is derived from hydromodification requirements included in the previously described RWQCB NPDES Municipal Permit and related County standards.

Analysis

Pursuant to requirements under the NPDES Municipal Permit (as outlined in Section 3.1.4.1 of this subchapter), the County prepared an HMP for Priority Development Projects (PDPs), with the final (adopted) HMP dated March 2011. Specifically, the HMP requires that all PDPs must either demonstrate that the project is exempt from HMP requirements based on the identified criteria, or provide compliance with the hydromodification mitigation requirements outlined in the HMP.

The stated purpose of the HMP is "…to manage increases in runoff discharge rates and durations from all PDPs, where such increased rates and durations are likely to cause increased erosion of channel beds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force". In general terms, hydromodification consists of the erosive impacts caused by cumulative changes in the quantity and duration of storm water flows resulting from the increase in impervious surfaces associated with development. Specifically, an increase in impervious areas typically generates related increases in both the rate and amount of storm water runoff compared to pre-development conditions. Flow thresholds associated with hydromodification mitigation requirements are typically expressed in terms of less intense storms (e.g., 2- to 10-year storm events) which, due to the increased of impervious area in associated watersheds, can potentially result in more accelerated cumulative long-term erosion than one larger storm event (such as a 100-year storm). As a result, hydromodification management techniques are aimed at reducing the duration and quantity of storm flows from the smaller and more frequent storm events.

The Proposed Project is a PDP and must therefore comply with the HMP mitigation requirements. Accordingly, a Hydromodification Screening and a PHMS were prepared for the Project to evaluate the HMP compliance efforts incorporated into the Project design (Chang 2013b and PDC 2013d in Appendix L). Flow duration control is the most common form of hydromodification management, and is intended to mitigate associated effects prior to downstream discharge. Flow duration control typically involves the use of facilities such as infiltration basins, bioretention areas, detention basins or cisterns to regulate and/or reduce flows and help reduce associated impacts to downstream receiving waters. Based on analysis in the PHMS, the following observations and conclusions regarding hydromodification effects and related HMP requirements were identified for the Proposed Project:

- The two proposed development areas south of SR-76 (PAs 4 and 5) are exempt from HMP requirements, due to the fact that the proposed outfall location discharges to an exempt water body. That is, based on Table 6-1 of the HMP, direct discharges to the San Luis Rey River near the Project site are exempt, as this portion of the river is identified as an "exempt river reach" due to considerations including watershed area, 100-year flow rates, and existing upstream flow regulation (County 2011b).

- There are eight proposed outfall (or discharge) points within (or from) the portion of the Project site located north of SR-76, with two of these exempt from HMP requirements, including outfalls B and G as depicted on Exhibit B of the PHMS (PDC 2013d in Appendix L). Specifically, Outfall B discharges "run-on" flows originating in off-site areas to the west, with these flows conveyed through the Project site without the addition of any Project-related flows. Outfall G consists of an existing 72-inch pipeline that conveys to the south (under SR-76) that are derived primarily from a natural sump area (refer to PHMS Exhibit B and the discussion of Drainage System 300E above in Section 3.1.4.1). While this outfall also includes flows from Proposed Project development areas, these Project-related flows pass through an additional outfall (Outfall F) before reaching Outfall G, and are therefore already addressed as part of the HMP requirements for Outfall F (as described below).

- The remaining six outfall points north of SR-76 (Outfalls A, C through F and H) were evaluated under HMP requirements in the PHMS. Outfalls D and E were combined for purposes of the PHMS, as both discharge to Horse Ranch Creek at approximately the same location and the hydromodification basin at Outfall E would compensate for providing no attenuation at Outfall D (that is, the minor amount of net increase in impervious surface at Outfall D would be adequately addressed in the basin upstream of Outfall E such that the combined discharge would be in compliance with the hydromodification requirements). Similarly, Outfalls F and H were combined as they ultimately discharge to the same point, and Outfall H discharges to a hardened channel that flows into Horse Ranch Creek (refer to PHMS Exhibit B). Accordingly, there are four discharge points addressed for HMP compliance in the PHMS, including Outfalls A, C, D/E and F/H, with these four locations referred to as point of compliance (POC) sites. It should also be noted that all applicable project discharge would be subject to appropriate water quality treatment, as described below in this section.

- The four POCs described above were assessed using the San Diego Hydrology Model, (SDHM2012), with appropriate soil type, slope, land cover, drainage and rainfall data. Based on this modeling, four detention basins were identified for the noted POCs and included in the Proposed Project design, with these facilities to provide appropriate flow control management and ensure conformance with applicable HMP requirements (refer to Figure 1-25, Conceptual Drainage Plan).

A number of conservative assumptions were incorporated into the Project SDHM model, including the detention basin volumes and the fact that zero infiltration into native soils is factored into the related calculations (with local soils generally characterized as exhibiting "moderate infiltration rates"). The identified detention basins are also proposed to be used as water quality treatment BMPs, as outlined below in this section. Based on this proposed use and potential future changes in the Project design, the identified nature, extent and location of the four detention basins could be modified accordingly. Specifically, the current site plan identifies the four basins as graded, open facilities. If the Project design is subsequently modified to, for example, include additional uses in the basin areas, the design of these facilities could be changed to provide underground vaults or tanks. Regardless of such potential future Project design changes, the four basins (or equivalent facilities) would be required to provide adequate detention capacity, as identified in the Project PHMS, to ensure compliance with associated requirements in the HMP. Based on the described conclusions and considerations, the Project design incorporates appropriate detention facilities to provide compliance with applicable requirements under the HMP, and would avoid or reduce potential effects related to hydromodification to a **less than significant** level.

Floodplains, Floodwater Surface Water Elevations, and Related Flood Hazards

Guidelines for the Determination of Significance

A significant impact related to floodplains, floodwater surface elevations, and related flood hazards would occur if the Proposed Project would:

4. Place housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, a County Floodplain Map or County Alluvial Plain Map, which would subsequently endanger health, safety and property due to flooding; or

5. Place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:

    a. Alter the Lines of Inundation resulting in the placement of other housing in a 100-year flood hazard; or
    b. Increase the water surface elevation in a watercourse with a watershed equal to or greater than one square mile by one foot or more in height, or increase the water surface elevation of the San Luis Rey River by 2/10 of a foot or more in height.

Guideline Sources

Guideline Nos. 4 and 5 are from Section 4.0 of the County Guidelines for Determining Significance – Hydrology (County 2007b).

Analysis

Flood-related Health, Safety and Property Hazards, and Inundation/Water Surface Elevations

As described in Section 3.1.4.1, floodplain studies were conducted for applicable portions of Horse Ranch Creek (PDC 2013c) and the San Luis Rey River (Chang Consultants 2013a) to delineate existing floodplain boundaries and evaluate associated potential Project-related impacts. The results of these studies, along with FEMA Flood Insurance Rate Map (FIRM) data, are used in the following analyses of potential on- and off-site flood-related hazards.

Horse Ranch Creek. Delineation of the Horse Ranch Creek floodplain identified a number of existing and proposed facilities that are or would be located within the mapped floodplain boundaries (refer to Figure 3.1.4-2). Specifically, existing facilities within the mapped floodplain include the majority of the North Pankey Road Bridge and portions of Pankey Road between the bridge and SR-76. Proposed Project facilities that would be located within the mapped Horse Ranch Creek floodplain include portions of several residential, commercial and mixed used lots, as well as associated access roads, on the north side of SR-76, along with portions of the westernmost commercial lot south of the highway. Based on these conditions, the current Project design includes a number of measures to address associated potential impacts from flood-related health, safety and property hazards. Specifically, this would include replacing the North Pankey Bridge and realigning/raising applicable portions of Pankey Road, as well as raising applicable graded pad elevations such that all proposed roadways, bridges, and graded pads would be located outside of the mapped Horse Ranch Creek 100-year floodplain (Figure 3.1.4-3, Proposed Conditions Floodplain Map). The proposed modifications to the existing mapped 100-year floodplain for Horse Ranch Creek would warrant submittal of a Conditional Letter of Map Revision (CLOMR) to FEMA for review, and subsequent approval of a LOMR. This process would allow revision of the associated FIRM panels to reflect proposed conditions, and would be conducted during (and incorporate) final Project design, with a LOMR to be processed after construction is complete. Based on the described conditions and assumptions, potential impacts to the Proposed Project from 100-year flood-related health, safety and property hazards associated with Horse Ranch Creek would be **less than significant.**

The Horse Ranch Creek Floodplain Study (and subsequent related correspondence) concludes that, north of the North Pankey Road Bridge, Project implementation could potentially result in a maximum rise in surface water elevations of 2.2 feet above existing conditions. Under existing conditions, a large percentage of the flow overtops Pankey Road and only a small percentage flows underneath the existing bridge. Since overtopping is eliminated with the new bridge and new Pankey Road profile, the water surface elevation increases upstream of the bridge because more energy is required to drive the flow through the proposed bridge opening than the existing condition flow (which flows over the roadway). The increase does not violate the above-noted threshold of raising elevations by one foot or more, since that condition only applies to

regulatory floodways and no regulatory floodways exist within Horse Ranch Creek. The water surface elevation increase could potentially generate flood-related (inundation) impacts to off-site areas. The Floodplain Study also notes, however, that three separate flood analyses for Horse Ranch Creek have been conducted for the Campus Park West, Campus Park and Meadowood projects, and that all three used different modeling and bridge design assumptions and resulted in different conclusions. As a result, the projected rise in water surface elevations varies, depending on which analysis/data are used, but all three projects noted increases in water surface elevations and designed the elevations of the proposed improvements accordingly. Based on the described conditions and assumptions, potential impacts from the Proposed Project related to on- and off-site water surface elevations and associated flooding hazards would be **less than significant.**

San Luis Rey River. The Project San Luis Rey River Floodplain Study identified a number of existing and proposed facilities that are or would be located within the associated mapped floodplain boundaries (refer to Figure 3.1.4-2). Specifically, existing facilities within the mapped floodplain include portions of Shearer Crossing. Proposed Project facilities that would be located within the mapped San Luis Rey River floodplain include all or part of the two proposed commercial development areas south of SR-76. Based on these conditions, the San Luis Rey River Floodplain Study provides the following conclusions: (1) the current Project design includes appropriate measures to address associated potential flood-related health, safety and property hazards, including raising applicable roadway structures and graded pad elevations above the mapped San Luis Rey River 100-year floodplain (Figure 3.1.4-3), as well as providing protective measures (such as geosynthetic mats or vegetation) in appropriate areas (i.e., road embankments near Shearer Crossing) to address potential erosion and scour effects; (2) post-development water surface elevations along the San Luis Rey River would be generally the same as existing elevations with only minor increases of between 0.01 and 0.02 foot at cross-sections 673 through 677.8 (upstream of Shearer Crossing) as a result of Project implementation; (3) post-development channel velocities along the San Luis Rey River would be generally the same as existing velocities, with exceptions including a 0.2 foot per second (fps) decrease at cross-section 670 (just upstream of Shearer Crossing), and a 0.1 fps increase at cross-sections 676.7 and 677.2 (which would not affect the proposed project or existing erosion/scour protection at Shearer Crossing); and (4) no adverse impacts related to inundation of associated off-site properties would result for the Proposed Project. The proposed modifications to the existing mapped 100-year floodplain for the San Luis Rey River would also warrant submittal/approval of a CLOMR and would require submittal of a LOMR, as described above for Horse Ranch Creek. Based on the described conditions and conclusions, potential impacts to the Proposed Project and related off-site areas from 100-year flood-related health, safety, property and inundation/water surface elevation hazards associated with the San Luis Rey River would be **less than significant.**

Water Quality

Guidelines for the Determination of Significance

A significant impact related to water quality would occur if the Proposed Project would:

6. Fail to conform to applicable federal, State or local "Clean Water" statutes or associated regulations including, but not limited to, the Federal Water Pollution Control Act (Clean Water Act [CWA]) and related NPDES requirements; California Porter-Cologne Water Quality Control Act and related San Diego Basin Plan; County of San Diego Watershed Protection, Stormwater Management, and Discharge Control Ordinance (Ordinance No. 10096, San Diego Code of Regulatory Ordinances Sections 87 and 67); County of San Diego Storm Water Standards Manual; County of San Diego LID Manual; and County of San Diego SUSMP.

7. Drain to a tributary of an impaired water body listed on the CWA Section 303(d) list, and contribute substantial additional pollutants for which the receiving water body is already impaired.

8. Contribute pollution in excess of that allowed by applicable state or local water quality objectives or cause or contribute to the degradation of beneficial uses.

Guideline Sources

Guideline Nos. 6 through 8 are derived from Section 4.0 of the County Guidelines for Determining Significance – Surface Water Quality (County 2007c).

Analysis

Conformance with Federal, State and Local Water Quality Statues and Associated Regulations

Potential Project-related water quality impacts are associated with both short-term construction activities and long-term operation and maintenance. Project-related activities that could potentially result in direct effects to groundwater quality are limited to the percolation of Project-related surface runoff and associated pollutants (e.g., in proposed detention basins). Accordingly, the following assessment of potential water quality impacts is applicable to both surface and groundwater resources.

Short-term Construction Impacts. Potential water quality impacts related to on- and off-site Project construction include erosion/sedimentation, the use and storage of construction-related hazardous materials (e.g., fuels, etc.), generation of debris from demolition activities, and disposal of extracted groundwater (if required), as described below.

Erosion and Sedimentation. Proposed excavation, grading, and construction activities on the Project site and associated off-site areas (e.g., road improvements) could potentially result in related erosion and off-site sediment transport (sedimentation). Project activities would involve

the removal of surface stabilizing features such as vegetation, excavation of existing compacted materials from cut areas, redeposition of excavated (and/or imported) material as fill in proposed development sites, and potential erosion from disposal of extracted groundwater (if required). Project-related erosion could result in the influx of sediment into downstream receiving waters, with associated water quality effects such as turbidity and transport of other pollutants that tend to adhere to sediment particles.

While graded, excavated and filled areas associated with construction activities would be stabilized through efforts such as compaction and installation of hardscape and landscaping, erosion potential would be higher in the short-term than for existing conditions. Developed areas would be especially susceptible to erosion between the beginning of grading/construction and the installation of pavement or establishment of permanent cover in landscaped areas. Erosion and sedimentation are not considered to be significant long-term concerns for the Proposed Project because developed areas would be stabilized through installation of hardscape or landscaping. The Project also would incorporate long-term water quality controls pursuant to County and NPDES guidelines, including (among other efforts) measures that would avoid or reduce off-site sediment transport. This would include efforts such as the use of detention/water quality basins, media filters, hydrodynamic separators, energy dissipators, irrigation controls, and drainage facility maintenance (i.e., to remove accumulated sediment).

The short-term water quality effects from Project-related erosion and sedimentation could potentially affect downstream waters and associated wildlife habitats, with such impacts considered potentially significant. Short-term (construction) erosion and sedimentation impacts would be addressed through conformance with the NPDES Construction General Permit and associated County standards, as described above in Section 3.1.4.1 under Regulatory Framework. This would include implementing an authorized NPDES/County SWPPP for proposed construction, including (but not limited to) erosion and sedimentation BMPs. The Project SWMP identifies a number of preliminary construction BMPs, including measures related to erosion/sedimentation (Appendix M). While specific BMPs would be determined during the SWPPP process based on site characteristics (soils, slopes, etc.), they would include standard industry measures and guidelines from the NPDES Construction Permit and County Stormwater Ordinance/Stormwater Standards Manual, as well as the SWMP and additional sources identified in Section 3.1.4.1 under Regulatory Framework. A summary of anticipated erosion and sedimentation BMPs that would be applicable to the Proposed Project are provided in Table 3.1.4-4, Potential Measures to Avoid or Minimize Impacts Related to Erosion and Sedimentation. Based on the implementation of these and/or other appropriate erosion and sediment control BMPs as part of (and in conformance with) the Project SWPPP and related requirements, associated erosion/sedimentation impacts would be **less than significant**. Erosion and sedimentation controls implemented for the Proposed Project would be further defined during the NPDES/County SWPPP process, with the resulting BMPs taking priority over the more general types of standard industry measures listed in Table 3.1.4-4.

Construction-related Hazardous Materials. Project construction would involve the use and/or storage of hazardous materials such as fuels, lubricants, solvents, concrete, paint, and portable septic system wastes. The accidental discharge of such materials during Project construction could potentially result in significant impacts if such materials reach downstream receiving

waters, particularly materials such as petroleum compounds that are potentially toxic to aquatic species in low concentrations. Implementation of a SWPPP would be required under NPDES and (potentially) County guidelines, and would include detailed measures to avoid or mitigate potential impacts related to the use and potential discharge of construction-related hazardous materials. The Project SWMP identifies a number of preliminary construction BMPs, including measures related to the proper use and storage of hazardous materials (Appendix M). While detailed BMPs would be determined as part of the NPDES/SWPPP process based on Project-specific parameters, they are likely to include the standard industry measures and guidelines from the NPDES Construction General Permit and County Stormwater Ordinance/Stormwater Standards Manual, as well as the SWMP and additional sources identified in Section 3.1.4.1 under Regulatory Framework. A summary of anticipated construction-related hazardous material BMPs that would be applicable to the Proposed Project is provided in Table 3.1.4-5, Potential Measures to Avoid or Minimize Impacts Related to the Use and Storage of Construction-related Hazardous Materials. Based on the implementation of these and/or other appropriate hazardous material BMPs as part of (and in conformance with) the Project SWPPP and related requirements, associated impacts would be **less than significant**. Construction-related hazardous materials controls implemented for the Project would be further defined during the NPDES/County SWPPP process, with the resulting BMPs taking priority over the more general types of standard industry measures in Table 3.1.4-5.

Demolition-related Debris Generation. The Proposed Project would involve the demolition of existing on-site facilities including structures and pavement. These activities would generate variable amounts of construction debris, potentially including concrete, asphalt, glass, metal, drywall, paint, insulation, fabric and wood. Demolition activities could also potentially generate particulates, as well as pollutants related to hazardous materials including lead-based paint and asbestos insulation. The introduction of demolition-related particulates or hazardous material pollutants into the local storm drain system could potentially result in significant downstream water quality impacts.

Project construction would be subject to a number of regulatory controls related to demolition, including NPDES/SWPPP requirements and hazardous materials controls described in Section 3.1.3, Hazards and Hazardous Wastes, of this subchapter. The Project SWPPP would include measures to address potential effects associated with pollutant generation from demolition activities, with detailed requirements to be determined as part of the SWPPP process. A number of standard BMPs that would likely be applicable to Project demolition efforts are provided in Table 3.1.4-6, Potential Measures to Avoid or Minimize Impacts Related to the Generation of Debris during Demolition Activities. Demolition-related activities involving hazardous materials would conform to the associated regulatory requirements described in Section 3.1.3 of this EIR. Such conformance would include applicable measures to regulate sampling and monitoring procedures; contain/abate contaminated materials during construction; provide protective gear for workers handling contaminated materials; ensure acceptable exposure levels; and provide for safe and appropriate handling, transport and disposal of hazardous materials generated during Project construction.

Based on implementation of appropriate BMPs as part of (and in conformance with) an NPDES/County SWPPP, as well as conformance with applicable hazardous material regulations,

potential water quality impacts from Project-related generation of demolition debris would be **less than significant**. Project controls for demolition-related debris generation would be further defined during the NPDES permitting and SWPPP process, with the resulting BMPs taking priority over the more general types of standard industry measures listed in Table 3.1.4-6.

Disposal of Extracted Groundwater. Shallow groundwater is expected to be encountered during Project-related excavation and construction. Disposal of groundwater extracted during construction activities into local drainages and/or storm drain facilities could potentially generate significant water quality impacts through erosion/sedimentation, or the possible occurrence of pollutants in local groundwater aquifers. Project construction would require conformance with applicable NPDES Groundwater Permit criteria prior to disposal of extracted groundwater (as outlined under Regulatory Framework). While specific BMPs to address potential water quality concerns from disposal of extracted groundwater would be determined based on site-specific parameters, they would likely include standard measures from the Groundwater Permit, with typical requirements outlined below.

- Use erosion and sediment controls similar to those described in Table 3.1.4-4 for applicable areas/conditions (e.g., disposal of extracted groundwater on slopes or graded areas).
- Test extracted groundwater for appropriate contaminants prior to discharge.
- Treat extracted groundwater prior to discharge, if required, to provide conformance with applicable discharge criteria (e.g., through methods such as filtration, aeration, adsorption, disinfection, and/or conveyance to a municipal wastewater treatment plant).

Based on the required conformance with NPDES Groundwater Permit standards and the implementation of related BMPs, water quality impacts from Project-related disposal of extracted groundwater would be **less than significant**.

Based on the temporary nature of potential dewatering activities associated with Project construction, related potential impacts to local groundwater resources such as aquifer drawdown or depletion would be **less than significant**.

Long-term Operation and Maintenance Impacts. The Project SWMP (Appendix M) identifies pollutants of concern and appropriate control measures related to development of the Proposed Project, based on procedures identified in the County Stormwater Ordinance/Manual, SUSMP and LID Manual, as well as the related NPDES Municipal Permit. The Proposed Project is identified as a PDP due to the inclusion of proposed development categories such as residential and commercial properties, parking areas, and roadways. Anticipated and potential pollutants associated with the Proposed Project include sediment, nutrients, heavy metals, organic compounds, trash and debris, oxygen demanding substances, oil and grease, bacteria and viruses, and pesticides (refer to Table 7 of the SWMP in Appendix M). Based on the condition of the downstream receiving waters (refer to Section 3.1.4.1), the primary target pollutants for the Proposed Project are nutrients, bacteria and viruses, and heavy metals. Secondary pollutants of concern for the Project include sediment, organic compounds, oxygen demanding substances, trash and debris, oil and grease, and pesticides. Urban pollutants accumulate in areas such as streets, parking areas, and drainage facilities, and are picked up in runoff during storm events.

Runoff within the Project site would increase as a result of constructing impervious surfaces, with a corresponding increase in pollutant loading potential. Based on these conditions, long-term Project operation could result in the on- and off-site transport of urban pollutants and associated significant effects such as increased turbidity, oxygen depletion and toxicity to attendant species in downstream receiving waters.

The Proposed Project would conform to applicable County and NPDES storm water standards, with such conformance to include the use of appropriate post-construction LID and site design, source control and LID/treatment control BMPs. Specific proposed BMPs are identified in the Project SWMP (Appendix M), with these measures summarized below and followed by a discussion of associated monitoring and maintenance activities.

LID Site Design BMPs. LID and site design BMPs are intended to avoid, minimize and/or control post-development runoff, erosion potential and pollutants generation to the MEP by mimicking the natural hydrologic regime. The LID process employs design practices and techniques to effectively capture, filter, store, evaporate, detain and infiltrate runoff close to its source. Specific LID and site design BMPs identified in the Project SWMP are summarized below, with additional discussion provided in Appendix M. All of the proposed LID and site design BMPs would help reduce long-term urban pollutant generation by minimizing runoff rates and amounts, retaining permeable areas, increasing on-site filtering and infiltration, and reducing erosion/sedimentation potential.

- Conserve Natural Areas, Soils and Vegetation. This measure would include efforts such as preserving well-draining (Type A and B) soils, significant trees, critical areas (e.g., floodplains and steeper slopes), and areas near drainages wherever feasible to provide natural buffer zones.

- Minimize Disturbance to Natural Drainages. Specific efforts would include providing appropriate set-backs from drainages for development envelopes, and restricting construction equipment access in planned green/open space areas.

- Minimize and Disconnect Impervious Surfaces. This measure would involve using clustered lot designs and providing landscaping in applicable paved areas such as parking lots.

- Minimize Soil Compaction. Individual efforts to minimize soil compaction would include restricting construction equipment access in planned green/open space areas, and scarifying soils that are compacted during construction.

- Parking Lot Design. This measure would include efforts such as providing permeable and/or pitched pavements, and use of curb cuts to drain applicable areas to landscaping where feasible.

- Driveway, Sidewalk and Bike Path Design. This measure would involve using permeable and/or pitched pavement to infiltrate and/or drain impervious surfaces to landscaping where feasible.

- Building Design. Specific measures would include providing cisterns/rain barrels and use of downspouts to increase infiltration and direct drainage into vegetated areas where feasible.

- Landscaping Design. Individual landscaping design efforts would include using appropriate soil amendments, reusing native soils, installing "smart" irrigation systems (e.g., appropriate water schedules and rain/pressure-sensitive shutoff devices), and installing appropriate landscaping, including street trees.

Source Control BMPs. Source control BMPs are intended to avoid or minimize the introduction of pollutants into storm drains and natural drainages to the MEP by reducing on-site pollutant generation and off-site pollutant transport. Specific source control BMPs identified in the Project SWMP are summarized below, with additional discussion provided in the Project SWMP (Appendix M). All of the proposed source control BMPs would help improve long-term water quality within and downstream from the Project site by avoiding or minimizing pollutant generation and exposure to storm flows at the source.

- Install "no dumping" stencils/tiles and/or signs with prohibitive language (per current County guidelines) at applicable locations such as drainages, storm drain inlets, catch basins and public access points to discourage illegal dumping.

- If applicable (i.e., if such facilities are included as part of the proposed development), design outdoor material storage areas, food service facilities, water features, loading docks, maintenance bays, vehicle/equipment wash areas, outdoor processing areas, and non-retail fueling areas to reduce pollutant discharge through the following types of methods: (1) providing appropriate storage facilities for hazardous materials (e.g., cabinets, sheds or similar structures that prevent runoff contact and discharge to storm drains); (2) providing appropriate on-site pretreatment or directing flows from applicable areas (e.g., vehicle/equipment maintenance or fueling sites) to the sanitary sewer; (3) installing impermeable floors, covers and secondary containment structures such as berms, dikes or curbs in appropriate areas (e.g., loading docks and fueling/maintenance areas); (4) using pavement grades, containment structures or other appropriate methods to prevent run-on.

- Design trash storage areas to reduce pollutant discharge through methods such as paving with impervious surfaces, precluding run-on, installing screens or walls to prevent trash dispersal, providing attached lids and/or roofs for trash containers to prevent direct precipitation contact, and providing appropriate on-site pretreatment prior to discharge of associated runoff to the sanitary sewer.

- Implement regular street sweeping in areas such as plazas, sidewalks and parking lots, and preclude debris and washwater containing cleaning agents/degreasers from entering the storm drain system (e.g., through discharge to the sanitary sewer).

- Design site landscaping to maximize the use of appropriate native and/or drought-tolerant varieties, and use efficient irrigation systems as described above for Site Design and LID BMPs.

- Direct drainage from private roadways into water quality basins (as described below under LID/Treatment Control BMPs).

- Design driveways to include shared access, flared lanes (i.e., a single lane at the street), wheelstrips (i.e., pavement only under tires), and/or drainage to landscaped areas prior to entering the storm drain system where feasible.

- Incorporate landscaping into parking area drainage systems wherever applicable.

- Revegetate/stabilize manufactured or disturbed slopes as soon as feasible, and use appropriate drainage structures to preclude concentrated flows on slopes.

- Provide pet waste disposal bags and related educational materials at trail heads, open space corridors or other applicable locations to encourage clean-up efforts.

- Minimize applications of chemical pesticides, herbicides, fertilizers; use licensed professionals for application of such chemicals in common landscaped areas; and restrict the rates and times of fertilizer applications to minimize potential discharge in irrigation or precipitation runoff.

- Implement an educational program for home and business owners/tenants to prevent illegal or inadvertent pollutant discharge, including the distribution of materials regarding dry-clean methods, protection of storm drain inlets, prevention/proper disposal of pet wastes, proper handling/disposal of solid and hazardous wastes, water conservation, swimming pool chemical use/maintenance, integrated pest management (IPM) methods, employee training, secondary containment, minimizing hazardous material use, proper clean-up procedures, street and parking lot sweeping, and proper collection/disposal of wash water.

LID and Treatment Control BMPs. Treatment control (or structural) BMPs are designed to remove pollutants from urban runoff for a design storm event to the MEP through means such as filtering, treatment, or infiltration. Treatment control and/or LID BMPs are required to address the identified priority pollutants of concern, and treatment control BMPs must provide medium or high levels of removal efficiency for these pollutants (per applicable regulatory requirements). Specific LID and treatment control BMPs identified in the Project SWMP include extended/dry detention basins with grass/vegetated linings (water quality basins), and storm drain inlet high-rate media filter inserts (Bioclean Round Grate Inlet Skimmer Box [GISB] media filters with curb inlet filters, or equivalent). Water quality basins would be used to treat runoff from most of the site prior to discharge, with four individual basins proposed in the Project area north of SR-76 (refer to Figure 1-25 of this EIR and Attachment B of the Project SWMP in Appendix M). Water quality basins exhibit a high removal efficiency for coarse sediment/ trash and pollutants that tend to associate with fine particles during treatment (sediment, nutrients,

heavy metals, organic compounds, oxygen demanding substances, pathogens, oil and grease, and pesticides); and a low removal efficiency for pollutants that tend to be dissolved during treatment (nutrients). To compensate for the low nutrient removal efficiency, the Project will also incorporate additional efforts including the use of native landscaping to reduce fertilizer use, and restricting the rates and times of fertilizer applications to minimize nutrient discharge in irrigation or precipitation runoff.

Media filter inserts would be used to treat Project runoff from applicable areas not covered by the described water quality basins. Specifically, this includes areas around the proposed intersection of SR-76 and Pankey Road, with a series of six curb inlets proposed to direct associated flows to the associated filters prior to discharge into the Project storm drain system (refer to Attachment C of the Project SWMP In Appendix M). Potential pollutants from the described area include sediment, heavy metals, organic compounds, trash and debris, and oil and grease, with media filters exhibiting a high level of removal efficiency for all of these pollutants. The Project SWMP identifies the noted Bioclean Round GISB Media Filters as a potential media filter for the Proposed Project, with Bioclean filters approved by the County as a BMP filtration device.

Additionally, one or more treatment BMPs would be required in the commercial development areas located south of SR-76. As identified in the *Menu of Additional Potential BMPs* provided in the Project SWMP, additional treatment BMPs in the commercial areas could potentially include media filters, biofilters, vegetated swales, bioretention facilities, wet ponds/constructed wetlands, and/or infiltration devices, all of which would provide a medium or high level of removal efficiency for the target pollutants (refer to Table 11 of the SWMP in Appendix M). The specific types and locations of these additional BMPs would be determined after completion of preliminary site design for the noted commercial development areas to determine the most appropriate and effective BMP type(s). If the two commercial lots are developed together or in partnership, one regional BMP could potentially be used to treat both pads. Otherwise, each pad would be designed so that associated drainage would be appropriately treated prior to discharge into the public storm drain system.

The proposed LID/treatment control BMPs would help to improve long-term water quality within and downstream of the Project site by treating/removing pollutants from urban runoff prior to downstream discharge. Detailed discussion of proposed LID/treatment control BMP design, locations, sizing, and performance criteria is provided in the Project SWMP (Appendix M).

Post-construction BMP Monitoring/Maintenance Schedules and Responsibilities. Identified BMPs include physical facilities such as no dumping signs/tiles, water quality basins, and media filters that require ongoing monitoring and maintenance. Water quality basins are identified as Second Category BMPs, while the proposed media filters are Fourth Category BMPs (due to their proposed location within a pubic road ROW). Accordingly, monitoring and maintenance efforts for the water quality basins would be implemented by the Project owner(s) through entering into a written BMP Maintenance Agreement with the County. Specific elements of this agreement would include requiring that the basin areas be limited to the proposed use, granting an access easement to the County, and ensuring adequate funding through means such as a cash deposit, letter of credit, or other means acceptable to the County. Monitoring and maintenance

for the Fourth Category media filters would be conducted by the County, although the property owner(s) would be responsible for the related funding (as well as funding for implementation and maintenance of all other proposed BMPs). Specific monitoring and maintenance efforts associated with proposed BMP facilities and programs include monitoring and reporting to document that programs/activities are being implemented as designed, inspection and maintenance of physical facilities, and making necessary modifications to ensure that intended BMP functions and regulatory requirements are being met. Additional discussion of specific monitoring and maintenance requirements is provided in Attachment F of the Project SWMP in Appendix M.

Based on implementation of proposed LID and site design, source control, and LID/treatment control BMPs in conformance with County storm water standards and the related NPDES Municipal Storm Water Permit (along with related monitoring/maintenance efforts), long-term Project-related water quality impacts would be **less than significant**.

Drainage to 303(d) List Impaired Waters or Tributaries

As described in Section 3.1.4.1, the project site is tributary to 303(d) listed waters including the San Luis Rey River and the Pacific Ocean at the mouth of the San Luis Rey River. Based on Guideline No. 7 under Water Quality and the identified list of anticipated and potential pollutants from the Proposed Project, associated potential impacts to 303(d) listed waters would be related to pollutants including nutrients (e.g., for TDS, phosphorus and chloride impairment), petroleum hydrocarbons (e.g., for toxicity) and bacteria (for bacterial indicator impairment). Pursuant to the discussion of short- and long-term water quality issues provided above under the analysis of regulatory conformance, the Proposed Project would incorporate treatment BMPs that provide medium or high avoidance/removal efficiencies for all applicable pollutants, as well as additional measures to minimize the use and/or potential discharge of pollutants including nutrients and bacteria. Specifically, these additional measures would involve efforts such as: (1) providing educational materials and waste disposal bags in appropriate locations (e.g., trail heads) to minimize the discharge of bacterial pollutants (i.e., from pet wastes); and (2) using native landscaping to reduce fertilizer (nutrient) use, and restricting the rates and times of fertilizer applications to minimize nutrient discharge in irrigation or precipitation runoff. Based on the use of these and other appropriate measures in conformance with applicable County and NPDES regulatory requirements, potential Project-related impacts associated with drainage to 303(d) listed waters or tributaries would be **less than significant**.

Protection of Water Quality Objectives and Beneficial Uses

A summary of applicable San Diego Basin Plan water quality objectives and related beneficial uses is provided in Section 3.1.4.1, under the discussion of Regulatory Framework (refer also to Table 3.1.4-3). Pursuant to the discussion of short- and long-term water quality issues provided above under the analysis of regulatory conformance, the Proposed Project would incorporate a number of BMPs and related efforts to ensure conformance with the CWA, NPDES, California Porter-Cologne Water Quality Control Act, San Diego Basin Plan, and pertinent County water quality requirements. Based on this conformance, the Proposed Project would not generate

pollutants that exceed surface water quality objectives or cause or contribute to the degradation of associated beneficial uses, and related potential impacts would be **less than significant**.

3.1.4.3 *Cumulative Impact Analysis*

As described in the preceding analysis, implementation of the Proposed Project would require conformance with a number of regulatory requirements related to hydrology and water quality, including applicable elements of the CWA, NPDES, County storm water standards, California Porter-Cologne Water Quality Control Act, and RWQCB Basin Plan. Based on such conformance (including the design measures described in Chapter 7.0 of this EIR), all identified Project-level hydrology and water quality impacts from the Proposed Project would be avoided or reduced below a level of significance.

The described regulatory requirements constitute a regional effort to implement hydrology and water quality protections through a watershed-based program designed to meet applicable criteria such as Basin Plan Beneficial Uses and Water Quality Objectives. To this end, these standards require the implementation of efforts to reduce runoff and contaminant discharges to the MEP, with the NPDES Municipal Permit identifying the goal of "[p]romoting attainment of water quality objectives necessary to support designated beneficial uses." The County has implemented all of these requirements in the form of the SUSMP, Stormwater Ordinance/Manual and URMPs, as well as applicable education, planning, and enforcement procedures. Based on the described regional/watershed based approach required for hydrology and water quality issues in existing regulatory standards, and the fact that conformance with these requirements would be required for all identified projects within the cumulative projects area (including the Proposed Project), cumulative hydrology/water quality impacts related to Project implementation would be **less than significant**.

3.1.4.4 *Significance of Impacts*

Identified potential hydrology/water quality impacts associated with the Proposed Project would be less than significant prior to mitigation, based on the implementation of identified proposed design measures and conformance with applicable regulatory requirements.

3.1.4.5 *Conclusion*

Based on the discussions provided above, potential Project-specific and cumulative hydrology and water quality impacts associated with implementation of the Proposed Project would be effectively avoided or reduced below identified significance guidelines through implementation of recommendations provided in the Project Hydrology Study, PHMS, SWMP, Horse Ranch Creek Floodplain Study, and San Luis Rey River Floodplain Study, as well as conformance with established regulatory requirements. Accordingly, no mitigation measures are required or proposed.

Table 3.1.4-1
SUMMARY OF TYPICAL POLLUTANT SOURCES
FOR URBAN STORM WATER RUNOFF

Pollutants	Pollutant Sources
Sediment and Trash/Debris	Streets, landscaping, driveways, parking areas, rooftops, construction activities, atmospheric deposition, drainage channel erosion
Pesticides and Herbicides	Landscaping, roadsides, utility right-of-ways, soil wash-off
Organic Compounds	Landscaping, streets, parking areas, animal wastes, recreation areas
Oxygen Demanding Substances	Landscaping, animal wastes, leaky sanitary sewer lines, recreation areas
Heavy Metals	Automobiles, bridges, atmospheric deposition, industrial areas, soil erosion, corroding metal surfaces, combustion processes
Oil and Grease/Hydrocarbons	Roads, driveways, parking lots, vehicle maintenance areas, gas stations, illicit dumping to storm drains
Bacteria and Viruses	Landscaping, roads, leaky sanitary sewer lines, sanitary sewer cross-connections, animal wastes, recreation areas
Nutrients (Nitrogen and Phosphorus)	Rooftops, landscaping, atmospheric deposition, automobile exhaust, soil erosion, animal wastes, detergents, recreation areas

Source: USEPA 1999

Table 3.1.4-2
TYPICAL LOADINGS FOR SELECTED POLLUTANTS IN RUNOFF
FROM VARIOUS LAND USES
(lbs/acre/year)

Land Use	TSS	TP	TKN	NH_3 - N	NO_2 + NO_3 - N	BOD	COD	Pb	Zn	Cu
Commercial	1000	1.5	6.7	1.9	3.1	62	420	2.7	2.1	0.4
Parking Lot	400	0.7	5.1	2	2.9	47	270	0.8	0.8	0.04
HDR	420	1	4.2	0.8	2	27	170	0.8	0.7	0.03
MDR	190	0.5	2.5	0.5	1.4	13	72	0.2	0.2	0.14
LDR	10	0.04	0.03	0.02	0.1	N/A	N/A	0.01	0.04	0.01
Freeway	880	0.9	7.9	1.5	4.2	N/A	N/A	4.5	2.1	0.37
Industrial	860	1.3	3.8	0.2	1.3	N/A	N/A	2.4	7.3	0.5
Park	3	0.03	1.5	N/A	0.3	N/A	2	0	N/A	N/A
Construction	6000	80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grains/Hay	400	0.8	N/A	N/A	N/A	20	150	N/A	N/A	N/A
Citrus/Vegetables	400	1.5	N/A	N/A	N/A	30	200	N/A	N/A	N/A

HDR = High Density Residential; MDR = Medium Density Residential; LDR = Low Density Residential
N/A = Not available; insufficient data to characterize
Abbreviations: TSS = Total Suspended Solids; TP = Total Phosphorus; TKN = Total Kjeldahl Nitrogen; NH_3 – N = Ammonia – Nitrogen; NO_2 + NO_3 – N = Nitrite + Nitrate - Nitrogen; BOD = Biochemical Oxygen Demand; COD = Chemical Oxygen Demand; Pb = Lead; Zn = Zinc; Cu = Copper
Sources: USEPA 1999; RWQCB 1988

Table 3.1.4-3
SURFACE AND GROUNDWATER QUALITY OBJECTIVES FOR THE LOWER SAN LUIS HYDROLOGIC AREA AND THE BONSALL HYDROLOGIC SUBAREA[1]

SURFACE WATER												
Lower San Luis Hydrologic Area												
Constituent (mg/l or as noted)												
TDS	**Cl**	**SO_4**	**% Na**	**N&P**	**Fe**	**Mn**	**MBAS**	**B**	**Odor**	**Turb NTU**	**Color Units**	**F**
500	250	250	60	--[2]	0.3	0.05	0.5	0.75	None	20	20	1.0
GROUNDWATER												
Bonsall Hydrologic Subarea												
Constituent (mg/l or as noted)												
TDS	**Cl**	**SO_4**	**% Na**	**NO_3**	**Fe**	**Mn**	**MBAS**	**B**	**Odor**	**Turb NTU**	**Color Units**	**F**
1,500	500	500	60	45	0.85	0.15	0.5	0.75	None	5	15	1.0

[1] Concentrations not to be exceeded more than 10% of the time during any one-year period; refer to Figure 3.1.4-1 for local hydrologic designation locations.

[2] Shall be maintained at levels below those that stimulate algae and emergent plant growth.

Abbreviations: TDS = Total Dissolved Solids; Cl = Chlorides; SO_4 = Sulfate; Na = Sodium; N&P = Nitrogen and Phosphorus; NO_3 = Nitrate; Fe = Iron; Mn = Manganese; MBAS = Methylene Blue Activated Substances (e.g., commercial detergent); B = Boron; Turb = Turbidity (measured in Nephelometric Turbidity Units [NTU]); F = Fluoride.

Source: RWQCB 1994, as amended

Table 3.1.4-4
POTENTIAL MEASURES TO AVOID OR MINIMIZE IMPACTS RELATED TO EROSION AND SEDIMENTATION

- Comply with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions.
- Prepare and implement a CSMP to ensure appropriate monitoring, testing, BMP effectiveness, and conformance with applicable discharge requirements.
- Prepare and implement a REAP, if applicable (i.e., depending on risk level), to ensure that active construction areas/activities have adequate erosion and sediment controls in place within 48 hours of the onset of any likely precipitation event (i.e., 50 percent or greater probability of producing precipitation, per National Oceanic and Atmospheric Administration projections).
- Preserve existing vegetation wherever feasible, and use phased grading schedules to limit the area subject to erosion at any given time.
- Properly manage storm water and non-storm water flows to minimize runoff.
- Use erosion control/stabilizing measures such as geotextiles, mulching, mats, plastic sheets/tarps, fiber rolls, soil binders, compost blankets, soil roughening, and/or temporary hydroseeding (or other plantings) established prior to October 1 in appropriate areas (e.g., disturbed areas and graded slopes).
- Use sediment controls to protect the construction site perimeter and prevent off-site sediment transport, including measures such as temporary inlet filters, silt fence, fiber rolls, silt dikes, biofilter bags, gravel bag berms, compost bags/berms, temporary sediment basins, check dams, street sweeping/vacuuming, ATS (if applicable based on risk assessment), energy dissipators, stabilized construction access points/sediment stockpiles, and properly fitted covers for sediment transport vehicles.

Table 3.1.4-4 (cont.)
POTENTIAL MEASURES TO AVOID OR MINIMIZE IMPACTS RELATED TO EROSION AND SEDIMENTATION

- Store BMP materials in applicable on-site areas to provide "standby" capacity adequate to provide complete protection of exposed areas and prevent off-site sediment transport.
- Provide full erosion control for disturbed areas not scheduled for additional activity for 14 or more consecutive calendar days.
- Provide appropriate training for the personnel responsible for BMP installation and maintenance.
- Use solid waste management efforts such as proper containment and disposal of construction debris.
- Comply with local dust control requirements, potentially including measures such as regular watering, use of chemical palliatives, limiting construction vehicle/equipment speeds, and restricting/precluding construction operations during periods of high wind speeds.
- Install permanent landscaping, with emphasis on native and/or drought-tolerant varieties, as soon as feasible after construction.
- Implement appropriate monitoring and maintenance efforts (e.g., prior to and after storm events) to ensure proper BMP function and efficiency.
- Implement sampling/analysis, monitoring/reporting and post-construction management programs per NPDES and/or County requirements.
- Implement additional BMPs as necessary to ensure adequate erosion and sediment control (e.g., enhanced treatment and more detailed monitoring/reporting).

Table 3.1.4-5
POTENTIAL MEASURES TO AVOID OR MINIMIZE IMPACTS RELATED TO THE USE AND STORAGE OF CONSTRUCTION-RELATED HAZARDOUS MATERIALS

- Minimize the amount of hazardous materials used and stored on site, and restrict storage/use locations to areas at least 50 feet from storm drains and surface waters.
- Use raised (e.g., on pallets), covered, and/or enclosed storage facilities for all hazardous materials.
- Maintain accurate and up-to-date written inventories and labels for all stored hazardous materials.
- Use berms, ditches, and/or impervious liners (or other applicable methods) in material storage and vehicle/equipment maintenance and fueling areas to provide a containment volume of 1.5 times the volume of stored/used materials and prevent discharge in the event of a spill.
- Place warning signs in areas of hazardous material use or storage and along drainages and storm drains (or other appropriate locations) to avoid inadvertent hazardous material disposal.
- Properly maintain all construction equipment and vehicles.
- Restrict paving operations during wet weather, use appropriate sediment control devices/methods downstream of paving activities, and properly contain and dispose of wastes and/or slurry from sources including concrete, dry wall and paint, by using properly designed and contained washout areas.
- Provide training for applicable employees in the proper use, handling and disposal of hazardous materials, as well as appropriate action to take in the event of a spill.

Table 3.1.4-5 (cont.)
POTENTIAL MEASURES TO AVOID OR MINIMIZE IMPACTS RELATED TO THE USE AND STORAGE OF CONSTRUCTION-RELATED HAZARDOUS MATERIALS

- Store absorbent and clean-up materials in readily accessible on-site locations.
- Properly locate, maintain and contain portable wastewater facilities.
- Regularly (at least weekly) monitor and maintain hazardous material use/storage facilities and operations to ensure proper working order.
- Implement solid waste management efforts such as proper containment and disposal of construction debris, and restrict construction debris storage areas to appropriate locations at least 50 feet from storm drain inlets and water courses.
- Employ a licensed waste disposal operator to regularly (at least weekly) remove and dispose of construction debris at an authorized off-site location.
- Use recycled or less hazardous materials wherever feasible.
- Post regulatory agency telephone numbers and a summary guide of clean-up procedures in a conspicuous on-site location.
- Regularly (at least weekly) monitor and maintain hazardous material use/storage facilities and operations to ensure proper working order.
- Implement additional BMPs as necessary (and in conformance with applicable requirements) to ensure adequate hazardous material control.

Table 3.1.4-6
POTENTIAL MEASURES TO AVOID OR MINIMIZE IMPACTS RELATED TO THE GENERATION OF DEBRIS DURING DEMOLITION ACTIVITIES

- Recycle appropriate (i.e., non-hazardous) construction debris for on- or off-site use whenever feasible.
- Use dust-control measures such as watering to reduce particulate generation for pertinent locations/activities (e.g., concrete removal).
- Use appropriate erosion prevention and sediment control measures downstream of all demolition activities.
- Conform with applicable requirements related to the removal, handling, transport and disposal of hazardous materials generated during demolition, including efforts such as implementing appropriate sampling and monitoring procedures; proper containment of contaminated materials during construction; providing protective gear for workers handling contaminated materials; ensuring acceptable exposure levels; and ensuring safe and appropriate handling, transport and disposal of hazardous materials generated during Project construction.

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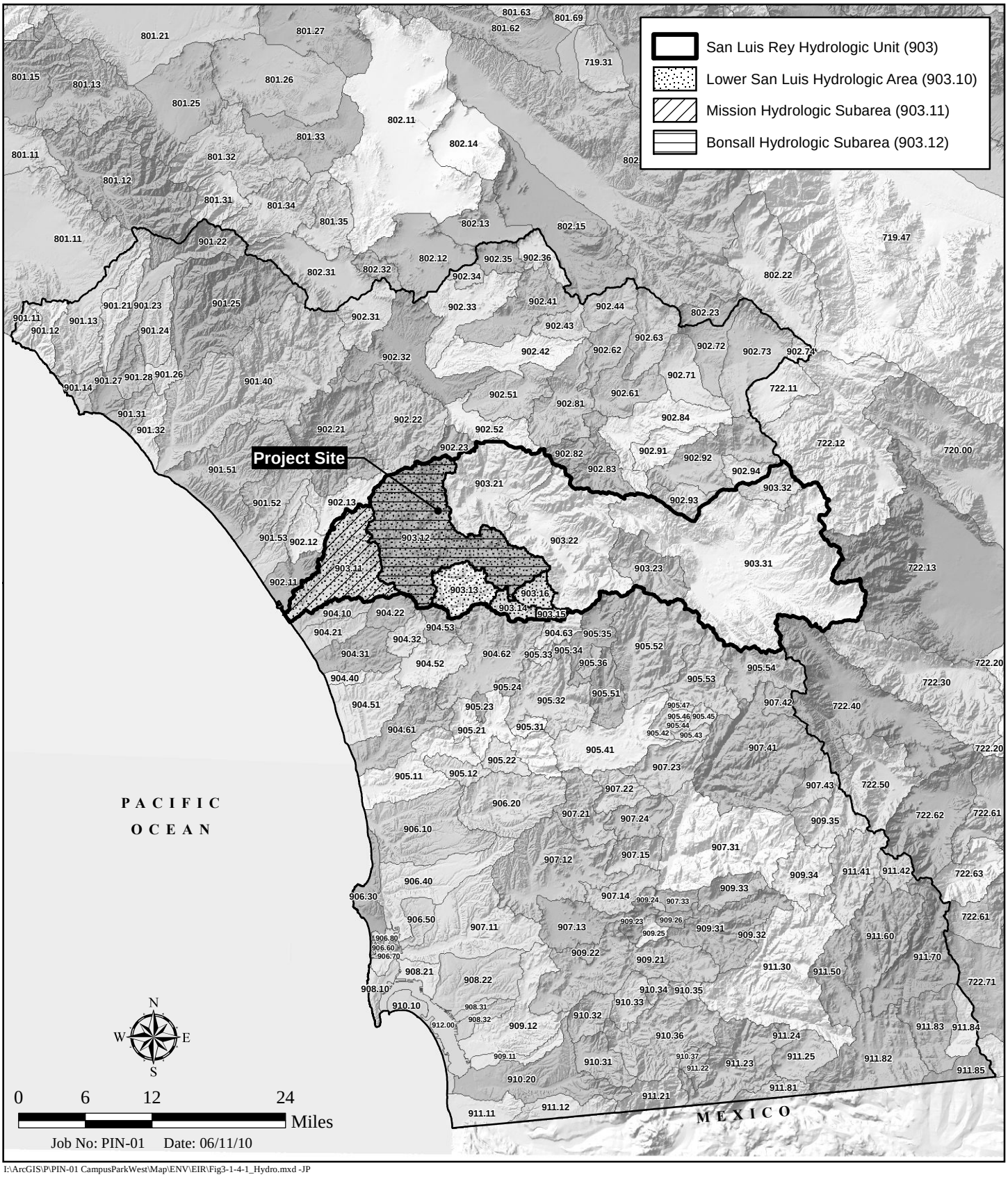

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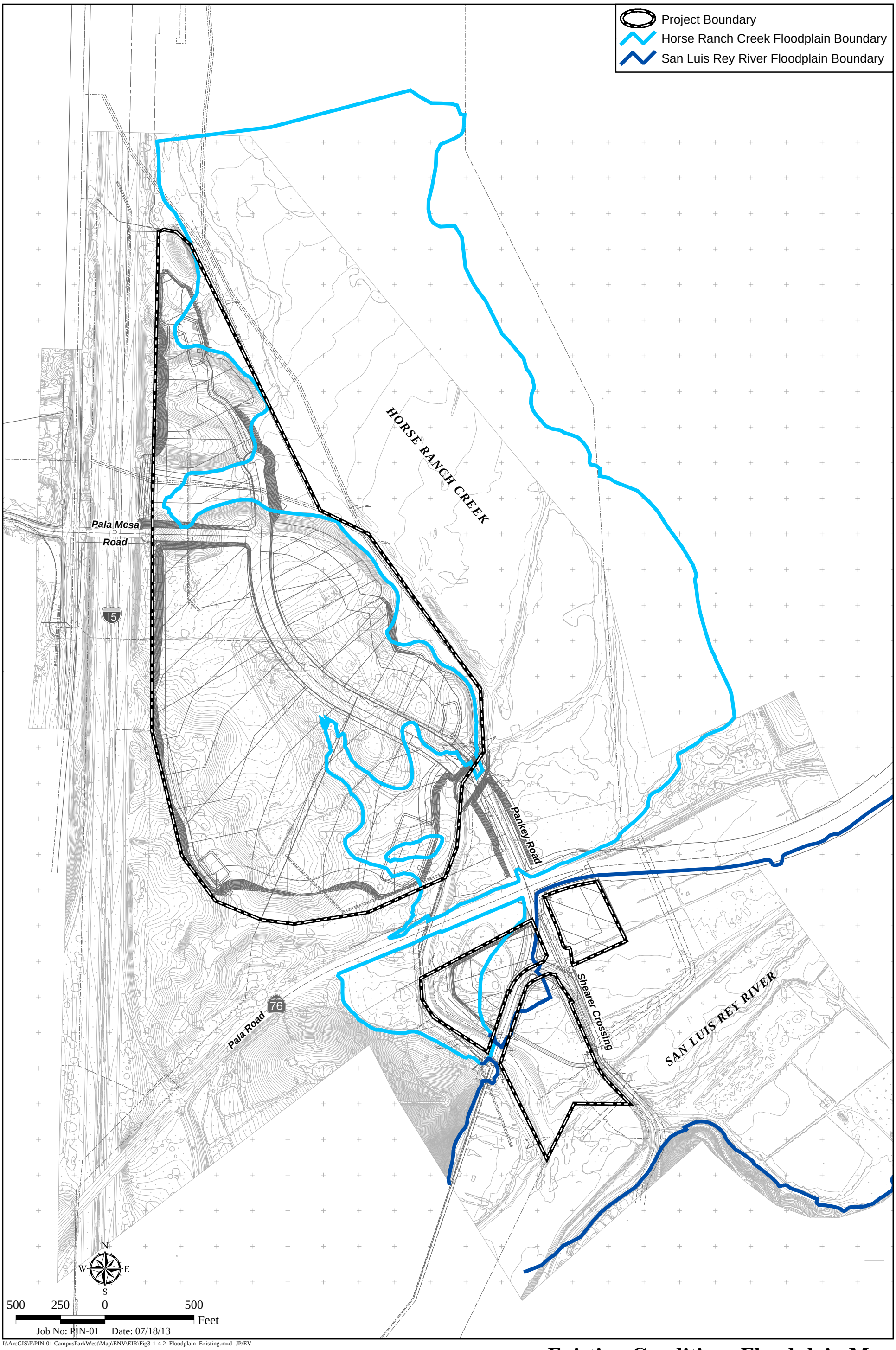
Project Location within Local Hydrologic Designations

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 3.1.4-1



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Existing Conditions Floodplain Map

CAMPUS PARK WEST

Figure 3.1.4-2

HELIX Environmental Planning

Project Boundary
Horse Ranch Creek Floodplain Boundary
San Luis Rey River Floodplain Boundary

HORSE RANCH CREEK

Pala Mesa Road

15

Pankey Road

Shearer Crossing

SAN LUIS REY RIVER

Pala Road

76

N
W
E
S

500 250 0 500
Feet

Job No: PIN-01 Date: 07/22/13

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Proposed Conditions Floodplain Map

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 3.1.4-3

3.1.5 Land Use and Planning

The 1981 and 1983 EIRs identified impacts to land use as less than significant with no mitigation required. The 1981 EIR noted that the project was consistent with the Fallbrook Community Plan and with existing land use designations, but that it could conflict with general provisions of the Regional Land Use Element and Regional Growth Management Plan. The previous project analyzed in the 1983 EIR was found to be consistent with the Fallbrook Community Plan for creating a good balance of land uses and encouraging light research and development of industrial uses. The project was found consistent with the goal of "preserving the area's natural amenities" through retention of freshwater marsh in the southern portion of the project site as part of a proposed recreation area. The uses proposed for the Campus Park West portion of the Hewlett Packard Specific Plan included a 10.5-acre commercial center, a 150-unit townhouse project, and a 336-unit mobile home park. Rezoning of portions of the site would have made use regulations consistent with the proposed commercial and residential uses.

The current Project proposes land uses different from those proposed in the 1981 and 1983 documents, and plans and ordinances have either been updated, amended or approved since certification of the previous EIRs, including the General Plan (comprehensively updated in 2011; General Plan) and Fallbrook Community Plan (also updated in 2011). The Fallbrook Community Guidelines also post-date the 1981 and 1983 documents. In addition, the previous EIRs did not discuss the I-15 Corridor Subregional Plan, Interstate 15/Highway 76 Interchange MSP, RPO, CMP, or NCCP.

The changes in the analysis due to changes in Proposed Project uses, as well as new or amended plans, lead to the need for new analysis for this issue. The reader is referred to text below for a new evaluation of Project-related land use issues. The reader should also note that in some instances, land use compatibility is evaluated in other sections of the EIR, where applicable, such as topics including biological resources, noise, aesthetics, traffic, etc. Where appropriate, these analyses are cross-referenced within this section.

3.1.5.1 *Existing Conditions*

Existing Setting

For information regarding the existing setting, the reader is referred to the discussion of Subchapter 1.4, Environmental Setting, of this EIR, as well as Figure 3.1.5-1, Existing Land Uses.

Regulatory Framework

Land use plans, policies, and ordinances that apply to the Proposed Project are contained in the General Plan comprehensively updated and adopted August 3, 2011), and its associated elements; Fallbrook Community Plan, adopted December 31, 1974 (GPA 74-02) and updated and adopted August 3, 2011; Fallbrook Design Guidelines, approved April 3, 1989; Interstate 15 Corridor Subregional Plan; Interstate 15/Highway 76 Interchange MSPA; Zoning Ordinance (Ordinance 5281), adopted October 18, 1978 and continually revised; Subdivision Ordinance

(effective March 22, 1979, Title 8, Division 1 of the San Diego Code of Regulatory Ordinances); LPC (Division 9, §§59.101 – 59.115); CMP; and NCCP. The Project is exempt from the RPO (see discussion below). These documents address a variety of issues, including development at appropriate densities, as well as conservation of sensitive habitats, provision of open space, protection of visual amenities, regulation of signage and lighting, and protection against incompatible land uses. Many of these issues are addressed in several elements of the General Plan and in the Community Plan. Generally, the Community Plan supplements elements of the General Plan.

County of San Diego General Plan

The General Plan Land Use Element (2011) provides maps, goals, and policies and serves as the regulatory document guiding land use, conservation, and development in the unincorporated County. This element provides a framework to accommodate future development within the County in an efficient and sustainable manner that is compatible with the character of unincorporated communities and the protection of valuable and sensitive natural resources (County 2011). The Land Use Element describes land use designations and use regulations shown on community and subregional area maps, in this case the Fallbrook Community Planning Area (CPA) Land Use Map, as contained in an appendix to the General Plan and referenced in the Fallbrook Community Plan (described below). The existing Regional land use categories for the Project site, as identified in the Land Use Element, are Village north of SR-76 and Rural Lands south of SR-76. The Land Use Element also includes a Community Services and Infrastructure section addressing water supply, wastewater collection and treatment, solid waste management, schools, libraries, and telecommunication services.

The Mobility Element of the General Plan (2011) describes the multi-modal transportation network within the unincorporated areas, including motor vehicle, public transportation, bicycle, pedestrian, rail, and air transportation facilities. The element states the goals and policies that address the safe and efficient operation, maintenance, and management of the transportation network, and identifies major existing and planned road network components in the County. These road network components are shown on maps and matrices in the Mobility Element Network Appendix. In the vicinity of the Campus Park West Project, the following roads and their corresponding classifications are identified: SA 15 (I-15), Freeway; SR-76, Major Road; Pankey Road (from Stewart Canyon Road to SR-76; SC 260.2), Community Collector; and Pala Mesa Drive, Light Collector.

The Conservation and Open Space Element (COS; 2011) combines what formerly were four separate elements (Open Space, Conservation, Scenic Highway, and Energy) and describes the natural resources within the County and goals and policies to preserve them. This element provides direction for future growth and development in the County with respect to the conservation, management, and utilization of natural (biological, water, agricultural, paleontological, mineral, visual [including scenic highways and dark skies]) and cultural resources; protection and preservation of open space; and provision of park and recreation resources. In the vicinity of the Campus Park West site, I-15 and SR-76 are designated as scenic corridors. The COS Element also addresses air quality, climate change, and energy, and the associated generation of criteria pollutants and greenhouse gas emissions. Finally, the element

contains goals and policies related to parks and recreation and uses residential densities to determine the spacing of parks based on population (i.e., 10 acres of local parks and 15 acres of regional parks for every 1,000 persons in the unincorporated County). Projects are required to provide in lieu fees and/or dedicate land to parks, passive recreation open space areas, and trails in accordance with the County Park Land Dedication Ordinance (PLDO).

The Safety Element (2011) brings safety considerations into the planning and decision-making process by establishing policies related to future development that will minimize the risk of injury, death, property and environmental damage associated with natural and man-made hazards (County 2011). The Safety Element ensures that development accounts for physical constraints and natural hazards of the land. The goals and policies of this element were developed to protect residents and areas from wildland and urban fire, crime, hazardous materials incidents, earthquakes, flooding, and hazardous incidents associated with aircrafts and airports. Disaster preparedness and emergency response also are addressed in this element.

The Noise Element (2011) ensures that noise considerations are incorporated into the land use decision-making process and establishes Noise Compatibility Guidelines to be used in the evaluation of proposed development projects. The community noise control standards within the County's Noise Abatement and Control Ordinance are used in conjunction with the Noise Element in considering the environmental impacts of noise exposure. The Noise Element addresses transportation and non-transportation noise sources, noise-sensitive land uses, and existing and future noise levels. This element was developed to preserve County residents' quality of life by protecting from the obtrusive impacts of noise and noise-generating uses such as traffic, construction, airplanes, and certain industrial uses.

The Housing Element (2011) is a policy framework that sets forth a range of programs designed to meet the varying needs of the different communities within the unincorporated area. This element documents and discusses the housing needs of County residents, includes an inventory of the resources and constraints relevant to meeting current and future housing needs, and seeks to reconcile housing needs with competing land use interests (e.g., agricultural operations, sensitive species habitat). The key issues addressed in this element are compliance with state housing requirements, the regional house needs allocation (RHNA) process, village issues, and semi-rural and rural lands issues. The goals and polices in the element address housing development, community character and environment, housing affordability, preservation of affordable housing, governmental constraints, and the delivery of housing services.

The consistency analysis that follows under Section 3.1.5.2 addresses how the Project would comply with the various General Plan elements. The following goals and policies from each element of the General Plan apply to the Project. The complete goals and policies that are applicable to the Project can be found in the General Plan, as well as the Campus Park West General Plan Amendment Report, specific to the Project.

Land Use Element

- Goal LU-1: Primacy of the Land Use Element, Policies LU-1.2, LU-1.3, LU-1.4, and LU-1.8
- Goal LU-2: Maintenance of the County's Rural Character, Policies LU-2.7, LU-2.8, and LU-2.9
- Goal LU-3: Diversity of Residential Neighborhoods, Policies LU-3.1 through LU-3.3
- Goal LU-4: Inter-jurisdictional Coordination, Policy LU-4.1
- Goal LU-5: Climate Change and Land Use, Policies LU-5.1 through LU-5.5
- Goal LU-6: Development-Environment Balance, Policies LU-6.1, LU-6.2, and LU-6.4 through LU-6.12
- Goal LU-7: Agricultural Conservation, Policies LU-7.1 and LU-7.2
- Goal LU-9: Distinct Villages and Community Cores, Policies LU-9.1 through LU-9.12
- Goal LU-10: Function of Semi-rural and Rural Lands, Policies LU-10.2 through LU-10.4
- Goal LU-11: Commercial, Office, and Industrial Development, Policies LU-11.1 through LU-11.11
- Goal LU-12: Infrastructure and Services Supporting Development, Policies LU-12.1 through LU-12.4
- Goal LU-13: Adequate Water Quality, Supply, and Protection, Policies LU-13.1 and LU-13.2
- Goal LU-14: Adequate Wastewater Facilities, Policies LU-14.1 through LU-14.4

Mobility Element

- Goal M-1: Balanced Road Network, Policies M-1.1 through M-1.3
- Goal M-2: Responding to Physical Constraints and Preservation Goals, Policies M-2.1 through M-2.5
- Goal M-3: Transportation Facility Development, Policies M-3.1 through M-3.3
- Goal M-4: Safe and Compatible Roads, Policies M-4.1, 4.2, and 4.4 through M-4.6
- Goal M-5: Safe and Efficient Multi-modal Transportation System, Policy M-5.1
- Goal M-8: Public Transit System, Policies M-8.4 through M-8.6
- Goal M-10: Parking for Community Needs, Policies M-10.1 through M-10.5, and M-10.7
- Goal M-11: Bicycle and Pedestrian Facilities, Policies M-11.1 through M-11.8
- Goal M-12: County Trails Program, Policies M-12.1 through M-12.10

Conservation and Open Space Element

- Goal COS-1: Inter-connected Preserve System, Policies COS-1.1 through COS-1.10
- Goal COS-2: Sustainability of the Natural Environment, Policies COS-2.1 and COS-2.2
- Goal COS-3: Protection and Enhancement of Wetlands, Policies COS-3.1 and COS-3.2
- Goal COS-4: Water Management, Policies COS-4.1 through COS-4.5
- Goal COS-5: Protection and Maintenance of Water Resources, Policies COS-5.1 through COS-5.5
- Goal COS-7: Protection and Maintenance of Archaeological Resources, Policies COS-7.1 through COS-7.6

- Goal COS-9: Educational and Scientific Uses, Policies COS-91 and COS.9-2
- Goal COS-10: Protection of Mineral Resources, Policies COS-10.1 through COS-10.4, and COS-10.9
- Goal COS-11: Preservation of Scenic Resources, Policies COS-11.1 through COS-11.7
- Goal COS-13: Dark Skies, Policies COS-13.1 through COS-13.3
- Goal COS-14: Sustainable Land Development, Policies COS-14.1 through COS-14.12
- Goal COS-15: Sustainable Architecture and Buildings, Policies COS-15.1, 15.4, and 15.6
- Goal COS-16: Sustainable Mobility, Policies COS-16.1, 16.2, 16.3, and 16.5
- Goal COS-17: Sustainable Solid Waste Management, Policies COS-17.1, COS-17.2, COS-17.4, COS-17.6, and COS-17.7
- Goal COS-19: Sustainable Water Supply, Policies COS-19.1 and COS-19.2
- Goal COS-23: Recreational Opportunities in Preserves, Policy COS-23.1
- Goal COS-24: Park and Recreation Funding, Policy COS-24.1

Housing Element

- Goal H-1: Housing Development and Variety, Policies H-1.3, H-1.5 through H-1.7, and H-1.9
- Goal H-2: Neighborhoods that Respect Local Character, Policies H-2.1 and H-2.2

Safety Element

- Goal S-1: Public Safety, Policies S-1.1 and S-1.2
- Goal S-3: Minimized Fire Hazards, Policies S-3.1 through S-3.7
- Goal S-4: Managed Fuel Loads, Policies S-4.1 through S-4.3
- Goal S-6: Adequate Fire and Medical Services, Policies S-6.1 through S-6.5
- Goal S-7: Reduced Seismic Hazards, Policies S-7.1 through S-7.5
- Goal S-8: Reduced Landslide, Mudslide, and Rockfall Hazards, Policies S-8.1 and S-8.2
- Goal S-9: Protection of Life and Property, Policies S-9.1 through S-9.6
- Goal S-10: Floodway and Floodplain Capacity, Policies S-10.1 through S-10.6
- Goal S-11: Controlled Hazardous Material Exposure, Policies S-11.4 and S-11.5
- Goal S-12: Adequate Law Enforcement Facilities, Policy S-12.1
- Goal S-13: Safe Communities, Policies S-13.1 and S-13.2
- Goal S-14: Crime Prevention, Policies S-14.1 through S-14.3

Noise Element

- Goal N-1: Land Use Compatibility, Policies N-1.1 through N-1.3
- Goal N-2: Protection of Noise-sensitive Uses, Policies N-2.1 and N-2.2
- Goal N-4: Transportation-related Noise Generators, Policies N-4.1, 4.2, 4.5 and 4.6
- Goal N-5: Non-transportation-related Noise Sources, Policy N-5.1
- Goal N-6: Temporary and/or Nuisance Noise, Policies N-6.2 through N-6.4

Fallbrook Community Plan

The Community Plan augments the 2011 General Plan and contains goals and policies specific to the community of Fallbrook. Contained within the Community Plan are the I-15 Corridor Subregional Plan (Appendix B of the Community Plan) and two additional appendices; Scenic Preservation Guidelines and the Interstate 15/Highway 76 Interchange MSPA.

The Project site is located in the easternmost portion of the Fallbrook community planning area. The Community Plan designates Campus Park West as General Commercial, Limited Impact Industrial, Village Residential (VR-7.3), and Specific Plan Area (2.8). The Specific Plan Area designation is used where a specific plan has been adopted (in this case, the 1983-approved Hewlett Packard Campus Park Specific Plan [SP-83-01]). An adopted specific plan is one in which the Board of Supervisors has determined that more detailed planning is required before development can occur. Land within this designation typically has environmental constraints or unique land use issues that require special land use and/or design controls. No major or minor tentative subdivision maps or reclassifications to more intensive zones can be approved except in accordance with the adopted plan. The (2.8) suffix indicates a maximum overall density of 2.8 du/ac within the specific plan area.

Each community/subregional plan in San Diego County identifies specific community character attributes and outlines goals and policies intended to preserve those attributes. The Fallbrook Community Plan does not contain a community character element, but addresses community character in the Community Background and Goals, Policies, and Implementation (specifically under Land Use) sections of the Community Plan. The Community Character issue statement identifies Fallbrook as having a unique village atmosphere characterized by predominantly low-density residential development and agricultural uses. The County's Community Character goal is to "perpetuate the existing rural charm and village atmosphere while accommodating growth," and the associated policy is to "preserve Fallbrook's "Good Living Environment." The Community Plan discusses business (including commercial and industrial), residential, schools, floodplains and open space, public utilities, parks and recreation, air quality, and community beautification and design goals and policies. Circulation and Mobility goals and policies relate to a logical and balanced transportation network with safe and efficient circulation, parking, bus use, and trails/pathways. The Plan also includes goals and policies pertaining to Conservation and Open Space, notably the preservation and enhancement of urban and rural trees, permanent open space areas, protection of water resources and air quality, and well-balanced recreational facilities.

Fallbrook Design Guidelines

The Fallbrook Design Guidelines apply to all development projects within the Fallbrook Community Plan area, with additional guidelines pertaining to commercial, industrial, and multi-family residential developments. The Fallbrook Design Guidelines include objectives and guidelines to ensure that new development in Fallbrook is designed and built with a consideration of community context, a strong emphasis on quality, sensitivity to the landscape, and respect for the community's Design Objectives. The Guidelines contain direction on site

planning; landform alteration; landscaping; walls, fences, and berms; parking and circulation; lighting; non-motorized circulation; architecture; and signage.

Interstate 15 Corridor Subregional Plan

The Subregional Plan area extends along the I-15 corridor from approximately 20 miles north of the Escondido city limits to the Riverside County line, and includes the viewshed area on either side of the freeway. The Subregional Plan encompasses approximately 12,600 acres and passes through five planning areas within the County: North County Metropolitan, Bonsall, Valley Center, Fallbrook, and Rainbow. The Subregional Plan does not replace these community plans, but rather is implemented through amendments to the community plans, as appropriate. The Subregional Plan calls for the preservation of the scenic attributes of the I-15 corridor and establishes Scenic Preservation Guidelines applicable for development within the I-15 corridor. In addition, a Special Area Designator "B," Community Design Review Area, is applied to the zones of all property within the I-15 corridor.

Interstate 15/Highway 76 Interchange Master Specific Plan Area (Appendix B of the I-15 Corridor Subregional Plan)

On June 1, 1988, the San Diego County Board of Supervisors approved the I-15/Highway 76 Interchange Master Specific Planning Area (MSPA). This area encompassed approximately 1,178 acres of land located within four quadrants of the interchange and included eight property owners. It was anticipated that this area, because of its location at the intersection of an Interstate Highway and a State Highway, would become a logical node of future development. The Project site is located within the MSPA and is identified as Hewlett Packard "Campus Park" (Areas A, C, and D of Specific Plan 83-01). Because of its location at the intersection of an interstate highway and a major state highway, the MSPA envisions this area as a logical node for future development. The MSPA states that:

> The principal land use components of the proposed plan include the adopted Campus Park/Hewlett Packard industrial/research park Specific Plan to convert approximately 100 acres of mobile home park to an industrial/research park use (with a similar type of development as proposed on the Hewlett Packard Park ownership) or to retain it for residential uses. Also proposed are residential areas to meet some of the anticipated housing needs of the community and the industrial park, supporting neighborhood commercial areas, parks, trails and open space.

The MSPA calls for an overall residential density of 0.81 du/ac, based on the total acreage within the MSPA, with a maximum of 956 DU for the entire MSPA, subject to the preparation of several studies and adoption of a Master Specific Plan (MSP). The MSP preparation and adoption never occurred. According to the MSPA, the area does not have the necessary service, utility, and road infrastructure to support the entire proposed plan. Therefore, a final land use plan cannot be adopted until further studies are conducted to detail both the specific needs of the plan area and appropriate methods to support those needs.

Due to the service concerns noted above, the MSPA calls for the designation of the interim zone S90 – Holding Area for the MSPA, until the necessary supporting technical studies are conducted and the County Board of Supervisors adopts the final zoning and the MSP. The S90 zone is intended to prevent isolated or premature land uses from occurring on lands for which adequate public services and utilities are unavailable, or for which the determination of the appropriate zoning regulations is precluded by contemplated or adopted planning proposals; or by lack of economic, demographic, geographic or other data. It is intended that the S90 designation will be replaced by other use regulations when the aforementioned conditions no longer exist. The uses permitted are community services, interim uses, or uses that would not prematurely commit the land to a particular use or intensity of development. Until the Board of Supervisors adopts the MSP, and the land contained therein is appropriately zoned to implement the MSP land uses, only the land uses allowed in the S90 zone, as defined in Sections 2900-2908 in the Zoning Ordinance, would be allowed, with a minimum lot size of 2.0 acres.

The entire MSPA is designated with a Regional category of SSA, as described above, on an interim basis to restrict development pending completion of the required studies, including a river plan, traffic study, facilities financing plan, phasing plan, market analysis, dark sky policy, design guidelines, and a park/open space and trails study.

The 1988 MSP anticipates that a specific plan will be prepared for the Hewlett Packard Campus Park (the southern area of the Project site), with 83 acres designated for an industrial research park and associated parking and 10.5 acres designated for neighborhood commercial, south of SR-76.

Campus Park Specific Plan

The adopted Campus Park Specific Plan (SP-83-01; 1983) encompasses the Project site, as well as the Palomar College site and the southern portion of the Campus Park property (Figure 3.1.5-2, Existing and Proposed Specific Plan Land Uses).

Within the combined Campus Park West, Campus Park, and Palomar College area, the adopted Campus Park Specific Plan would allow development of 2.5 million square feet of industrial research park in buildings up to 50 feet tall, parking for 5,500 cars, a pond, community trails, and a variety of recreational amenities for use by employees, as well as 150 condominiums, a 336-unit mobile home park, a commercial center, and some open space. Riparian habitat in the extreme southern portion of the site would be preserved; however, portions of the southern riparian forest would be impacted by the development of recreational facilities. Primary internal access would be along Pankey Road, which would extend from its current northern terminus (southern extension) north along the western property boundary to connect to the current northern extension of Pankey Road.

County of San Diego Zoning Ordinance

The Zoning Ordinance identifies the permitted uses on the Project site, using one zoning designation, S90 – Holding Area. As previously described, this is an interim zone intended to prevent premature development from occurring in areas that are lacking adequate public services

and facilities or because the determination of appropriate zoning regulations is precluded by planning proposals or by a lack of geographic, demographic, economic, or other information. Minimum lot size within the S90 zone is 2.0 acres.

The Project site is located within the I-15 Corridor Subregional Plan area and thus is designated with a Special Area Designator of "B," Community Design Review Area, in the S90 zone. The Proposed Project is subject to the Community Design Review Area Regulations contained in Section 5750 *et seq*. of the County Zoning Ordinance, which are intended to maintain and enhance the community's individual character and identity.

County of San Diego Resource Protection Ordinance

The RPO provides development controls for unique topography, ecosystems, and natural characteristics within the County deemed to be fragile, irreplaceable, and vital to the general welfare of the County's residents. On-site resources addressed by the RPO include wetlands, wetland buffers, floodplains, steep slopes, sensitive lands, and prehistoric and historic sites.

On July 23, 2004, the San Diego County Planning Commission granted an RPO exemption for the Campus Park West development as part of the Pappas Specific Plan Area, and adjacent Campus Park development (PC7-23\RPO-Exemption). The exemption was granted because these developments met the conditions of Article V.2 of the RPO, which exempts all or any portion of a Specific Plan Area that has at least one Tentative Map or Tentative Parcel Map approved prior to August 10, 1988, subject to specific findings made by the Planning Commission, or (on appeal) the Board of Supervisors, at a public meeting.

County of San Diego Park Land Dedication Ordinance

The PLDO is the mechanism that enables the funding or dedication of local parkland. The ordinance establishes several methods by which developers may satisfy their park requirements including payment of park fees, dedication of a public park, provision of private recreational facilities, or a combination of these methods.

County of San Diego Subdivision Ordinance

The County Subdivision Ordinance sets forth development standards for the subdivision of land with respect to design, dedication and access, and required improvements. Applicable standards for the Proposed Project include several design regulations associated with lot size, orientation, and configuration.

County of San Diego Light Pollution Code

The LPC is a County regulatory ordinance that restricts the use of outdoor lighting that emits undesirable light rays into the night sky that would have a detrimental effect on astronomical research. The Project site falls within Zone B of the ordinance, which is defined as all areas within the territorial limits of the unincorporated portion of San Diego County that are not within a 15-mile radius of the Palomar Observatory or the Mount Laguna Observatory.

Natural Community Conservation Planning Program

Regional conservation planning strategies under the California ESA that provide protection, preservation, and conservation of listed and candidate species, their habitats, natural communities, and natural resources, while continuing to allow appropriate development and growth within the state, are authorized and implemented under the NCCP Act of 1991. These strategies are designed to allow for growth as well as provide protection and conservation to threatened and endangered species through multi-species, habitat-based, and long-term approaches that ensure both the conservation of, and net benefits to, the affected species. Development and implementation of regional multi-species open space systems is intended to protect viable populations of key sensitive plant and animal species and their habitat while accommodating continued economic development and quality of life for residents of the region.

A Multiple Species Conservation Plan (MSCP) is a comprehensive, long-term habitat conservation plan that addresses the needs of multiple species by identifying key areas for preservation as open space in order to link core biological areas into a regional wildlife preserve. The County adopted an MSCP for a portion of the County on March 18, 1997, to meet the requirements of the NCCP Act of 1991 and the federal and California ESAs. The total MSCP study area encompasses 582,243 acres, of which 43 percent (252,132 acres) is in the unincorporated areas of San Diego County. Campus Park West lies outside the boundaries of the currently adopted MSCP; however, it is within the boundary for the proposed North County segment of the MSCP. The Project site contains proposed hardline preserve on the Draft North County MSCP map (within which development may occur). Refer to Subchapter 2.6, Biological Resources, for additional information on the MSCP and the North County Subarea.

3.1.5.2 Analysis of Project Effects and Determination as to Significance

These plans address policies and goals of the overall Project. As such, it is the goals and strategies of the Proposed Project that are reviewed for consistency in this section. There is, therefore, no substantive difference between Scenario 1 and 2 with regard to goals and policies (including Project GPAs for circulation and residential density). Similarly, proposed infrastructure improvements (water, sewer, roads), would be necessary to satisfy health and welfare or safety concerns. These policies do not vary based on precise footprint. Discussion below, therefore, addresses the Project as a whole.

Goals, Policies, and Objectives of Applicable Land Use Plans

Guideline for the Determination of Significance

A significant land use impact would occur if the Proposed Project would:

1. Conflict with the land use goals, objectives, policies, and recommendations of the adopted Campus Park Specific Plan, Subregional Plan, MSPA, and other sections of the Community Plan, General Plan, Zoning Ordinance, and any other applicable plans, policies, ordinances, guidelines or regulations.

Guideline Sources

This land use guideline is based on Appendix G of the CEQA Guidelines and County staff guidance. This guideline is intended to ensure conformance with existing regional and local planning efforts. Consideration is also given to the Land Use Element of the General Plan and the Fallbrook Community Plan, particularly applicable sections of the I-15 Corridor Scenic Preservation Guidelines, Fallbrook Design Guidelines, and I-15/Highway 76 MSP.

Analysis

County of San Diego General Plan

Land Use Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Land Use Element of the General Plan, as listed above under Section 3.1.5.1.

Goal LU-1, Primacy of the Land Use Element, and Goal LU-4, Inter-jurisdictional Coordination. The current designated Regional land use categories for the Project site are Village north of SR-76 and Rural Lands south of SR-76. The Village category permits a wide range of land uses and higher densities, including 2.8 du/ac, or a total of 331 DU on the Project site. The Rural Lands category is applied to large open space and very low-density lands and is not appropriate for intensive residential or commercial uses. Because the Rural Lands category does not permit the commercial land uses proposed for some of the areas south of SR-76, the Specific Plan proposes to change the designation of two parcels south of SR-76 from Rural Lands to Village. The two parcels proposed for re-designation as Village would be developed consistent with the community character, scale, and orderly growth of this area called for in the General Plan.

The existing land use designations for the Project site are General Commercial, Limited Impact Industrial, Village Residential (VR-7.3), and Specific Plan Area. The Project proposes a GPA that would allow more DUs; specifically, an increase in multi-family residential density from 7.3 dwelling units per acre (du/ac) to 20 du/ac. The GPA would also change the regional categories of PAs 4 and 5 from Rural to Village, the land use designation of PAs 4 and 5 from Specific Plan to General Commercial, and the land use designation for PA 6 from Specific Plan to Rural Lands 40; as well as amend the General Commercial to Industrial, by expanding the limited impact industrial area, and reclassify Pankey Road and East Dulin Road, to a Boulevard. The proposed designation of two parcels south of SR-76 as Village would be compatible with environmental conditions and constraints, as both parcels were included within the proposed hardline development project area in the draft North County MSCP. Consisting of non-native grassland and a citrus orchard, the parcels are well suited for commercial development due to their convenient access off of SR-76. Development of the Project site has been contemplated for the past 30-plus years, within the I-15/SR-76 quadrant, which includes the approved Palomar College, Campus Park, and Meadowood projects.

The combination of the 2011-approved Campus Park and Meadowood projects with Campus Park West would provide a range of services within a compact development setting that would

encourage non-vehicular transportation by locating housing closer to retail, services, schools, and jobs. The land uses for the I-15/SR-76 quadrant were planned on a regional scale and coordinated with all service providers, and this mix of uses is expected to lead to the creation of a smart growth area consistent with the land use principles of Senate Bill 375 and SANDAG's Regional Comprehensive Plan, Regional Transportation Plan, and Sustainable Communities Strategy. This development pattern also is consistent with the County's General Plan Community Development Model, which encourages the establishment of compact village "cores" that are surrounded by gradually decreasing densities/intensities. Campus Park West would serve as the "core" of the I-15/SR-76 quadrant. For these reasons, the Proposed Project would comply with **Goal LU-1, Primacy of the Land Use Element**, and **Goal LU-4, Inter-jurisdictional Coordination**, as well as the relevant policies. Adoption of the GPA would render the Proposed Project consistent with the General Plan land use designations.

Goal LU-2, Maintenance of the County's Rural Character, and Goal LU-9, Distinct Villages and Community Cores. The Specific Plan maintains the rural character of Fallbrook by ensuring consistency with and incorporating the Fallbrook Community Plan and Fallbrook Design Guidelines, into the Project design to the maximum extent possible. The Project's detailed design guidelines are consistent with the Fallbrook Design Guidelines to the extent feasible, and are intended to preserve the character of the Fallbrook community in terms of architectural and landscape design. The proposed commercial center would provide goods and services that are intended to be complementary to, rather than in competition with, existing commercial properties in the area. The proposal to reclassify Pankey Road as a Boulevard would not adversely impact the rural character of the community; rather, it would result in an appropriate classification for a Village-type development. It supports the County's Community Development Model by locating more intense, compact development within a Village core that is surrounded by decreasing densities that transition into the more rural/semi-rural part of the community. Such a development patterns helps to limit urban sprawl and maintain/protect larger areas of rural/semi-rural lands within the community. Urban growth on this site is considered appropriate because the property is located adjacent to I-15 and SR-76, an area that has been designated for intense development since the adoption of the Sycamore Springs Specific Plan in 1981 and the subsequent approval of the Hewlett Packard Campus Park Specific Plan in 1983. In addition, other projects in the vicinity (Palomar College, Campus Park, and Meadowood) have already been approved and are moving forward with development plans. As detailed throughout Chapters 1 and 2 of this EIR, Campus Park West would provide design or mitigation measures to minimize and mitigate significant adverse Project effects. For these reasons, the Proposed Project would comply with **Goal LU-2, Maintenance of the County's Rural Character**, and **Goal LU-9, Distinct Villages and Community Cores**, as well as the relevant policies.

Goal LU-3, Diversity of Residential Neighborhoods. Proposed Project multi-family residential units would offer with design options suitable for a variety of lifestyles, ages, and affordability levels. The Project would provide a neighborhood center in the form of the proposed mixed-use "core" area, which would be located within easy walking distance (less than one-quarter mile) from the proposed residential district and would likely contain commercial/office uses with additional residential units on upper floors. It is anticipated that residents of the other communities planned within the I-15/SR-76 quadrant, which together would provide a variety of residential zones ranging from multi-family to single-family, would work, shop, or recreate in

Campus Park West. For these reasons, the Proposed Project would comply with **Goal LU-3, Diversity of Residential Neighborhoods**, as well as the relevant policies.

Goal LU-5, Climate Change and Land Use, and Goal LU-9 Distinct Villages and Community Cores. Campus Park West is proposed as part of a larger "village" that would encompass the approved Palomar College campus, Campus Park Specific Plan, and Meadowood Specific Plan. In addition to being designated as a Village in the General Plan, this larger village would be located in an area identified as a smart growth area in SANDAG's Regional Comprehensive Plan and would be a major focal point and activity node serviced by a transit center (on the west side of I-15). The Campus Park West Specific Plan provides more detailed planning and direction for the character, design, uses, densities, and amenities of Project.

The Project Specific Plan includes potential for green roofs/rooftop gardens in its design, which would aid in reducing the urban heat island effect and improving building energy efficiency by providing greater insulation and promoting passive cooling. The proposed mixture of land uses in close proximity would support multi-modal transportation. The Project is designed as a complete neighborhood and pedestrian-oriented development, and would incorporate many features that emphasize bicycle and pedestrian activity and integrate it with existing neighborhoods, such as:

- A compact development pattern with a mix of uses that encourages non-vehicular travel and higher-density residential development to support transit operations
- A mixed-use core within the general commercial area, within easy walking distance of the residential district, that promotes sidewalk cafes, public plazas, wide walkways, street furniture, and street trees
- Sidewalks along all roadways
- An eight-foot-wide multi-purpose pathway along Pankey Road that would provide a non-motorized connection to the Campus Park, Meadowood, and Palomar College projects
- Class II bike lanes along Pankey Road and Pala Mesa Drive
- Class III bike route along Pala Mesa Drive to the west of the Project site to provide a connection to the Class II bike lanes in Old Highway 395 on the west side of I-15
- A non-contiguous Type D Special Pathway along Pankey Road that provides a non-motorized connection to the projects to the east and links to the San Luis Rey River Park Trail

The Project would reserve space for one to two bus stops along Pankey Road to accommodate future bus service based on standards provided by the North County Transit District (NCTD). As described further below, approximately 27 percent of the site would be dedicated as permanent biological open space, some of which would provide buffers to off-site sensitive resources. Buildings also would be constructed to permit the future installation of rooftop photovoltaic systems. For these reasons, the Proposed Project would comply with **Goal LU-5, Climate Change and Land Use**, **and Goal LU-9 Distinct Villages and Community Cores**, as well as the relevant policies.

Goal LU-6, Development-Environmental Balance. The Project has been designed based on an evaluation of environmental constraints and development opportunities and consistent with the

proposed development hardline for the draft North County MSCP. Significant on-site biological and visual resources would be preserved, with approximately 31 acres, or 27 percent of the site, to be dedicated as permanent biological open space and protected with restrictive easements in perpetuity. The Project would maintain adequate buffers from wetland areas and the major drainages in the area, the San Luis Rey River and Horse Ranch Creek, would be preserved. Project development is limited to the area north of the San Luis Rey River as to limit effects on the river and its resources. Proposed drainage patterns would closely match existing conditions and the flow of water from the project site would not increase in volume from that which now drains downstream. In addition, the Horse Ranch Creek and San Luis Rey floodplains were mapped and studied during the design of the Project to ensure that the development would be protected from flood hazards. Steep slope areas are not prominent within the generally flat development area, which is located on a mesa top. Accordingly, the amount of grading proposed is minimal for a site of this size and finished grades generally would conform to existing conditions. The average depth of cut and fill over the site is approximately 10 feet and the maximum height of the fill slopes are 20 to 30 feet. Grading would be balanced on site to eliminate the need to import or export dirt. The Project provides protection from wildfires through the incorporation of limited building zones, and Project storm water design complies with the County Stormwater Management Plan Guidelines and Low Impact Development (LID) standards. For these reasons, the Proposed Project would comply with **Goal LU-6, Development-Environmental Balance**, as well as the relevant policies.

Goal LU-7, Agricultural Conservation. The Campus Park West Specific Plan Area has been planned for non-agricultural development since the adoption of the Sycamore Springs and Hewlett Packard Campus Park Specific Plans in 1981 and 1983, respectively. The Findings adopted for these Specific Plan EIRs concluded that the proposed developments would not have a significant impact on agriculture, based on environmental conditions (e.g., winter frosts and soil alkalinity) and economic factors (high water cost) which limit the potential for continued agricultural production on the site. The County also noted at that time that the Specific Plan Area was no longer regarded as prime agricultural land, as it was virtually surrounded by proposed urban development and located adjacent to I-15. In addition, the steeply sloped mountains to the east were regarded as a natural buffer protecting more extensive agricultural activities further to the east from encroaching development. Since the adoption of those Findings, the described conditions are essentially unchanged, with several of the adjacent areas that were proposed for development at that time currently approved or under construction. The only active agriculture impacted by the Proposed Project would be the removal of approximately 3 acres of a 12.5-acre citrus orchard remnant located south of SR-76/Pala Road, with this orchard present when the 1981 and 1983 Findings were adopted. Based on the described conditions, the project is consistent with **Goal LU-7, Agricultural Conservation**, because it has been found that continued agricultural operations are not beneficial or viable at this site.

Goal LU-10, Function of Semi-rural and Rural Lands. Campus Park West proposes to amend the General Plan to convert two of the three parcels south of SR-76 from a Rural Lands designation to a Village designation. These two parcels are included in the proposed development hardline of the North County MSCP. The third parcel south of SR-76 would remain within the Rural Lands designation and would serve as a buffer between Campus Park West and areas of open space (Horse Ranch Creek and the San Luis Rey River) and the Lake Rancho Viejo residential subdivision to the south. No developed uses would be established on

this parcel, and the rural character and unique biological features associated with the creek would be protected in perpetuity. The undeveloped nature of this third parcel in the southern portion of the site would allow the Project to avoid impacts to the San Luis Rey River. A 20-foot-wide easement also would be dedicated to accommodate the San Luis Rey River Park Trail. A General Plan amendment addressing this change is provided as part of this Project (i.e., part of Project design). With Project approval, the inconsistency in design would be amended and the Project would be fully consistent with **Goal LU-10, Function of Semi-rural and Rural Lands**, as well as the relevant policies.

Goal LU-11, Commercial, Office, and Industrial Development. The proposed commercial and limited impact industrial/office development would be located in an area of high connectivity and accessibility at the interchange of I-15 and SR-76. It also would be within easy walking distance of the proposed residential uses and mixed-use core. The proposed regional center would serve the larger surrounding community as well as the more immediate I-15/SR-76 quadrant. The proposed commercial and limited impact industrial/office uses would be subject to the Campus Park West design guidelines to ensure that the scale and design be compatible with the unique character of Fallbrook. For example, building heights would generally be limited to 35 feet, with some architectural articulations exceeding this height to avoid a perception of "box-type" development. Large walls would not be left blank, but would receive articulation. The permitted architectural styles for the Project include urban Victorian, rustic rural ranch, Mediterranean, and cottage—all styles that are identified as compatible with the rural features of the area and the architectural character of the approved Campus Park and Meadowood projects.

The proposed mixed-use core requires the establishment of storefronts with active retail uses fronting on a central drive aisle/traditional "main street," designed to be low speed with one lane of travel in each direction and diagonal or parallel parking on each side. Pedestrian activity would be enhanced with the use of decorative paving, crosswalks, and wide sidewalks to accommodate outdoor cafes, street furniture, and street trees. Commercial building facades would front along 30 percent of developed Pankey Road north of SR-76 and south of Pala Mesa Drive, thereby enhancing the pedestrian environment and minimizing expansive parking lots. The commercial and limited impact industrial/office uses also would be subject to the landscaping requirements of the Fallbrook Design Guidelines, which require landscaped setbacks that assist with the screening and buffering of outdoor service, storage and parking areas. The limited impact industrial uses, therefore, would be buffered from the nearby residential areas by Pankey Road. For these reasons, the Proposed Project would comply with **Goal LU-11, Commercial, Office, and Industrial Development**, as well as the relevant policies.

Goal LU-12, Infrastructure and Services Supporting Development. Campus Park West would be served by the Bonsall Elementary School District and the Fallbrook Union High School District and would be required to pay the necessary school fees. The project also would pay a fair share contribution to ensure adequate law enforcement and fire services and facilities. Campus Park West would reserve land for purchase by the Sheriff's Department for a new station to be located in the limited impact industrial/office area, where it would not conflict with adjacent land uses. Compliance with the County's PLDO would occur either through the payment of fees or dedication of land. All other on- and off-site infrastructure improvements associated with roads, water, and sewer needed to serve the Project would be constructed prior to or concurrent with the

proposed development. Off-site roadway improvements to ensure adequate levels of service would be implemented and/or fees would be paid, in advance of project occupancy. Roadway design would be compatible with the overall Village character and development planned for the I-15/SR-76 quadrant. For these reasons, the Proposed Project would comply with **Goal LU-12, Infrastructure and Services Supporting Development**, as well as the relevant policies.

Goal LU-13, Infrastructure and Services Supporting Development, and Goal LU-14, Adequate Wastewater Facilities. Potable water and wastewater services for Campus Park West would be provided by the RMWD. This arrangement requires detachment of a portion of the Project from VCMWD and annexation to RMWD. Substantial coordination has occurred with RMWD to ensure that adequate water supplies would be available to serve the Project. In addition, the Specific Plan requires sustainable development and water conservation measures to decrease the Project's demand on potable water supplies. In addition, the Project Applicant has coordinated with RMWD to ensure that adequate capacity is available to serve the Project. Proposed wastewater facilities would be designed and sized appropriately to meet expected demands, but would not result in the inducement of unplanned growth. For the reasons given above, the Proposed Project would comply with **Goal LU-13, Infrastructure and Services Supporting Development**, and **Goal LU-14**, **Adequate Wastewater Facilities,** as well as the relevant policies.

Mobility Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Mobility Element of the General Plan, as listed above under Section 3.1.5.1. The Project would include a GPA to the existing Mobility Element. Figure 1-16 shows the existing and proposed roadway network. Specific changes to the Mobility Element roadway network proposed by Campus Park West would include:

- Reclassification of Pankey Road north of SR-76 from a Light Collector to Boulevard.

A General Plan amendment addressing this change is provided as part of this Project (i.e., part of Project design). With Project approval, the inconsistency in design would be amended and the Project would be fully consistent with the Mobility Element.

Goal M-1, Balanced Road Network. Campus Park West would be part of a regional roadway system that was planned in conjunction with the surrounding projects. The Project not only would connect with the regional road network, but also would provide and/or improve roads within the site boundaries and the larger Community Planning Area. The Project would not bisect a community, and Pankey Road would become a Village-appropriate Boulevard with lower design speeds and ample landscaping. Providing the backbone through the Project site, Pankey Road would connect to Pankey Place, which would access the Campus Park project and provide a link to Horse Ranch Creek Road (thereby providing access to the Palomar College project); Pala Mesa Drive, which connects to Old Highway 395 west of I-15; SR-76, which heads west towards Oceanside and east towards Pauma Valley; and Shearer Crossing, which continues south to Dulin Road. Multiple access points are also provided to allow primary and secondary access for emergency services, with the circulation system designed to meet the General Plan emergency response time of five minutes. For these reasons, the Proposed Project would comply with **Goal M-1, Balanced Road Network,** as well as the relevant policies.

Goal M-2, Responding to Physical Constraints and Preservation Goals. Where the Project would impact level of service on Mobility Element roads, as discussed in Subchapter 2.3 of this EIR, the Project Applicant would provide mitigation in the form of road/intersection improvements, fair share payments, or payment of a Traffic Impact Fee (TIF). Pankey Road originally had an alignment that was to curve out towards the eastern border of the Project area. During the Project design process now incorporated into the 2011 General Plan, that alignment was revised to a more environmentally sensitive design to avoid the sensitive wetland areas along that eastern border. Similarly, a Pankey Road extension north of Pala Mesa Drive was deleted in order to eliminate impacts to wetlands that would have resulted from the original alignment of this roadway. Under the revised roadway design, the wetlands would be better protected by buffers and limited building zones. Noise buffers in the form of sound walls, would be incorporated into the Project to mitigate traffic-related noise. In addition, best management practices (BMPs) and LID techniques would be implemented to accommodate Project-related storm water runoff in a manner that would maximize natural detention and infiltration and minimize excess runoff, as described in Section 3.1.4 of this EIR. For these reasons, the Proposed Project would comply with **Goal M-2, Responding to Physical Constraints and Preservation Goals,** as well as the relevant policies.

Goal M-3, Transportation Facility Development, Goal M-4, Safe and Compatible Roads, and Goal M-5, Safe and Efficient Multi-modal Transportation System. Campus Park West would include multiple ingress and egress routes, as shown on Figures 1-16 and 3.1.5.2. This road network is appropriately scaled for a compact village-type development designed to interconnect with the surrounding projects/community. Pankey Road would be the main roadway serving the Project, allowing for multi-modal travel within a wide parkway. It would contain sufficient right-of-way for the Boulevard series and would accommodate all users with automobile travel lanes, Class II bike lanes, a sidewalk, and a multi-purpose Type D pathway. All Project roadways have been designed to allow for necessary access for fire apparatus and emergency vehicles, in accordance with County Standards and the County Consolidated Fire Code. The primary access route for fire response to the Project would be Pala Mesa Drive to Pankey Road. Should Pala Mesa Drive be blocked, the site could be accessed via SR-76 to Pankey Road. Future driveways accessing the various land uses also would be designed consistent with County Standards and the County Consolidated Fire Code. Coordination has occurred with Caltrans in the design of proposed facilities along SR-76. NCTD has been contacted regarding the provision of transit service to the area and has provided input on bus stop locations along Pankey Road. Additional coordination with NCTD will occur as planning for the bus stops continues (further discussed below). Campus Park West would contribute its fair share towards financing transportation facilities including providing mitigation associated with direct and cumulative traffic impacts consistent with the Traffic Impact Analysis prepared for the Project (refer to Subchapter 2.3). For the reasons given above, the Proposed Project would comply with **Goal M-3, Transportation Facility Development, Goal M-4, Safe and Compatible Roads, and Goal M-5, Safe and Efficient Multi-modal Transportation System,** as well as the relevant policies.

Goal M-8, Public Transit System. A park-and-ride facility was recently constructed in close proximity to the Project site (on the west side of I-15 near SR-76), which would serve the development. The Project would reserve space for bus stops to accommodate future bus service.

Bicycle and pedestrian facilities also would be integrated throughout the Campus Park West development (including Class II bike lanes, sidewalks, and multi-use trails), providing connections to neighboring areas. For these reasons, the Proposed Project would comply with **Goal M-8, Public Transit System,** as well as the relevant policies.

Goal M-10, Parking for Community Needs. Future uses within Campus Park West would be required to comply with the County of San Diego parking regulations, which include requirements for bicycle parking. The design guidelines within the Specific Plan provide standards for parking areas to accommodate safe pedestrian circulation. For example, the design guidelines state that a 10- to 20-foot wide pedestrian "paseo" would be required to connect the front of a building to the parking lot behind it. On-street parking would be encouraged along the central drive aisle/traditional "main street" as a means of slowing down vehicles and creating a pedestrian-friendly environment. Any parking adjacent to Pankey Road would be screened with a low wall, hedge, berm, or combination thereof; and would also contain planting islands. Every designated parking space would be within 30 feet of the trunk of a tree. Wide crosswalks would be required and the utilization of special paving treatments or other special pedestrian path identifiers that contribute to the character of the area would be encouraged. Shared parking is permitted in the Specific Plan and a formula is provided to calculate the number of parking spaces required when shared parking is proposed. Future site plan applications may request additional reductions in on-site parking consistent with County procedures based on the Project's emphasis on non-motorized transportation. The Specific Plan also encourages transportation demand management programs and requires carpool parking. Finally, impervious surfaces in parking lots would be minimized or disconnected where feasible through the use of landscaping and similar LID techniques. For all parking lots greater than 6,000 square feet, in addition to all other guidelines, an internal area equivalent to a minimum of five percent of the total parking area would be planted with a combination of trees and shrubs. For these reasons, the Proposed Project would comply with **Goal M-10**, **Parking for Community Needs,** as well as the relevant policies.

Goal M-11, Bicycle and Pedestrian Facilities, and Goal M-12, County Trails Program. As described in detail above, a variety of bicycle and pedestrian facilities appropriate to the Village setting would be provided with the Project, including Class II and Class III bike facilities, a non-contiguous multi-purpose Type D Special Pathway, and sidewalks. The proposed facilities would provide transitions from the urban experience in the northern portion of the project (sidewalks) to the natural and scenic resources available at the southern end of the project at Horse Ranch Creek (trails). During the design of the Project, the feasibility of providing a trail connection at the northern end of the Project to the future Palomar College Campus, through MSCP land, was explored. It was determined that such a connection was not appropriate because Palomar College was not providing any trails in that area and a pedestrian trail adjacent to the freeway was undesirable. Instead, a pedestrian connection would be provided via the Type D Special Pathway. The pathway would connect to the pathway in Pankey Place, which would lead to Horse Ranch Creek Road, where the pathway would continue and link to Palomar College; the pathway also would continue along Pankey Road to the south and then transition into a sidewalk that would connect to the San Luis Rey River Park Trail. PA 6 contains a 20-foot wide recreational trail easement for the San Luis Rey River Trail, with connections to this trail from both Shearer Crossing and Pankey Road south of SR-76. The easement would

follow an existing dirt pathway to minimize impacts to environmental resources. For these reasons, the Proposed Project would comply with **Goal M-11, Bicycle and Pedestrian Facilities**, **and Goal M-12, County Trails Program,** as well as the relevant policies.

Open Space and Conservation Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Land Use Element of the General Plan, as listed above under Section 3.1.5.1.

Goal COS-1, Inter-connected Preserve System, Goal COS-2, Sustainability of the Natural Environment, and Goal COS-3, Protection and Enhancement of Wetlands. Substantial coordination occurred between the wildlife agencies, the County, and Campus Park West during the preparation of the draft North County MSCP and proposed development hardline. The preserve system was designed to ensure adequate open space linkages and wildlife corridors. In accordance with the preserve concept and draft MSCP, Campus Park West would preserve approximately 31 acres of biological open space, with Project development only located within authorized "take" areas consistent with the draft North County MSCP. Various re-designs of the Project have further reduced impacts to sensitive biological resources (see discussion of Goal M-2, above). Wetland buffers and limited building zones also would be provided to protect wetland areas, and no invasive species would be permitted for planting within fuel modification zones adjacent to riparian areas. Where the Project would result in unavoidable impacts to wetlands, appropriate mitigation is proposed in accordance with County resource regulations. Mitigation would consist of the preservation in perpetuity of remaining on-site sensitive habitats in biological open space, enhancement of on-site riparian habitats, off-site creation of mitigation habitat, and off-site purchase of upland mitigation habitat. A habitat management plan has been prepared to guide the management and monitoring of the Project biological open space areas in perpetuity, as well as to identify acceptable funding mechanisms. Other than revegetation and enhancement activities (including the San Luis Rey River Park Trail), no development would occur within the designated biological open space areas. The public also has been involved throughout the design and processing of this Project. For these reasons, the Proposed Project would comply with **Goal COS-1, Inter-connected Preserve System, Goal COS-2, Sustainability of the Natural Environment, and Goal COS-3, Protection and Enhancement of Wetlands**, as well as the relevant policies.

Goal COS-4, Water Management, and Goal COS-5, Protection and Maintenance and Water Resources. The Campus Park West design guidelines require water conservation efforts and the use of drought tolerant landscaping. The plant palette developed for the Project includes native and drought tolerant plant species. The landscape plan and irrigation system would comply with the County's Water Efficient Landscape Design Manual and Water Conservation in Landscaping Ordinance. Recycled water would be utilized for irrigation purposes, if it becomes available. The Project would be consistent with the County's floodplain regulations and would result in drainage patterns and volumes closely matching existing conditions. The Project Specific Plan includes a number of policies related to sustainable development and LID that help protect and maintain water resources. LID features and BMPs (e.g., vegetated swales; use of pervious surfaces and permeable paving; routing of storm water discharge into landscaped areas; reduction or elimination of herbicides, pesticides, and insecticides; green roofs, a subsurface reservoir bed or underground storm water storage, and the breaking up of impervious surfaces)

would be implemented to maximize storm water filtration and infiltration and assist with recharging groundwater supplies. Although the Project does not have high potential to contaminate groundwater and does not rely on groundwater supplies, any future uses that could contaminate groundwater (such as gas stations) would be required to follow applicable local, state, and federal regulations and take appropriate measures to protect water supply sources. For the reasons given above, the Proposed Project would comply with **Goal COS-4, Water Management, and Goal COS-5, Protection and Maintenance and Water Resources**, as well as relevant policies.

Goal COS-7, Protection and Preservation of Archaeological Resources. The County of San Diego has complied with Senate Bill 18 Consultation requirements throughout the processing of the Campus Park West Project. A cultural resources report was completed, which noted the presence of alluvial deposits and the associated potential for buried archaeological sites within the Project area. The field check also encountered remnants of the 1930/1940s Rancho San Luis Rey thoroughbred facility. The majority of the Rancho San Luis Rey improvements, however, formerly on the Campus Park West property, have been demolished or graded away. Because the possibility remains for the presence of obscured or buried potentially significant cultural resources, an archaeological monitoring program is recommended to ensure compliance with CEQA and County requirements. Archaeological monitoring during site preparation and construction would apply to the entire Project site. During initial brushing, debris clearing, and grading on the Project site, an archaeologist and Native American monitor would be present to ensure that if potentially significant deposits are uncovered, they are evaluated for significance and adequate preservation or data recovery tasks are implemented. For the reasons given above, the Proposed Project would comply with **Goal COS-7, Protection and Preservation of Archaeological Resources**, as well as relevant policies.

Goal COS-9, Educational and Scientific Uses. Based on the geotechnical and paleontological investigations undertaken for Campus Park West, surficial materials and geologic formations observed or expected to occur within the project site include fill deposits, native topsoil/colluvium, Quaternary (Holocene) alluvium, Quaternary river terrace deposits, and Cretaceous igneous intrusive rocks. No unique geologic features are present within or adjacent to the Project site or off-site impact areas. Because the on-site terrace deposits exhibit a moderate potential for the occurrence of sensitive paleontological resources, a qualified paleontologist or paleontological monitor (working under the direction of the paleontologist) shall be present during all or selected grading operations to monitor for the presence of paleontological resources and, if applicable, conduct appropriate salvage operations. The paleontologist and paleontological monitor have the authority to temporarily halt or divert grading activities in the area of any discovery to allow salvage and ensure protection of sensitive paleontological resources. Based on these requirements, the project is consistent with **Goal COS-9, Educational and Scientific Uses**.

Goal COS-10, Protection of Mineral Resources. The Campus Park West site contains areas classified by the State as MRZ-2 and MRZ-3, which indicate the potential occurrence of significant mineral deposits. The Project site, however, is not currently being mined, has no known history of mineral extraction, and is not zoned or subject to overlay zones that designate the presence of locally important mineral resources. In addition, the Mineral Resource Technical

Report prepared for the Proposed Project provides the following conclusions: (1) per County guidelines, a buffer of 1,300 feet from residential uses is generally necessary to avoid mining-related nuisance issues (e.g., noise and dust), with several existing off-site residences located within 1,300 feet of the on-site MRZ-2 areas south of SR-76 (which effectively eliminates the potential for mineral extraction in these areas); (2) a number of existing off-site residences are located within 1,300 feet of several Project site areas north of SR-76 that are mapped as MRZ-3, but identified as possibly having MRZ-2 quality materials, which would preclude mineral extraction in those areas; (3) two additional portions of the Project site north of SR-76 that are designated MRZ-3, but potentially contain MRZ-2 quality materials, encompass a combined area of approximately 6.8 acres, which would not provide sufficient economic return to meet the County marketability threshold (based on analysis in the Mineral Resource Technical Report); and (4) off-site areas to the east that are mapped as MRZ-3 but possibly contain MRZ-2 quality materials encompass substantial wetland habitat, with all but approximately 0.2 acre of this area identified as permanent open space and thus not considered to be minable (due to disturbance restrictions and mitigation requirement costs). Based on the described considerations, the Project is consistent with **Goal COS-10, Protection of Mineral Resources**, and associated policies.

Goal COS-11, Preservation of Scenic Resources. Campus Park West is subject to and planned to be consistent with the I-15 Corridor Scenic Preservation Guidelines. The I-15/SR-76 quadrant, within which the Project would be located, was designed in a collaborative manner among all applicants to ensure the preservation of contiguous open space areas, compatibility among the physical characteristics of each development including architectural and landscape elements, and the connection of the projects to each other and surrounding regional trails. Significant natural features within the quadrant would be preserved, including Horse Ranch Creek and the San Luis Rey River, and the Project would afford opportunities for views into these existing open space areas. Project signage would be erected for identification purposes only, and no billboards or advertisements would be permitted. Although sound walls cannot be avoided, where they would block views to scenic resources, inclusion of transparent materials, where feasible and appropriate, could be considered. Where feasible and space permits, the use of berms and landscaping in conjunction with the sound walls to reduce their visible height would be implemented. All walls and fences over three feet in height that face a public street would provide a fully landscaped five-foot-buffer between the wall or fence and the street. A six-foot high fire control wall also is included along the western, southern and eastern boundaries of the southernmost portion of PA 2, as well as (for **Scenario 1** only) the northern boundary of PA 5 as part of Project design. The walls would be solid, approximately 2,300 and 450 feet in length, respectively, and would be constructed of non-combustible material. The walls may contain a view wall (tempered glass) in the upper half as long as design remains solid and non-combustible. Utilities would be undergrounded to further minimize visual impacts associated with the Project. For these reasons, the Proposed Project would comply with **Goal COS-11, Preservation of Scenic Resources**, as well as relevant policies.

Goal COS-13, Dark Skies. As described further in Subchapter 2.1, the Project site is outside the Zone A 15-mile radius of the Palomar Observatory. The Project site is instead within Zone B, which includes all areas within the territorial limits of the unincorporated portion of the County outside of Zone A. Campus Park West would be consistent with the County's dark sky ordinance and the SP contains guidelines to minimize light pollution in accordance with the

site's location within Zone B. The design guidelines within the SP require outdoor lighting to be fully shielded, designed to prevent spillover into adjacent areas, and to consist of low pressure sodium vapor light or equivalent source. For these reasons, the Proposed Project would comply with **Goal COS-13, Dark Skies**, as well as relevant policies.

Goal COS-14, Sustainable Land Development, and Goal COS-15, Sustainable Architecture and Buildings. Campus Park West is designed with a mixture of uses in a compact setting that encourages people to walk or ride a bike. As detailed above, the Project would contain a number of features that promote a pedestrian/bicycle-friendly environment, such as a mixed-use core that promotes sidewalk cafes, public plazas, wide walkways, street furniture, and street trees; non-motorized pathway and sidewalks that provides connections to the projects to the east and links to the San Luis Rey River Park Trail; Class II bike lanes and a proposed Class III bike route; and a higher-density residential development to support planned transit operations. The Project also would be part of a larger "village" within the I-15/SR-76 quadrant; the village would include complementary uses that allow for internal capture of vehicle trips by locating housing closer to retail, services, schools, and jobs. This type of development pattern allows reductions in the length and duration of vehicular trips and associated air pollution and greenhouse gas emissions. To further reduce automobile reliance, a park-and-ride facility was recently constructed west of I-15 near SR-76 that would serve the Campus Park West development and space would be reserved for bus stops along Pankey Road to accommodate future bus service. Additional details and discussion of the Project's compliance with Sustainable Mobility goals and policies are contained below and in Subchapter 2.3.

Campus Park West would be designed to meet or exceed current Title 24 standards, which contain requirements related to structural, mechanical, electrical, and plumbing systems, energy conservation measures, green design, construction and maintenance, fire and life safety, and accessibility. Per the Project design guidelines, deciduous trees would be installed on the south and west sides of residential, commercial, and retail pad buildings, or limited impact industrial buildings, (excluding warehousing and loading and service areas), to provide shade in the summer and sun penetration in the winter (i.e., passive solar cooling and heating, respectively). Buildings would be encouraged to maximize solar access to allow for the use of photovoltaic systems (i.e., active solar). Shade trees would be required throughout the development along roadways and pedestrian connections, within parking lots, and within landscaped setback areas. In some instances (e.g., in the residential areas), the Project must meet minimum tree spacing and quantity requirements. To reduce the urban heat island effect, "green roofs" would be permitted on multi-family structures and "cool" paving materials are preferred. The Campus Park West Specific Plan encourages buildings to be designed to integrate LEED Certification guidelines and other additional "green building" criteria into the site design and design of the buildings, where feasible. Buildings also would be constructed to allow for the future installation of rooftop photovoltaic systems. During construction, low-emission equipment would be used and dust control measures would be implemented. In addition, a minimum of 50 percent of all construction waste would be recycled. Native and drought tolerant plant materials which require minimal maintenance are included in the plant palette for Campus Park West. For these reasons, the Proposed Project would comply with **Goal COS-14, Sustainable Land Development, and Goal COS-15, Sustainable Architecture and Buildings**, as well as relevant policies.

Goal COS-16, Sustainable Mobility. As noted above, Campus Park West would be a compact development designed with "smart growth" principles that are consistent with the County and SANDAG's vision for the area. The Project has been designed to support alternative transportation modes through the provision of pedestrian and bike facilities and would reserve space for bus stops along Pankey Road to accommodate future bus service. It would also be served by the recently constructed park-and-ride facility located on the west side of I-15. In addition, the Specific Plan requires carpool parking and supports the implementation of other transportation demand management strategies such as flexible work schedules, a bike share program, provision of shower facilities for employees that bike to work, and other similar strategies. As the Project Applicant would not develop specific business uses within the development, the Project cannot commit in advance to provisions of incentives for the use of zero- and low-emission vehicles and equipment upon site buildout. Because the Project anticipates that larger businesses would occupy some of the commercial space, however, it is likely that future on-site businesses could provide such programs and opportunities for their employees. The potential for such programs would be consistent with anticipated buildout and would not be prohibited by site design. During construction, low-emission construction vehicles and equipment would be utilized to minimize air pollutant and greenhouse gas emissions. For these reasons, the Proposed Project would comply with **Goal COS-16, Sustainable Mobility**, as well as relevant policies.

Goal COS-17, Sustainable Solid Waste Management. Pursuant to San Diego County Ordinance 9840, the Campus Park West Project would recycle a minimum of 50 percent of all construction waste. In addition, for long-term Project operation, separate refuse and recycling containers are required on site, and the homeowner's association (HOA) and/or landscape maintenance district (LMD) would be responsible for properly disposing of green waste to minimize the amount of organic materials disposed of at landfills. Based on the noted considerations, the Project would be consistent with **Goal COS-17, Sustainable Solid Waste Management**, as well as relevant policies.

Goal COS-19, Sustainable Water Supply. Campus Park West would be served by RMWD, as noted above. If recycled water becomes available to the Project, it would be utilized for irrigation purposes. The Specific Plan also encourages a number of sustainable development practices that minimize water consumption and recharge water supplies such as the use of native and drought tolerant plant species and other, previously described LID features and BMPs (further detailed in Section 3.1.4). For the reasons given above, the Proposed Project would comply with **Goal COS-19, Sustainable Water Supply**, as well as relevant policies.

Goal COS-23, Recreational Opportunities in Preserves, and Goal COS-24, Park and Recreation Funding. The Project would tie into a regional trail network that connects to natural habitat. The proposed 20-foot-wide easement to be provided in PA 6 to accommodate the San Luis Rey River Park Trail would be consistent with the San Luis Rey River Park Master Plan. The proposed trail alignment follows along an existing dirt pathway and, therefore, would afford protection of the San Luis Rey River and its surrounding habitat. Campus Park West would contribute to park and recreation facilities either through the payment of fees or dedication of land, in accordance with the County PLDO. For these reasons, the Proposed Project would

comply with **Goal COS-23, Recreational Opportunities in Preserves**, **and Goal COS-24, Park and Recreation Funding**, as well as relevant policies.

Housing Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Housing Element of the General Plan, as listed above under Section 3.1.5.1.

Goal H-1, Housing Development and Variety, and Goal H-2, Neighborhoods that Respect Local Character. The proposed residential district permits multi-family housing types up to a density of 20 du/ac, which is considered an appropriate density to accommodate more affordable housing options than would be available at lower densities. The district would be located within a short walking distance of shopping, employment, and other services and in the vicinity of a park-and-ride facility, making the site ideal for accommodating a variety of ages and income levels and diversity of residents. The proposed mixed-use core also would be located within easy walking distance (less than one-quarter mile) from the proposed residential district and would likely contain additional residential units on upper floors above commercial/office uses. Campus Park West residential development would be required to provide 200 square feet of group usable open space and 100 square feet of private open space per DU. In addition, children's play areas must be provided (unless the particular development is restricted to seniors); at least one children's play area of 400 square feet would be provided for the first 25 DUs with an additional 100 square feet required for each additional 25 DUs. As described in Chapter 1 and Subchapter 2.1, the Campus Park West design guidelines require residential development to incorporate a variety of design elements such as wall offsets, balconies, deep openings and entryways, windows, roof pitches, gables, tower elements, arches, roof structures and stepbacks on upper floors. Landscaped setbacks with at least one tree provided for each 300 square feet of residential yard area also would be required, consistent with the Fallbrook Design Guidelines. The described architectural and landscape features of the proposed housing would contribute to the establishment of a project that is well-designed, compatible with, and respectful of the character of the surrounding community. For these reasons, the Proposed Project would comply with **Goal H-1, Housing Development and Variety, and Goal H-2, Neighborhoods that Respect Local Character**, as well as relevant policies.

Safety Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Safety Element of the General Plan, as listed above under Section 3.1.5.1.

Goal S-1, Public Safety, Goal S-3, Minimized Fire Hazards, Goal S-4, Managed Fuel Loads, and Goal S-6, Adequate Fire and Medical Services. Site opportunities and constraints were analyzed prior to the designing of the Project to minimize exposures to hazards. Campus Park West would incorporate adequate fuel modification zones throughout the development and the plant palette reflects a resistance to fire. Adequate fire clearing would be conducted within the fuel modification zones and, as described above, a fire wall would be required along the south/southwestern portion of the site. The closest fire station to the Project site is North County Fire Protection District (NCFPD) Station #4, located at 4375 Pala Mesa Drive. The Project site is located within an acceptable travel time for this first responding station. Campus Park West would enter into an agreement with the NCFPD and pay a proportionate fair share contribution for necessary improvements to fire protection services and facilities. The Project's FPP

identifies fire-resistant construction techniques and all new buildings would be built to County of San Diego Fire and Building Codes. RMWD, which would serve the Project, is capable of meeting the fire flow requirements for the Project. For the reasons given above, the Proposed Project would comply with **Goal S-1, Public Safety, Goal S-3, Minimized Fire Hazards, Goal S-4, Managed Fuel Loads, and Goal S-6, Adequate Fire and Medical Services**, as well as relevant policies.

Goal S-7, Reduced Seismic Hazard. The Project site and vicinity do not encompass any known active or potentially active faults, and are not located within a County Near-Source Seismic Shaking Zone. The Project site and vicinity are, however (like all of San Diego County), within a Seismic Zone 4 designation and thus may be subject to substantial ground shaking from larger earthquake events along one or more major regional faults. The 2012 Project Geotechnical Investigation identifies a number of standard design measures to address these potential impacts, including the use of: (1) an appropriate design ground acceleration level; (2) other related considerations such as appropriate subsurface profile types, acceleration and velocity coefficients, and seismic source (including type and distance); and (3) applicable seismic elements of the IBC/CBC and County Building Code. In addition, there are no existing structures on the site that would require seismic retrofitting. Based on the noted considerations, the Project would be consistent with **Goal S-7, Reduced Seismic Hazard**, and related policies.

Goal S-8, Reduced Landslide, Mudslide, and Rockfall Hazards. The 2012 Project Geotechnical Investigation concluded that no mapped landslide deposits or topographic features indicative of landslides were present within or adjacent to the site, and that the potential for associated landslides or large-scale slope instabilities is considered low. While some potential for landslides and/or rock falls was identified for off-site areas along Horse Ranch Creek Road associated with proposed utilities (i.e., water and sewer lines), no associated adverse effects are anticipated due to the subsurface location of these facilities. For the reasons provided, the Project would be consistent with **Goal S-8, Reduced Landslide, Mudslide, and Rockfall Hazards**, as well as relevant policies.

Goal S-9, Protection of Life and Property, and Goal S-10, Floodway and Floodplain Capacity. The current 100-year floodplain in the Project area is defined around the existing conditions of both the San Luis Rey River and Horse Ranch Creek. Portions of the site located south of SR-76 are within the identified 100-year FEMA floodplain boundary associated with the San Luis Rey River. In addition to the described FEMA mapping, the floodplain analyses conducted for the Proposed Project concluded that: (1) the mapped 100-year floodplain along Horse Ranch Creek encroaches into portions of the Project site both north and south of SR-76, including areas proposed for development; and (2) the mapped 100-year floodplain along the San Luis Rey River encroaches into the project site south of SR-76, including areas proposed for development. The floodplain analysis included proposed modifications to the existing 100-year floodplain. As discussed in Section 3.1.4, the site's location within the noted floodplains would not result in significant 100-year flood-related health, safety, property and inundation/water surface elevation hazards or impacts. Potential impacts from the Proposed Project related to on- and off-site water surface elevations and associated flooding hazards (Horse Ranch Creek) also would be less than significant.

The proposed drainage conditions associated with the Project would generally maintain existing drainage patterns. The proposed storm drain system would collect site runoff within the Project limits and convey it to Horse Ranch Creek, at various locations. The storm drain system would include detention basin(s) to ensure post-project peak flow rates do not exceed pre-project peak flow rates, and would convey runoff from the existing I-15 storm drain systems. The aforementioned LID techniques would reduce the amount of runoff leaving the site and, therefore, the Project's contribution to flooding. For these reasons, the Proposed Project would comply with **Goal S-9, Protection of Life and Property, and Goal S-10, Floodway and Floodplain Capacity**, as well as relevant policies.

Goal S-11, Controlled Hazardous Materials Exposure. Evidence of hazardous materials has been found in the vicinity and agricultural operations have historically occurred on the Project site, but the site is not a known or expected contamination site. As discussed in Section 3.1.3, organophosphorus pesticides, chlorinated pesticides/herbicides, petroleum hydrocarbons, and lead residue in soils have been found to be at "less than detection levels." Nitrate levels also were below levels of concern. If hazardous materials were to be identified, for example during detailed geotechnical investigations for future project development activities, conformance with all pertinent agency regulations would be required. The Project would incorporate buffers between an existing orange grove and development proposed in PA 4, and the operator of the orange grove is required to comply with relevant safety codes with respect to the application of pesticides and other hazardous materials. For these reasons, the Proposed Project would comply with **Goal S-11, Controlled Hazardous Materials Exposure**, as well as relevant policies.

Goal S-12, Adequate Law Enforcement Facilities, Goal S-13, Safe Communities, and Goal S-14, Crime Prevention. Law enforcement services would be provided to the Project by the San Diego County Sheriff's Department. The closest sheriff's station to the site is the Fallbrook substation, located at 388 East Alvarado Street. A new station is likely to be required within the Project site or near the vicinity of the site per the San Diego County Sheriff's Department Facilities Master Plan dated October 2005. Discussions with the San Diego County Sheriff indicate that a possible location for the station could be within the limited impact industrial planning area north of SR-76. The Project Applicant is working with the Sheriff's Department to reserve land within the Project area for purchase by the County and would pay a proportionate fair share contribution towards the establishment of adequate law enforcement facilities and services. Crime prevention through environmental design techniques is addressed in the Campus Park West design guidelines to discourage unlawful behavior by maximizing visibility of and fostering legitimate social interaction in public spaces and controlling access between public and private spaces. For these reasons, the Proposed Project would comply with Goal S-12, **Adequate Law Enforcement Facilities, Goal S-13, Safe Communities, and Goal S-14, Crime Prevention**, as well as relevant policies.

Noise Element. The following analysis demonstrates the Project's consistency with the relevant goals and policies of the Noise Element of the General Plan, as listed above under Section 3.1.5.1.

Goal N-1, Land Use Compatibility, Goal N-2, Protection of Noise-sensitive Uses, Goal N-4, Transportation-related Noise Generators, Goal N-5, Non-transportation-related Noise Sources, and Goal N-6, Temporary and/or Nuisance Noise. Noise considerations were taken into account in the design of Campus Park West. As described in Section 2.5, a noise analysis has been completed for the Project and mitigation measures to reduce noise impacts associated with Project traffic and construction operations would be implemented as appropriate. The proposed general commercial and limited impact industrial land uses, which are less sensitive to noise impacts from traffic, would be located adjacent to I-15 and SR-76. Conversely, the proposed residential uses would be sited along the eastern edge of the Project site, further away from these busy roadways and adjacent to open space. The proposed residential areas along Pankey Road would not be subjected to excessive traffic noise because a sound wall would line the east side of the road; in addition, these areas are removed from I-15 and SR-76. Additional noise considerations for residential uses, such as the potential need for balcony or patio noise barriers, would be addressed during site plan review. Enhanced building elements (e.g., thicker dual-paned windows) would be implemented as necessary to ensure that interior noise standards are achieved. The Project would be subject to, and would comply with, the County noise ordinance including limits on the hours of construction. Potential noise impacts from siren testing if a Sheriff station is constructed in PA 1 would be addressed through proper site planning and preparation of a noise study, which would identify noise control requirements. For the reasons given above, the Proposed Project would comply with **Goal N-1, Land Use Compatibility, Goal N-2, Protection of Noise-sensitive Uses, Goal N-4, Transportation-related Noise Generators, Goal N-5, Non-transportation-related Noise Sources, and Goal N-6, Temporary and/or Nuisance Noise**, as well as relevant policies.

As described in detail above, with the exception of the General Plan land use designations and the Mobility Element, for which the Proposed Project is seeking amendment, the Project would be consistent with applicable General Plan Conservation and Open Space, Housing, Safety, and Noise Element standards addressed in this document. With approval of the GPA included in the Project, impacts associated with Project consistency with the Land Use Element would be avoided Adoption of the GPA by the Board of Supervisors to amend the Mobility Element would render the Proposed Project consistent with the Mobility Element classifications. Accordingly, the Project would conform to each of the relevant goals addressed above. Refer to the Project SPA/GPA Report for a list of each goal and associated policy evaluated herein. The reader is referred to Chapter 1.0 for additional Project description specifications, and to Subchapters 2.1, 2.3, 2.5 and 2.6 and Sections 3.1.3, 3.1.4, 3.1.8 and 3.1.9 for additional and supporting information regarding aesthetics, traffic, noise, biological resources, hazards, hydrology and water quality, and public services and utilities. Accordingly, associated land use planning impacts would be avoided and therefore **no impact** would occur.

Fallbrook Community Plan

The Fallbrook Community Plan includes as an appendix the I-15/Highway 76 Interchange MSP. That plan anticipates development at the crossroad of these primary transportation corridors to be substantially different from some of the more rural areas covered by the Fallbrook Community Plan (see also the discussion under Community Character of this section). For example, the relatively high-density Lake Rancho Viejo project is specifically called out, as are the

Hewlett Packard industrial park, mobile home development, and neighborhood and general commercial uses.

Because the Fallbrook Community Plan is a part of the County General Plan, the goals and policies of the community plan are largely reflective of those within the General Plan. As it did with nearly every element of the General Plan, the Proposed Project would comply with the Fallbrook Community Plan goals and policies related to Circulation and Mobility, Conservation and Open Space, Safety, Noise, and Specific Plans and Study Areas. Although ridgeline development was contemplated in an early version of the Project, the current design does not contain any ridgeline impacts.

Detailed discussion of the Project's consistency with these goals and policies, as well as those related to Land Use, is not included herein because they are so closely reflective of those within the General Plan (see above). Detailed discussion and a list of the relevant Fallbrook Community Plan goals and policies are included in the Project SPA/GPA Report. As described above, the Proposed Project would be inconsistent with the 1983 Campus Park Specific Plan and the General Plan land use categories, both of which are incorporated into the Fallbrook Community Plan. As this inconsistency would be addressed through adoption of the GPA by the Board of Supervisors to amend the General Plan, the Proposed Project would be rendered consistent and **no impact** associated with the Fallbrook Community Plan would occur.

Fallbrook Design Guidelines

As noted above, the Fallbrook Community Plan assumes a variety of non-rural uses at the I-15/SR 76 interchange. The Fallbrook Design Guidelines address the community as a whole. As a result, the design guidelines, intended primarily to address the heart of the town of Fallbrook or more large-lot residential development, is not always appropriate to the goals of this specific quadrant.

Although the Proposed Project would conform to a great majority of the Fallbrook Design Guidelines despite these varied uses, some inconsistencies have been identified. The areas in which inconsistency is found are few, and in some instances, the "amount" of non-compliance is minimal. Although the Proposed Project would conform to a great majority of the Fallbrook Design Guidelines, some inconsistencies have been identified. The areas in which inconsistency is found are few, and the "amount" of non-compliance is generally minimal. The overall conclusion with regard to these land use inconsistencies is presented following discussion of each of the items noted below. In particular, the Project SPA/GPA varies from the Fallbrook Design Guidelines with regard to signage height of letters, colors, and size; light standard heights and pole colors in parking areas; and open space configurations in residential areas. Discussion of Campus Park West's compliance with the Fallbrook Design Guidelines is included in Appendix A to Appendix B of this EIR.

Specifically, while particular stores and uses are not yet identified, the Project SPA/GPA includes a requirement that a comprehensive sign plan be submitted and approved once site plan specifics are identified. The Fallbrook Design Guidelines call for simplistic and clarifying signs that contain no more than three colors in addition to black and white. Project Specific Plan

guidelines generally restrict signage to color use as specified, but would allow more colors and typefaces for corporate logos and artistic elements where appropriate. Similarly, the Design Guidelines include standards for letter sizes on signs, with lettering and symbols on commercial, industrial, and town center commercial development (such as the proposed mixed-use core) signage to be limited to a maximum of eight inches. The signage deviations proposed by the Project are necessary to accommodate the proposed regional commercial center, which was not contemplated in Fallbrook when the guidelines were originally drafted. When appropriate, deviations would include an exceedance of the eight-inch letter/symbol limit, so that signs would be proportionate to the size of the building on which it is located. For example, the largest letter size would be proportionate to the largest building size [i.e., for business uses exceeding 60,000 s.f., letters could be a maximum of five feet in height]). An approved sign program would be required for the non-residential land use districts within the Project prior to the issuance of building permits.

With regard to the site lighting, the Fallbrook Design Guidelines call for overhead lighting within commercial and residential parking areas to be no higher than 20 and 15 feet, respectively. The Proposed Project would comply with the residential guidelines, as overhead lighting in residential parking areas would be limited to 15 feet. In commercial area parking lots, however, lights as high as 25 feet are proposed, and poles may be dark colors in addition to the Design Guidelines-noted black, white and natural stain finish. They would be configured so as to provide the amount of light necessary for safety while also complying with the Dark Sky policies. The restriction to lower heights is completely reasonable in town center areas where light standards should be in scale with immediately abutting structures. In a commercial structures parking lot, however, safety issues associated with potential user isolation and visibility as pedestrians move among cars becomes paramount. The difference of five feet in height of the pole lights associated with parking lot lighting would not visually read as "out-of-scale" given the size of the parking lot and the required trees within it. The taller light standards also would help reduce the number of light poles in the large commercial parking lots, which may be viewed as a positive benefit. As a result, adverse effects associated with visibility of these features are considered less than significant. Inclusion of "dark" colors also would help the poles visually fade.

Although the amount of open space associated with residential uses would be consistent with the Fallbrook Design Guidelines, the final area of potential inconsistency concerns the location of common open space areas in the multi-family residential district. The Project proposes that common open space be permitted atop buildings in the multi-family residential district that have green, or planted, roofs**,** in part to increase aesthetic value. These green roofs would provide additional common open space for Project residents**,** consistent with open space requirements. Green roofs as likely were not contemplated in the Guidelines because the document was prepared before green roofs became commonplace**.** Green roofs are considered consistent with the guidelines**,** however, because they directly address a number of items called out in the Guidelines relative to climate and energy conservation (e.g., temperature-moderating and passive solar elements that reduce energy consumption, provide more comfortable living spaces, and adding visual character to buildings). Therefore, no deviation from or inconsistency with the guidelines is identified for this issue and no impact would occur.

Due to the fact that the design criteria were authored prior to identification of this node for regional commercial uses, combined with the GPA incorporated into the Project as a design feature, land use inconsistency impacts would be resolved as part of Project approval. Similar to the discussions on the General Plan and Community Plan above, these inconsistencies with the Fallbrook Design Guidelines would be addressed through adoption of the GPA by the Board of Supervisors to amend the General Plan. The portions of the Fallbrook Design Guidelines that are currently silent as to details on this long-anticipated development node would be amended to include the Project specifications, tailored to development of this new village-style center. The Proposed Project would be rendered consistent and **no impact** associated with the Fallbrook Community Plan would occur.

Interstate 15 Corridor Subregional Plan

The Project site is located within the I-15 Corridor Subregional Plan area and has a Special Area Designator "B," Community Design Review Area. Pursuant to the I-15 Corridor Subregional Plan, the Project is subject to the Scenic Preservation Guidelines contained within the I-15 Corridor Subregional Plan. As discussed in detail in Subchapter 2.1, Aesthetics, the Proposed Project's would conform to the I-15 Corridor Subregional Plan. Therefore, while the Proposed Project would result in change to the visual environment east of I-15, the Proposed Project's conformance to the Subregional Plan would ensure that little overall compositional change to the visual environment of the I-15 corridor in this area would occur. As further listed in the Project SPA/GPA Report, the Proposed Project would be consistent with applicable detailed Scenic Preservation, Public Services and Facilities, Circulation, Conservation, Coordination, and Implementation Guidelines and **no impact** would occur.

I-15/Highway 76 Interchange Master Specific Plan Area (Attachment B of the Interstate 15 Corridor Subregional Plan)

As noted above, the Land Use Element of the County General Plan currently designates the entire MSPA as SSA to ensure completion of recommended studies to identify both the needs of the area and appropriate methods to address those needs. The MSPA required master detailed studies for eight issues. Some of these have been addressed through overall plans or regulations already completed (e.g., the San Luis Rey River Plan or LPC and the adopted County General Plan's economic analysis). The remainder of the required studies were submitted as technical appendices to this EIR. The intent of the MSPA would be met upon approval of the Proposed Project for the parcels covered within Project boundaries (Project-specific studies that are consistent with the above-noted master studies are related to phasing, facilities financing, traffic, and park/open space trails). Land use and planning impacts are identified as **less than significant**.

Campus Park Specific Plan

The Project, as currently proposed, is not consistent with the existing Campus Park Specific Plan. Adoption of the proposed SPA, however, would render the Proposed Project consistent with Specific Plan uses and development guidelines. Thus, with adoption of the proposed SPA, Project impacts would be **less than significant**.

County of San Diego Zoning Ordinance

The Project site is zoned S90 – Holding Area. While residential development is a permitted use within the S90 zone, the allowable maximum densities must be in conformance with the zoning designations, which are consistent with the land use designations of the General Plan and Community Plan. Under the existing zoning, the maximum allowable number of DU would be 58 units. The Proposed Project would develop 283 DU. In order for the Project to be found consistent with the County Zoning Ordinance, the Project would include an application for a Rezone, which would rezone the entire site as S88 – Specific Planning Area. The S88 zone is intended to accommodate Specific Plan areas and would allow an unlimited variety of land uses. Upon approval of the proposed S88 zone, the Proposed Project would result in **less than significant** land use policy impacts with respect to the Zoning Ordinance.

County of San Diego Resource Protection Ordinance

As stated previously, the San Diego County Planning Commission granted an RPO exemption for the Campus Park West development as part of the Pappas Specific Plan Area, and adjacent Campus Park development (PC7-23\RPO-Exemption) in 2004. **No impact** related to the RPO would occur.

County of San Diego Park Land Dedication Ordinance

The Proposed Project would not include the development of any parks on site. The Project would comply with this ordinance via payment of park fees through the PLDO. Therefore, associated impacts would be **less than significant**.

County of San Diego Subdivision Ordinance

The Proposed Project is subject to the provisions and standards contained in Section 81.401 – Design of Subdivision, which includes 14 design regulations associated with lot size, orientation, and configuration. The Proposed Project would comply with all of these design regulations upon Project approval. Therefore, impacts would be **less than significant**.

Natural Community Conservation Planning Program

As noted above, the Project site lies outside of the current MSCP area, which was adopted by the County to meet the requirements of the NCCP. It does, however, lie within the proposed (Draft) North County Subarea of the MSCP. Proposed on-site development areas are mapped as Pre-negotiated (Hardlined) Take Authorized Areas, and proposed on-site open space is mapped as Preserve Areas, although the hardline has not yet been approved by the resource agencies. It is likely that the North County MSCP will be approved prior to construction of the Project; therefore, a hardline approval for coastal sage habitat has been sought by the Project Applicant, who has initiated discussions with the County, as well as with USFWS and CDFW. The current Project design incorporates the proposed hard line open space areas. Such designation, expected to be finalized in the future, would allow for take authorization within the Project's impacted areas with no further approvals necessary from the resource agencies as they relate to the NCCP

process. The hardline agreement between the Project Applicant, County, and resource agencies would incorporate the mitigation and protection measures for impacted biological resources. The Project also would include an RMP outlining the management tasks to be conducted to preserve the proposed open space in perpetuity. Land use impacts related to NCCP program non-conformity would be **less than significant**.

Community Character

Guidelines for the Determination of Significance

A significant land use/community character impact would occur if the Proposed Project would:

2. Conflict with the established community character, as defined by the Community Plan and Fallbrook Design Guidelines.
3. Physically divide an established community.

Guideline Sources

These land use guidelines are based on Appendix G of the CEQA Guidelines and County staff guidance. These guidelines are intended to maintain and enhance the character, structure, and dynamics of established communities in the Project vicinity.

Analysis

Community character/land use compatibility can be defined as those features of a neighborhood or community that give it an individual identity, as well as the unique or significant resources that comprise the larger community. Community character/land use compatibility are also functions of the existing land uses and natural environmental features based on a sense of space and boundaries, physical characteristics (e.g., geographic setting, presence of unique natural and man-made features, ambient noise, air quality, etc.), and qualitative psychological responses held in common (e.g., “rural,” “friendly”).

Determination of a proposed project’s effect on existing community character is derived from evaluating and comparing the introduced development to the existing community character of the area. If the proposed land uses conflict with the nature and character of the existing setting of the community, a significant impact would be anticipated. Evaluation of potential community character impacts is based on Project consistency with applicable goals and policies in relevant planning documents because these documents reflect the community’s prioritization of what is important—to retain, improve, or change.

The Proposed Project would provide a higher residential density, as well as general commercial and limited impact industrial uses, in a suburban setting. Such development would constitute an intensification of land uses that could be perceived as detracting from the rural community character of the Community Plan area. While the Project would construct a consolidated residential development with commercial and industrial uses in a generally rural setting, some areas of open space would be preserved to retain the rural character. The Project would dedicate

approximately 31 acres as biological open space preserve and an additional 1.4 acres as HOA-maintained open space, resulting in a total of 27.5 percent of the Project site as open space. In addition, at least 200 square feet of group usable open space would be provided per DU, at least one children's play area of 400 square feet would be provided for the first 25 DUs with an additional 100 s.f. required for each additional 25 DUs, and at least 100 s.f. of private usable open space would be provided per DU.

The Proposed Project has been designed in a "village" format, whereby the natural character of the site and surroundings provide both constraints and opportunities for the Proposed Project design. The Project would strive to retain the regional architectural style of the surrounding land uses while allowing for higher density housing and enhanced community development, which refers to the provision of community services (shopping, work and recreation opportunities) in proximity to residential uses in what is primary a "bedroom" community. In addition to the relevant Fallbrook Community Plan components and Design Guidelines discussed above, architectural and landscaping guidelines contained in the Campus Park West SPA and GPA Report and depicted in Chapter 1.0 and Subchapter 2.1 of this EIR provide general design criteria. Designs that encourage a harmonious relationship among buildings and sites, including restriction of overall maximum building heights and landscaping along Project perimeter roads, would contribute to visual minimization of the development (the reader is referred to Subchapter 2.1, Aesthetics, of this EIR for additional detailed discussion).

In addition, while the Project site is located in the rural Fallbrook Community Plan area, this portion of the Community Plan area is located in proximity to a major freeway (I-15) and highway (SR-76). The area along the I-15 corridor is transitioning to more intense uses by design and has been planned for large-scale residential and commercial/industrial uses, for the past 30 years. This is clearly expected and planned for by the community through the incorporation of the I-15 Corridor Subregional Plan (and associated attachments) into the Fallbrook Community Plan. Several existing and planned consolidated small-lot residential developments are located within the Project vicinity, including the existing Lake Rancho Viejo (an approximately 750-unit residential subdivision south of SR-76), Pala Mesa Resort (a private resort west of I-15 with a golf course, numerous guest rooms, and a restaurant), and two other residential developments on the west side of the I-15. The I-15/SR-76 interchange area has been anticipated as a location for future development since the 1980s with the approval of the Sycamore Springs Specific Plan and the subsequent approval of the Hewlett Packard Campus Park Specific Plan and is identified as a smart growth area in SANDAG's Regional Comprehensive Plan. Recently approved master planned communities, which include Campus Park, located immediately to the northeast, Palomar College immediately to the north, and Meadowood to the northeast/east. Campus Park will construct mixed-use development (single- and multi-family residential, commercial, and office professional). Palomar College will be a community college ultimately serving approximately 12,000 students. Meadowood will be developed with single- and multi-family residences, parks, and an elementary school. Taken together with these recently approved projects, the Campus Park West Project would be part of this larger village area along the east side of I-15.

Given that the Proposed Project would not be located along or permit development on a ridgeline (skylined), would preserve biological and visual resources in open space areas, would

incorporate design elements that are compatible with the surrounding areas, and is consistent with location and development intensity proposed in the area Community Plan, **less than significant** impacts to community character are identified.

The Project would be developed on land that is presently undeveloped and adjacent to and accessible via two major highways, I-15 and SR-76. Only a recreation center for radio-controlled model aircraft and cars is located on the Project site, and the Project site does not currently provide access to community uses to surrounding residents. The Project, through the proposed SPA, would consist of a development plan to provide a variety of land uses that surround a village-like mixed-use core. This mixed-use core would provide a point of cohesion and a place for surrounding residents, shoppers, and employees of the commercial and industrial districts to gather. For these reasons, effects associated with physically dividing an established community would not occur, and **no impact** is assessed.

3.1.5.3 *Cumulative Impact Analysis*

All of the projects listed in Table 1-4 were included in review of the potential for significant cumulative land use impacts. As noted in Table 1-4, two projects in addition to the Proposed Project include a GPA (Campus Park and Meadowood). Particular attention was given to those projects that include GPAs that may, in combination with the Project, contribute to increased land use density not envisioned in the General Plan or Community Plan. Construction of these various residential and commercial/industrial projects are anticipated to increase the urban intensity of the area, which may not be in conformance with the land use designations, policies, and goals of the General Plan, Community Plan, I-15 Corridor Subregional Plan, I-15/Highway 76 MSPA, and Zoning Ordinance, and may alter the overall community character and land use compatibility of the area over the long term.

The Proposed Project and all other cumulative projects, as shown in Table 1-4, would total approximately 5,125 residences. In addition, various commercial and office professional developments would be constructed. Approval of Campus Park West, in addition to previously approved Campus Park and Meadowood would result in a total of 1,878 DU (approximately 37 percent of the total cumulative residential units), as well as all of the industrial, commercial, and office uses. This potentially would result in a significant cumulative impact to the existing land use densities and character of the area. These cumulative projects would result in significant changes in the community character (as demonstrated through its visual character) of the areas east of I-15. Change in the seen environment is expressly addressed in the cumulative impacts discussion of Subchapter 2.1, Aesthetics. Assessing significant cumulative effects to the same criteria here would be duplicative. The reader is therefore referred to Subchapter 2.1, Section 2.1.3 of this EIR.

The Proposed Project would result in inconsistencies with two plans (as discussed above). These inconsistencies, however, would be resolved upon approval of the Project; the other two GPA projects (Campus Park and Meadowood) have been approved, in conjunction with their related amendments. These approvals, in conjunction with the anticipated Project approval, resolve any inconsistencies and achieve conformity with land use designations, goals, and policies of the General Plan, Community Plan, Zoning Ordinance, and Subdivision Ordinance. As discussed

above, the Project also would be consistent with all other relevant land use plans and policies. Based on this, the Project would be consistent with all applicable land use and planning requirements and would **not significantly contribute to regionally cumulative impacts** in association with the projects listed in Table 1-4.

Similarly, any potential changes in community character also would be consistent with planning documents for the area. Therefore, the Project would not result in a cumulatively considerable land use effect and potential impacts related to document conformity/inconsistency, including for the issue of community character, would be **less than significant**. Again, the reader is referred to Section 2.1.3 of Subchapter 2.1, however, for discussion of cumulative visual effects related to community character.

3.1.5.4 *Significance of Impacts*

Based on the analysis provided above, impacts related to land use plans and policies, as well as community character, would be **less than significant**.

3.1.5.5 *Conclusion*

The Project would be inconsistent with a few existing goals, standards, and/or policies in the Land Use Element of the General Plan, Mobility Element of the General Plan, and in a minor way, the Fallbrook Design Guidelines. The Project also would be inconsistent with the Zoning Ordinance. A GPA, SPA and Rezoning, however, are proposed as part of the Project, which would eliminate the potential land use policy inconsistencies; thereby resulting in less than significant land use policy impacts with regard to the Land Use Element of the General Plan, Mobility Element of the General Plan, and Fallbrook Design Guidelines.

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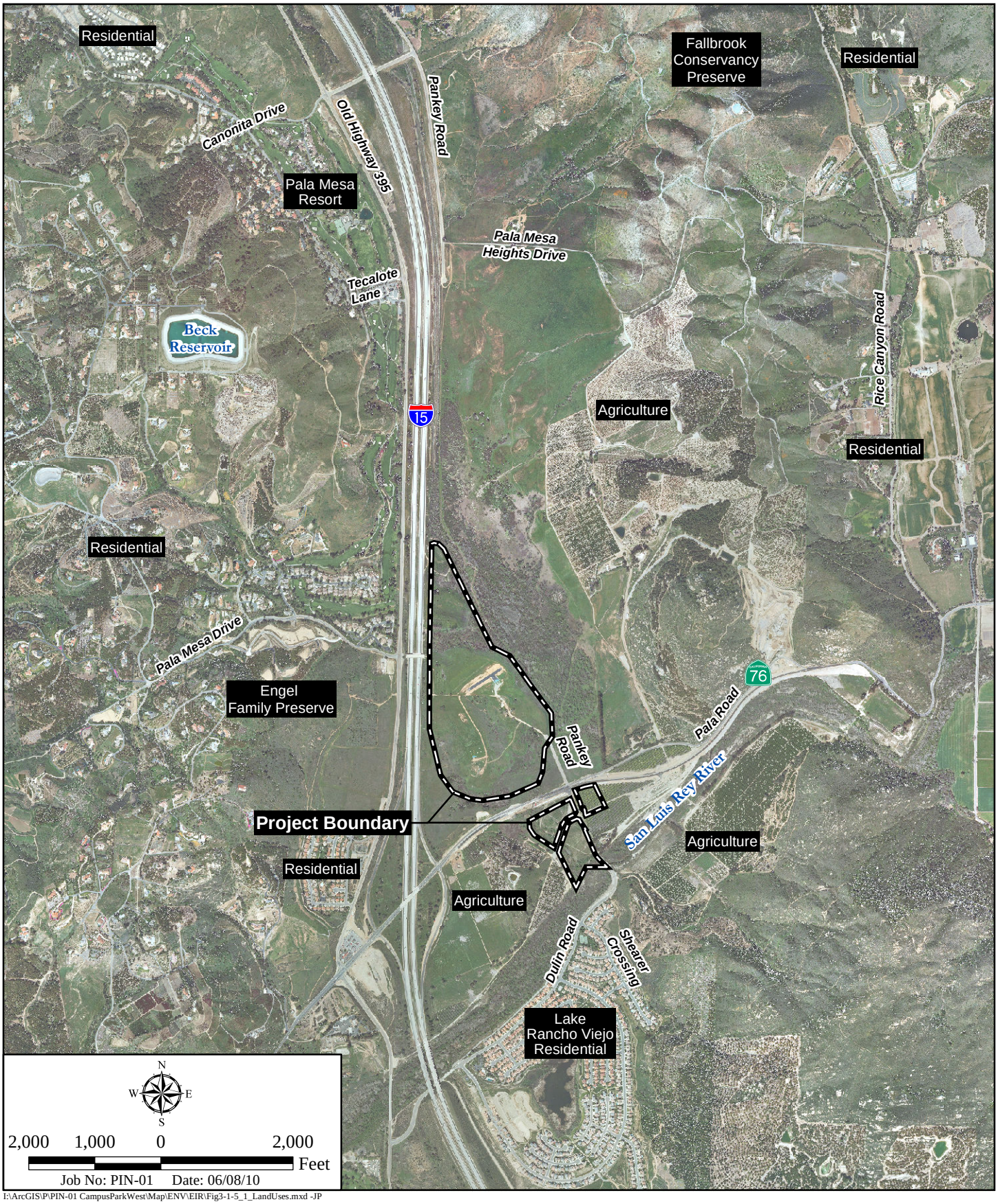

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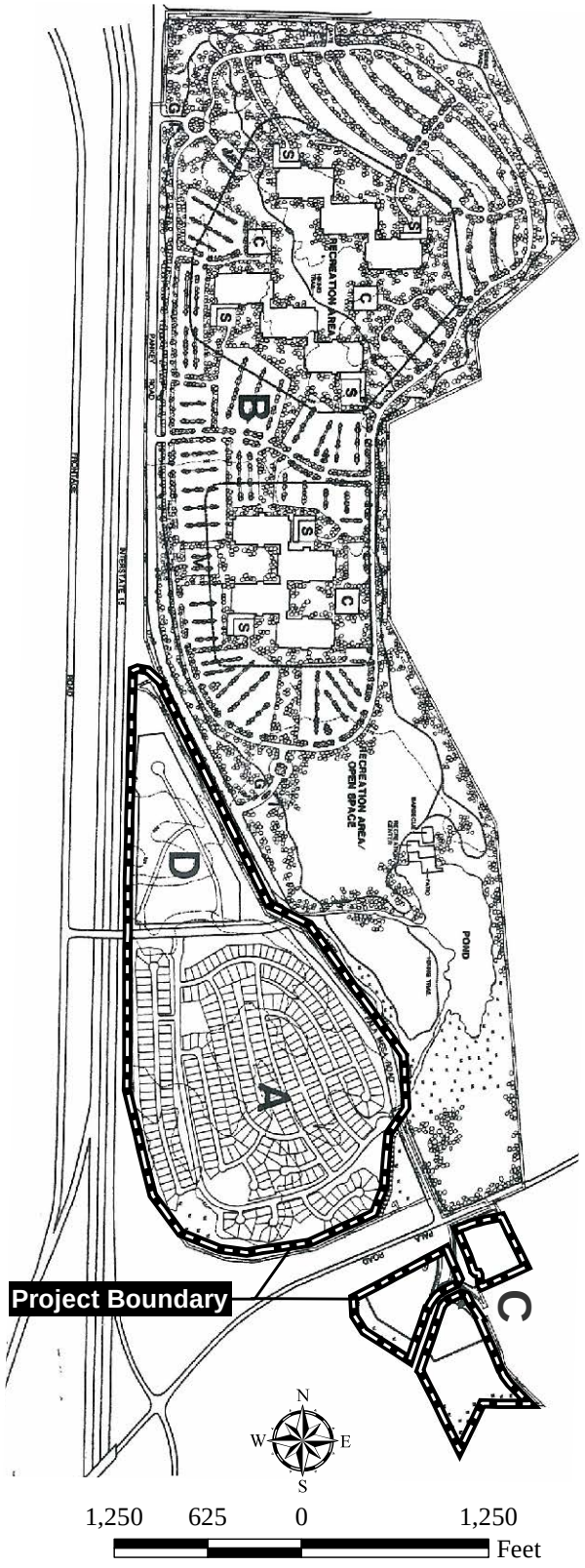
Existing Land Uses

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 3.1.5-1

Existing Specific Plan Land Uses



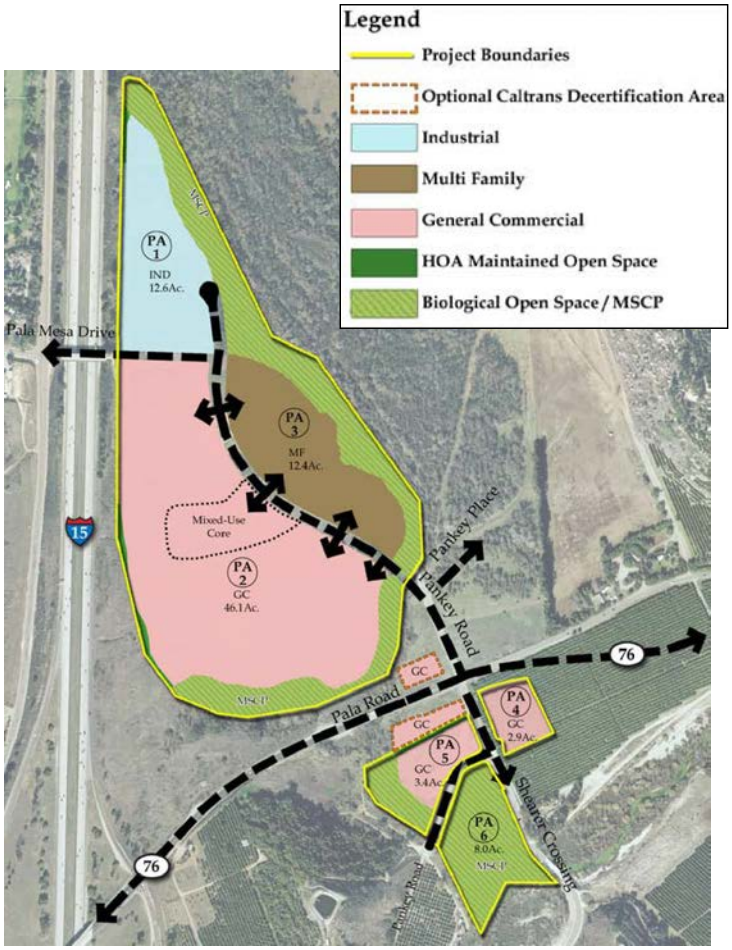
A 336-unit Mobile Home Park

B Hewlett Packard Facility and Recreation/Open Space Area

C Commercial Center and Open Space

D 150 Condominiums

Proposed Specific Plan Land Uses



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Existing and Proposed Specific Plan Land Uses

CAMPUS PARK WEST

Figure 3.1.5-2

HELIX Environmental Planning

3.1.6 Mineral Resources

The topic of minerals was not addressed in either the 1981 Sycamore Springs or 1983 Hewlett Packard certified EIRs. A Mineral Resource Technical Report was prepared for the Proposed Project by Leighton and Associates, Inc. (2009); this study is the basis for the analysis of impacts presented below. The complete Mineral Resource Technical Report is included as Appendix P of this EIR.

3.1.6.1 *Existing Conditions*

Topographic Setting

The Project site is located within the Peninsular Ranges Geomorphic Province, near the western edge of the Southern California Batholith. Erosion and regional tectonic uplift created the valleys and ridges of the area. Natural drainage is controlled by a broad canyon that borders the east side of the northern portion of the site and drains in a southwestward direction into the southwest flowing San Luis Rey River.

Land Use

Current land uses north of SR-76 include dirt roads, a paved "airfield" for model airplanes, and a few small scattered shade structures. The parcels south of SR-76 are undeveloped and crossed by a series of paved roads. The Project parcels are zoned either S90 (Holding Area) or A72 (General Agriculture); no Project parcels or adjacent parcels are identified with the County's Special Purpose Regulations zoning of S82 for Extractive uses. The existing General Plan land use is 21 (Specific Plan Area).

Mineral Resource Zones

As mandated by the Surface Mining and Reclamation Act of 1975 (SMARA), in 1982, the California State Mining and Geology Board classified the western one-third of San Diego County (called the Western San Diego County Production-Consumption (P-C) Zone) into distinct Mineral Resource Zones (MRZ) according to the Guidelines for Classification and Designation of Mineral Lands. The MRZ were established based on the presence or absence of significant sand and gravel deposits and crushed rock source areas. Such construction materials, collectively referred to as "aggregate," provide bulk and strength to Portland Cement Concrete (PCC) and asphalt concrete. Essential elements of the built environment, including roads, parking lots, pipelines, and buildings, are made with concrete. The MRZ classification system focuses on identifying sources of aggregate for PCC. Deposits acceptable for use as PCC aggregate are subject to strict specifications to ensure the manufacture of strong durable concrete. The following categories are provided in the mineral land classification for aggregate minerals in the Western San Diego County P-C region (CGS 1996a, 1982).

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that there is little likelihood for their presence.

- MRZ-2: Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that there is a high likelihood for their presence.

- MRZ-3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.

- MRZ-4: Areas where available information is inadequate for assignment to any other MRZ.

MRZ mapping in Appendix P indicates the two zones mapped on and near the Project site are MRZ-2 and MRZ-3 (see Figure 2 of Appendix P).

Geology

The Project site north of SR-76 primarily is underlain by Quaternary-age older alluvium/terrace deposits over granitic rock. Younger alluvial deposits underlie the parcels south of SR-76 and line the narrow drainages north of SR-76. The County summarizes the importance of geologic formations to the availability of mineral resources as follows (County 2008b):

- **Quaternary alluvium** – Sand and gravel can easily be mined and processed for construction materials from this geologic environment.

- **Tertiary Age sedimentary rocks** – Conglomerate and other sedimentary rock types can be quarried for construction materials from this geologic environment.

- **Cretaceous Age crystalline rocks and Upper Jurassic metavolcanics** – Granitic rocks and other rock types can be quarried for coarse aggregates that are needed for concrete, riprap (broken rock) for breakwaters and bank protection, as well as decorative and dimension stone from this geologic environment.

MRZ-2 Mapped Areas

The greater San Luis Rey River Valley has been identified as an MRZ-2 resource area for a distance of nearly 30 miles, from upstream of Oceanside (approximately 12 miles west of the Project) to where the River channel narrows upstream of Rincon (approximately 17 miles east of the Project). The River Valley and adjacent alluvial fan deposits were identified as containing an estimated 1.6 billion tons of sand and 1.2 billion tons of coarse aggregate through the 14,607-acre drainage basin (CGS 1982).

The Project site is located at the east end of Sector C and near the western edge of Sector D of the San Luis Rey River Resource Area (see Figure 6 of Appendix P). Sector C comprises the middle reaches of the San Luis Rey River channel, which includes Bonsall eastward to less than one mile east of I-15, covering about 2,160 acres. Sector D is a 3,740-acre area mapped between I-15 on the west (downstream end) and Pauma Valley on the east (upstream end). Approximately 990 million tons of quality (PCC grade) aggregate resources were estimated to

exist in Sectors C and D, including 660 million tons of sand and 330 million tons of gravel (CGS 1982).

The three parcels south of SR-76 are partly or wholly mapped as MRZ-2. Geologically, this area is characterized by the presence of younger (Quaternary-age) river channel, floodplain, and terrace deposits that have been eroded from the older (Tertiary to Cretaceous-age) bedrock units, transported, and re-deposited. They consist of naturally loose mixtures of sands and rounded gravels.

MRZ-3 Mapped Areas

Most of the Project site is mapped as MRZ-3, except for the parcels south of SR-76 as noted above. According to the explanations presented by CGS (1982), geologic formations or deposits that do not or have not been utilized for aggregate commonly do not have test data and studies are not available. Areas mapped as MRZ-3 include a wide variety of areas across all of San Diego County. The MRZ-3 area of older alluvial terrace deposits on the Project site north of SR-76 is well differentiated from the alluvium in the adjacent area in the San Luis Rey River known to be MRZ-2. Because the terrace deposits are generally more weathered and contain more fine material, they are less minable and less marketable than adjacent known MRZ-2 deposits. Narrow drainages within the northern portion of the Project site, however, contain what appear to be relatively minor deposits of younger alluvium correlative with the alluvium identified as MRZ-2 in the San Luis Rey River to the south.

Sand Mining Operations

Multiple companies have been mining sand from the San Luis Rey River for many years. Operations in the vicinity of the Project are described below (see Figure 6 of Appendix P).

Fenton Sand Mine

The Fenton Sand Mine originated as a 27-acre sand mine initially permitted in 1969. In 1975, a 30-year Major Use Permit was granted to allow extraction from an expanded 211-acre area. It was operated by the H.G. Fenton Company through 1998, when Hanson Aggregates assumed responsibility for the operation. They continued to mine and process sand and gravel through 2000. The discovery of endangered species in areas bordering the operation limited Hanson's ability to expand the mine. Hanson closed the sand and gravel processing plant as of September 15, 2005 (California RWQCB 2006). Although the plans for long-term usage of the site have been debated, the site includes a 207-acre conservation easement established by Hanson in accordance with their Clean Water Act Section 404 permit. The site, therefore, has been adopted back into the San Luis Rey fluvial ecosystem as overseen by the USFWS, ACOE, and CDFW.

Pankey Pits

The closest known historical aggregate extraction operation was located in the River southeast of the site. This property was originally known as the Pankey Pits, where the Marron Brothers

extracted sand and gravel. Like many in-stream operations, permitting processes and regulations became increasingly difficult, and the site was entirely inactive by the 1990s (CGS 1996b). An adjacent parcel known as Pankey Ranch was acquired by Palomar Aggregates in 1997.

Pankey Ranch/Rosemary's Mountain

In the late 1980s, Palomar Grading and Paving acquired a lease on the Pankey Ranch, a hillside immediately north of the Pankey Pits. The approximately 100-acre site is a small peak known as Rosemary's Mountain, ranging in elevation of approximately 300 to 990 feet. In 1989, Palomar submitted a petition to the State of California Division of Mines and Geology (CDMG, now CGS) for a reclassification of the MRZ-3 zoned property to MRZ-2. Based on data provided by Palomar and confirmed by CDMG staff, aggregate from the site met the published Caltrans Standards for PCC, asphaltic concrete, base, and sub-base. The mixed aggregate resources demonstrated far exceeded the minimum threshold value of 9.2 million 1998 dollars established by SMARA and the petition was granted (CGS 1989).

Granite Construction Company has since partnered with Palomar on the project, and a Major Use Permit has been obtained. Plans include rock crushing, extraction of aggregate and operation of an asphalt plant on 38 acres of the 94-acre site.

3.1.6.2 *Analysis of Project Effects and Determination as to Significance*

Both **Scenarios 1** and **2** are addressed separately in the following mineral resources analysis. Because the off-site facilities that would serve the Project are not in areas that would be available for extraction or not in deposits that would have value as mineral resources, off-site facilities are not further addressed in this discussion.

Loss of Availability of a Known Mineral Resource

Guideline for the Determination of Significance

A significant mineral resource impact would occur if:

1. The Project is:

    - On or within the vicinity (generally up to 1,300 feet from the site) of an area classified as MRZ-2; or
    - On land classified as MRZ-3; or
    - Underlain by Quaternary alluvium; or
    - On a known sand and gravel mine, quarry, or gemstone deposit;

AND

    The Project will result in the permanent loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

AND

> The deposit is minable, processable, and marketable under the technologic and economic conditions that exist at present or which can be estimated to exist in the next 50 years and meets or exceeds one or more of the following minimum values (in 1998 equivalent dollars):
>
> - Construction materials (sand and gravel, crushed rock) - $12,500,000
> - Industrial and chemical mineral materials (limestone, dolomite, and marble [except where used as construction aggregate]; specialty sands; clays; phosphate; borates and gypsum; feldspar; talc; building stone and dimension stone) - $2,500,000
> - Metallic and rare minerals (precious metals [gold, silver, platinum]; iron and other ferroalloy metals; copper; lead; zinc; uranium; rare earths; gemstones and semi-precious materials; optical–grade calcite) - $1,250,000

Guideline Source

The above identified significance guideline is based on the County Guidelines for Determining Significance – Mineral Resources (July 30, 2008).

Analysis

MRZ-2 Deposits

Under **Scenario 1**, two parcels south of SR-76 and part of the third are mapped as MRZ-2. These areas total approximately 18.2 acres. Additional MRZ-2 areas are located within PA 5 and immediately abut the **Scenario 2** parcel south of SR-76, although this parcel appears to be located in MRZ-3. The MRZ-2 deposits on the Project site south of SR-76 represent a known mineral resource that would be of value to the region and the residents of the state, being within Sector C of the San Luis Rey River Resource Area.

Appendix P evaluated whether these on-site deposits would be minable, processable, and marketable. In order for a deposit to be minable, it must be considered compatible with existing land uses. Based on the County Guidelines, a buffer of 1,300 feet from residences generally has been considered necessary to achieve adequate separation from noise, dust and other characteristics generated by aggregate extraction and processing. Existing residences south of the San Luis Rey River, along Dulin Road and Riverview Court, are within 1,300 feet of the two Project parcels west of Shearer Crossing. A residence along SR-76 east of the Project, in the area slated for the Meadowood development, is within 1,300 feet of the Project parcel east of Shearer Crossing. These existing, off-site residential properties eliminate the potential for extraction within the Project areas mapped as MRZ-2.

Appendix P designated on-site alluvial deposits mapped as MRZ-3 as possibly having MRZ-2 quality. These deposits are in four localized areas north of SR-76 and are mapped as Quaternary alluvium and "younger alluvium." The deposits could be similar in composition to the San Luis Rey River areas mapped as MRZ-2. This alluvial area north of SR-76 covers approximately

16.6 acres and has been assumed to contain MRZ-2 material in Appendix P. Existing residences within 1,300 feet eliminate the potential for extraction of most of these deposits. The existing residences are west of I-15 and north of Pala Mesa Drive (e.g., on Almendra Court), and west of I-15 and north of SR-76 (e.g., on Via Belmonte). The remaining deposits within the Project site that have been assumed to be of MRZ-2 quality are in two areas, each approximately 3.4 acres in size. Even if the total area were recoverable with a potential depth of recovery of 20 feet (due to potential groundwater constraints), the value of this material is slightly less than eight million dollars. This potential value is well below the County's threshold of $12,500,000 in 1998 equivalent dollars (equivalent to approximately $17,500,000 in 2012). The deposits in these small areas are, therefore, not marketable.

The potential for proposed residential development in the Project to eliminate future extraction of off-site MRZ-2 deposits was also examined (see Figure 7 in Appendix P). The closest proposed residential uses would be in the Project's mixed-use district. The only area of MRZ-2 within 1,300 feet of the mixed-use district that is not already eliminated by existing residences is immediately southeast of the I-15/SR-76 interchange and covers less than one acre. This area is too small to be marketable.

Off-site alluvial areas to the east of the Project are mapped as MRZ-3 but encompass possible MRZ-2 quality deposits and are not within 1,300 feet of existing residences. These areas are within the adjacent approved Campus Park development. The majority of this area supports sensitive wetland vegetation (i.e., southern riparian forest) and everything but a small area (less than 0.2 acre) for a future pump station, immediately adjacent to Campus Park West, is presumed to be in permanent open space as part of the 2011-certified Campus Park EIR. The presence and environmental sensitivity of such habitats would result in either restrictions on disturbance (and the corresponding loss of minable area), or requirements for the acquisition of regulatory permits with associated mitigation and substantial expenditures (e.g., acquisition/preservation and/or creation of off-site habitat areas). This area is, therefore, not considered to be minable.

Off-site facilities that would serve the Project, such as utility pipelines are: (1) not in areas that would be available for extraction, either due to proximity to existing residences or location in existing development and locations in roadbed, or (2) not in deposits that would have value as mineral resources.

Based on the above analysis, mapped on-site and most off-site MRZ-2 resources that could be affected by the Project are within 1,300 feet of existing residences; remaining off-site MRZ-2 resources that could be affected by the Project are in too small an area to be marketable. On-site deposits potentially having MRZ-2 quality also are in a limited area and would not be marketable. Off-site deposits potentially having MRZ-2 quality and within 1,300 feet of the Project's proposed multi-family district are in an area that supports sensitive wetland vegetation and is slated to remain as open space in the Campus Park development. Impacts to MRZ-2 deposits would be **less than significant**.

MRZ-3 Deposits

Most of the Project site is classified as MRZ-3. The acreage generally includes the parcel north of SR-76 and encompasses approximately 81 acres.

The data regarding the MRZ-3 material to the north are not sufficient to confirm that it has high enough quality to warrant extraction. The areas identified as older alluvium/terrace deposits have been investigated on the adjacent parcel by others (Geocon, Inc. 2006) and have been found to contain "over 60 feet of medium-dense to dense reddish brown silty to clayey fine to coarse sand." Because of the fine-grained nature and weathered condition of this material, it has not been a suitable candidate for extraction on other similar properties. The on-site and off-site terrace deposits, therefore, do not represent a known mineral resource that would be of value to the region and the residents of the state. Impacts to these MRZ-3 resources would be **less than significant**.

Loss of Availability of a Locally Important Mineral Resource Recovery Site

Guideline for the Determination of Significance

A significant mineral resource impact would occur if:

2. The Project would result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Guideline Source

The above identified significance guideline is based on the County Guidelines for Determining Significance – Mineral Resources (July 30, 2008).

Analysis

This guideline addresses projects that would result in the loss of availability of mineral resources on lands zoned as S82 by the Extractive Land Use Overlay, or General Plan Extractive Land Use Designation (25) and Impact-Sensitive Land Use Designation (24). S82 is a Zoning designation where mining and quarrying are allowed, and the General Plan 25 and 24 designations are applied to areas with economically extractable mineral resources. The County uses these designations to group lands of known, existing, and potential mineral resources. Zoning maps on the County Geographic Information Systems (GIS) Property Profile Mapping Application website indicate that none of the Project parcels or surrounding areas is designated S82 or General Plan 24 or 25.

Because the Project site does not include any known zoning designations of locally important mineral resources, impacts related to the loss of a locally important mineral resource recovery site from implementation of the Proposed Project would be **less than significant**.

3.1.6.3 *Cumulative Impact Analysis*

As described above, identified mineral resources within the Project site are either: (1) unavailable for extraction; (2) lack sufficient subsurface data to demonstrably meet established standards for construction material; or (3) unsuitable for extraction/use as construction material due to their weathered, and/or fine-grained nature. No significant impacts were identified to MRZ-2 resources on the Project site based on: (1) the location of such areas relative to existing residential development; and (2) the limited extent and low value of the potential MRZ-2 resources that are mapped as MRZ-3.

Based on the above described conditions, implementation the Proposed Project would not result in the loss of availability of known or designated mineral resources that would be of local, regional or statewide value. Accordingly, the Proposed Project would not contribute to any cumulative impacts related to the loss of such mineral resources. **No cumulative impact** is identified.

3.1.6.4 *Significance of Impacts*

Based on the analysis provided above, impacts related to mineral resources would be **less than significant**.

3.1.6.5 *Conclusion*

Based on the analysis provided above, no significant Project-specific or cumulative mineral resource impacts would result from implementation of the Project.

3.1.7 Population and Housing

The 1981 and 1983 EIRs did not address population and housing. The NOP for the Project noted that the findings for the Sycamore Springs and Campus Park EIRs did not address population and housing, and in order to assure that this topic is addressed, a discussion would be required in this EIR.

3.1.7.1 *Existing Conditions*

No homes exist within the Project boundaries.

3.1.7.2 *Analysis of Project Effects and Determination as to Significance*

The following population and housing analysis generally evaluates the Project as a whole as there are no substantive differences between **Scenarios 1** and **2** with regard to population and housing. Off-site Project improvements would also have no impacts on population and housing and are, therefore, not addressed separately.

Guidelines for the Determination of Significance

A significant impact to population and housing would occur if the Project would:

1. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

2. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Guidelines Source

The above identified significance guidelines are based on CEQA Guidelines Appendix G, issue XIII, thresholds b) and c).

Analysis

The Project would not result in any displacement of existing housing that would require construction of replacement housing; in fact, the Project would provide new housing opportunities (a total of 283 new units) in an area where employment and shopping opportunities would be created within the same development. In addition, the Project would not result in the displacement of people. As noted above, although no replacement housing would be required, the Project would provide 283 new housing units. There would be **no impact** on population and housing from the Project.

3.1.7.3 *Cumulative Impact Analysis*

Section 15130 of the CEQA Guidelines notes that an EIR should not discuss cumulative impacts which do not result in part from the project evaluated in the EIR. No impacts on population and housing would occur due to the Project. Therefore, cumulative impacts on population and housing do not need to be discussed.

3.1.7.4 *Significance of Impacts*

Because no significant impacts were identified, mitigation is not proposed.

3.1.7.5 *Conclusion*

Based on the analysis provided above, no Project-specific or cumulative impacts on population and housing would result from implementation of the Project.

3.1.8 Public Services

The 1981 and 1983 EIRs identified public service impacts as significant but mitigable. The 1981 EIR found impacts to police to be significant but mitigable, and covered impacts to fire protection and schools under Effects Found Not to be Significant. The 1981 EIR suggested that impacts to police services could be reduced by promoting security in residential areas through night lighting, installation of the locks, and provision of off-street parking. The 1983 EIR required the payment of development fees to school districts for the anticipated 300 students associated with the project (schools were identified as being over capacity). In addition, payment of annexation and development fees would be necessary with regard to fire, as well as automatic sprinklers in the Hewlett Packard building. The 1983 EIR did not discuss police protection.

Since preparation of the previous EIRs, the Project is within the fire district per the NCFPD. The 1981 mitigation measures are no longer viable. In addition, population in the area has changed, which is the basis for assessment of services impacts. Schools, fire and police protection services require update with current capacity, service ratios and/or response times, as appropriate. The reader is referred to text below for new and/or revised evaluation of schools and fire and police protection.

An FPP was prepared for the Project (Firewise 2000, Inc. 2014) and is included as Appendix K. In addition, Project Facility Availability Forms, as well as personal communications with service providers, are included in Appendix Q. The FPP, Project Facility Availability Forms, and communications are summarized below.

3.1.8.1 *Existing Conditions*

Schools

The Project site is located within the service area of the Bonsall Union School District (BUSD) and Fallbrook Union High School District (FUHSD). In the BUSD, Bonsall Elementary School and Norman Sullivan Middle School are located approximately 6 and 4.5 miles from the Project site, respectively. The nearest high school within the FUHSD is Fallbrook High School, located approximately 7.5 miles from the Project site.

The current enrollment and capacities of these schools are presented in Table 3.1.8-1, Enrollment and Capacity of Schools that Would Serve the Project. As shown in this table, and as presented in the Project Facility Availability Forms (Appendix Q to this EIR, incorporated by reference), schools that would serve the Project currently operate under capacity. In addition, BUSD has the availability to install portable classrooms at their schools if necessary (Pacheco 2012: pers. comm.).

Bonsall Elementary School was completely rebuilt in 2008. BUSD also has plans to build a new elementary school on the Meadowood property just east of the Project site. Assuming construction of this new elementary school is completed, elementary students from the proposed Project would attend the new school.

Fire Protection

The NCFPD, in conjunction with the California Department of Forestry and Fire Protection (CAL FIRE), would provide fire protection services to the proposed development. The NCFPD is composed of the Rainbow Volunteer Fire Department and the Fallbrook Fire Department. It serves the areas of Fallbrook, Bonsall, and Rainbow, with a primary service area of approximately 92 square miles and an estimated population of 50,000 people. The district also provides emergency medical services for 40 additional square miles outside the primary service area. The NCFPD currently operates six fire stations with 58 full-time emergency services personnel, 10 support personnel, 12 reserve firefighters, and 42 volunteer firefighters and nine volunteer office staff (NCFPD 2012).

The closest station to the Project site, Fire Station No. 4, is located at 4375 Pala Mesa Drive just west of I-15 and immediately west of Old Highway 395, less than 0.25 mile from the western boundary of the Project. The station is staffed 24 hours per day by one captain, one engineer, two firefighter/paramedics, and one reserve firefighter. Equipment includes one medic engine, one medic ambulance, and one brush truck with off-road capabilities that is normally used only for wildfires (NCFPD 2012). During 2011, Fire Station No. 4 responded to 1,569 calls, or 38 percent of the 4,121 calls received by NCFPD as a whole (Juul 2012: pers. comm.). This averages to approximately three to four calls to the station per day. Medical aids accounted for 65.5 percent of the calls in 2009 (Juul 2012: pers. comm.).

The Safety Element of the 2011 County General Plan states that for unincorporated "Village" areas, the maximum travel time for emergency response is five minutes for multi-family residential, industrial, and commercial developments.

Police Protection

The County Sheriff's Department provides law enforcement services to the County's unincorporated areas. Such services include general patrol, traffic enforcement, criminal investigation, crime prevention, juvenile services, communications dispatch, and various management support services. The Sheriff's Department operates a substation at 388 East Alvarado Street in Fallbrook, which is approximately 10 miles west-northwest of the Project site. This station serves a population of approximately 52,000; located in Fallbrook, Bonsall, Rainbow and De Luz. In 2010, staffing at the Fallbrook substation included approximately 30 sworn personnel, 5 non-sworn employees, and 5 reserve staff.

This number has increased. Numbers in October 2012 (Jones 2012: pers. comm.) included 37 sworn personnel (patrol officers, detectives, sergeants, a lieutenant, and a gang/narcotics position), 4 non-sworn employees, and 3 reserve staff.

The Safety Element of the County General Plan goals and policies focus on provision of comprehensive services at levels consistent with substantially similar areas of the County, and suggest that sheriff facilities should be located to best serve existing and planned development and the corresponding demand for services. A preference is noted for location of future sheriff

facilities in commercial, industrial, or mixed-use areas unless other factors such as geography, proximity to demand, etc., would impact the practical provision of services.

The Sheriff's Department currently utilizes a four-level priority dispatch system. Call priorities are assigned from greatest urgency (Priority 1) through non-emergencies. Priority 1 calls include serious injury traffic collisions, officer needs help, and foot or vehicular pursuit. Examples of Priority 2 calls include injured person, robbery in progress, bomb threats, carjacking, rape, and stolen vehicles. Priority 3 calls include assault, prowlers, disturbances, tampering with vehicles, and burglar alarms. Security checks, animal noise disturbances, traffic stops, harassing phone calls, illegal dumping, abandoned vehicles, and numerous other calls are included in Priority 4.

Average response times from October 2011 through September 2012 in the entire Fallbrook command were 3.5 minutes for Priority 1 calls, 13.9 minutes for Priority 2 (or Priority 1 and 2) calls, 18.2 minutes for Priority 3 calls, 27.8 minutes for combination Priority 3 and 4 calls, and 42.9 minutes for Priority 4 calls. This includes specific areas both more urban and more rural than the Project site. The Fallbrook command, Beat 388, which includes the Project site, is bordered by I-15 to the west, the Fallbrook Community Planning Area limits to the south and east, and the Riverside County border to the north. In this area, no Priority 1 calls were made from October 2011 through September 2012, but average response time was 22.4 minutes for Priority 2 calls, 28.2 minutes for Priority 3 calls, and 50.9 minutes for Priority 4 calls (Brown 2012: pers. comm.).

The Sheriff's Department has identified need for a new Sheriff's station to address future cumulative buildout in this area and has also identified a preferred location within the Project site (Mays 2012: pers. comm.).

3.1.8.2 *Analysis of Project Effects and Determination as to Significance*

Analyses for these issues do not vary between on-site and off-site elements, or **Scenarios 1** or **2**. There is no change in residential use between the two scenarios and the provision of additional general commercial square footage immediately adjacent to SR-76 and other general commercial uses would not result in any notable change in response requirements for fire or police services.

Guidelines of Significance

A significant impact to public services (schools, fire protection, and police protection) would occur if the proposed Project would:

1. Result in the need for altered or new governmental facilities in order to maintain acceptable service ratios, response times, or other performance service measures, the construction of which could cause significant environment effects.

Guideline Source

The identified guideline for significance is based on Appendix G of the CEQA Guidelines and the Safety Element of the County General Plan, and is intended to ensure that adequate public services are available for local residents.

Analysis

Schools

The multi-family residential component of the proposed Project would generate new school-aged students. BUSD uses a student generation rate of 0.4 student per multi-family DU for grades kindergarten through eighth to calculate potential impacts from residential development projects. FUHSD uses a rate of 0.199 student per multi-family residence to calculate increased high school populations. Applying these rates from BUSD and FUHSD and considering that the proposed Project would include 283 multi-family units, the Project would generate approximately 113 new elementary/middle school students and 58 new high school students, for a total of 171 students.

Both of these districts show capacity available at existing schools. BUSD and FUHSD also have indicated that the proposed Project would not result in the overcrowding of schools (refer to Table 3.1.8-1 for school capacity data and Appendix Q for Project Facility Availability Forms). In addition, and as stated above, BUSD has plans to build a new elementary school on the nearby Meadowood property, which would accept Campus Park West students. Accordingly, if a school is constructed on Meadowood, the proposed Project would not contribute any additional students to Bonsall Elementary School. Because Project-generated students would not over-burden anticipated school capacity, the potential Project impacts on school services are anticipated to be **less than significant impact**.

In accordance with California Education Code Section 17620, prior to the issuance of building permits, the Project Applicant would pay development impact fees to affected school districts, which are intended to reflect a fair share contribution toward school improvements. Additionally, the County has a School Facilities Mitigation Ordinance (7966), which requires mitigation of school facilities impacts prior to legislative action on a project such as the proposed Project. The ordinance requires execution of a binding agreement between an applicant and the affected school district prior to legislative approvals associated with a proposed project. Such an agreement can consist of a statement by the affected district that fees routinely assessed at the building permit stage are sufficient to mitigate impacts, and that no agreement is necessary. The Project would be required to execute an agreement between the Project Applicant and the affected school districts in order to set forth the methodology for providing school services to students generated by the Project. This agreement would ensure that school services and adequate facilities would be available concurrent with the number of students generated by the Project and impacts would be **less than significant**.

Fire Protection

The NCFPD Fire Marshall has indicated that the proposed Project is eligible for service. As previously stated, the required response time for multi-family residential, industrial, and commercial development, per the PFE of the County General Plan, is five minutes or less. Because of the proximity of Fire Station No. 4 to the Project site (the distance of the residential use farthest from the station would be within 0.8 mile), it is expected that this station would be able to meet NCFPD's travel time target goal of five minutes once road improvements are implemented, including opening of the Pala Mesa Drive/I-15 overpass. Fire Station No. 4 has "first in" responsibility for the Project site. According to the FPP prepared for the Project, the anticipated average response time to the farthest portion of the Project site from Station No. 4 would be two to three minutes (Firewise 2000, Inc. 2014). The average response time includes not only actual travel time but also "get away" time, or the time required for the team to get the response from their dispatch and load onto the fire apparatus.

Details as to road widths and travel lanes are provided in Chapter 1 of this EIR as well as the FPP for the Project. Also as detailed in the FPP, the Project would include specific features to address potential fire protection issues related to roadway access, building height, premises identification, gates, water supply, fire sprinklers, fire-resistant construction, defensible space, vegetation management, fuel modification zones, and CC&Rs requirements.

Primary access to the Project site would be across I-15 on Pala Mesa Drive or via SR-76 to Pankey Road from the south. Fire Station Nos. 5 and 6 would be requested at the same time as Station No. 4. Fire Station No. 5 is located at 31403 Old River Road, approximately 6.4 miles from the Project site. Response times to the Project site from this station would be 11 to 14 minutes. Additional engines and firefighting resources can be requested through the statewide mutual aid system.

CAL FIRE also would respond to a vegetation fire on the Project site, depending upon the size of the fire and the threat. More information on fire protection and fuel management is provided in Section 3.1.3, Hazards and Hazardous Wastes**.**

NCFPD has indicated that current fire protection facilities and equipment are not adequate to support the Proposed Project (Firewise 2000, Inc. 2014). As a result, the Project would be conditioned to enter into an agreement with the NCFPD to make a fair share contribution for necessary upgrades. Fire protection services in the area also would benefit from increased property taxes and other County revenues. Therefore, potential Project impacts to fire protection services would be **less than significant.**

Police Protection

As previously stated, the nearest Sheriff's Department substation is located at 388 East Alvarado Street in Fallbrook. Officers respond depending on such factors as type of call, call priority, previous calls pending, time of day, location of the responding squad car, and amount of traffic. The current average response times of Beat 388 (which services the Project site) range from approximately 22 to 51 minutes, depending on the priority of the call. No beat is precisely

similar to Beat 388. Based on information provided for Beat 396, however, which is also in the Fallbrook Command and was described as having the most similar land uses, response times appear generally similar. For Beat 396, no Priority 1 calls were received in the year referenced. Priority 2, 3, and 4 response times averaged 23.3, 27.3, and 49.1 minutes, respectively. As result, Beat 388 service ratios are considered consistent with those experienced in substantially comparable portions of the County.

Although service demand would be likely to increase with implementation of the Project, improvements to roads and intersections on and off site as a result of Project development and the RTIP would improve existing response times in the Project area. The development would provide the Sheriff's Department with an opportunity to site a new station on Campus Park West. If the Department purchases the Campus Park site and builds the station, service times would conceivably substantially improve over comparable portions of the County due to immediate proximity. If the Sheriff's Department decides to buy elsewhere, it is assumed that such a decision would be based on an assessment of logical location and identified need. Pursuant to that decision, it is also assumed that the Project would receive service comparable to similar areas within the Fallbrook Command. As a result, the Project would not generate a direct impact to police protection. Accordingly, potential Project impacts to police protection services would be **less than significant**.

3.1.8.3 *Cumulative Impact Analysis*

Several related cumulative development projects have been recently completed or are planned for development in the vicinity of the Campus Park West Project, as listed in Table 1-4. These future projects include residential developments totaling approximately 3,663 units, as well as other types of development, such as expansion of the Pala Mesa Resort. Cumulative impacts of these development projects are discussed below. The significance guidelines used to evaluate Project-specific impacts, described above in Section 3.1.8.2, also are applicable here.

Schools

Cumulatively, the future residential projects listed in Table 1-4 would generate approximately up to 1,330 elementary/middle school and 725 high school-aged students. The scale of cumulative development in the vicinity of the proposed Project is such that cumulative conditions would result in students in excess of existing and planned school capacities. The affected school districts would need to expand school facilities. In accordance with California Education Code Section 17620, prior to the issuance of building permits the Project Applicant would pay development impact fees to affected school districts, which are intended to reflect a fair share contribution toward school improvements needed to serve cumulative development. Other future developments also would be required to pay school fees and/or dedicate land for schools commensurate with their impact contribution. Because the adverse effect of student loading on area schools would be addressed during payment of fees, the proposed Project's contribution to cumulative impacts upon schools in the Fallbrook and Bonsall areas would be less than considerable and **less than significant**.

Fire Protection

As noted above, Project-related development fees and property taxes would benefit the NCFPD, which also has required the incorporation of certain fire prevention design measures into the proposed Project. Paying these fees and meeting the design requirements would avoid significant impacts from Project development. Likewise, development of other projects in the vicinity of the proposed Project also would be required to pay developer fees and property taxes, and incorporate similar design measures to avoid significant fire service impacts. Compliance with these existing programs would ensure that the cumulative contribution of Project development on fire protection would be less than considerable and **less than significant**.

Police Protection

Per communications between the County PDS and Sheriff's Department, potential impacts to police services would occur with the potential construction of all the developments in this quadrant of the County. To plan for future growth, the Sheriff's Department completed the Law Enforcement Facilities Master Plan (2005). In addition to assessing the existing conditions of County law enforcement facilities, the Law Enforcement Facilities Master Plan, using population projections prepared by SANDAG, recommended the construction of a new station along the northern section of the I-15 corridor.

Facilities identified in the Law Enforcement Facilities Master Plan are prioritized into categories one through four; the new facility to be located in the I-15 corridor is listed as a priority four with an approximate occupancy for a future station. This would necessitate the addition of additional sworn officers and also may require the addition of other personnel, such as detectives, patrol deputies, supervisors, and clerical support staff, as well as additional patrol vehicles and facilities. Based on input from the sheriff's department (Mays 2012: pers. comm.) the station is currently expected to support approximately165 sworn and professional staff, and be approximately 30,000 s.f. in size on approximately four acres. It is anticipated that expanded police protection services would be funded from increased property taxes and other revenues to the County resulting from the proposed Project, as well as from other cumulative developments in the Fallbrook area that have contributed or will contribute to the increased demands on police protection services. The Project would participate with others in the vicinity to fund a Sheriff's station. In addition, the Project assumes allocation of space adequate to support a station and necessary vehicle parking on the Project site adequate to construct a Sheriff's station and for County acquisition. The station would be sited within the light impact industrial portion of the site. This area would provide for ready access to I-15 via Pala Mesa Drive and would be a compatible use within this district. Accordingly, potential contributions to cumulative impacts to police protection would be less than considerable and **less than significant**.

3.1.8.4 *Significance of Impacts*

Because no significant impacts were identified, mitigation is not proposed.

3.1.8.5 *Conclusion*

Development of the Campus Park West Project is not expected to result in significant impacts to schools or fire and police protection services beyond the incremental impacts usually addressed through the payment of developer fees, taxes, or service fees, and the contribution of appropriate funds to fund a Sheriff's station. Campus Park West would exceed this mandated contribution by allocating space on the Project site within light impact industrial uses for a proposed future Sheriff's station, as specified in the Sheriff's Department Facilities Master Plan. This, in addition to payment of the developer fees and contribution of appropriate funds, would reduce the proposed Project's impacts to schools and fire services to below a level of significance because these requirements would ensure that the districts would have adequate funds to provide for upgraded facilities in accordance with their improvement plans in a timely manner. With regard to police services, the payment of fair share monies, in addition to retention of an available site of the requested size for a sheriff's station within the light impact industrial area, would allow necessary facility expansion and staffing to retain provision of service at levels consistent with comparable areas in the County.

Table 3.1.8-1
ENROLLMENT AND CAPACITY OF SCHOOLS THAT WOULD SERVE THE PROJECT

School District	School (Grade Range)	Distance from Project Site (miles)	Enrollment (number of students)	Capacity (number of students)	Available Capacity (number of students)
Bonsall Union School District	Bonsall Elementary School (K-5th)	6	968	Approx. 1,000	Approx. 32
	Norman Sullivan Middle School (6th-8th)	4.5	500	710-735	210-235
Fallbrook Union High School District	Fallbrook High School (9th-12th)	7.5	2,502	3,300	798

Table 3.1.8-2
ANTICIPATED NUMBERS OF NEW STUDENTS FROM THE PROJECT

School District	Type of DU	Number of DUs	Student Generation Rate (Students/DU)	Number of Students
Bonsall Union School District	Multi-family	283	0.4	113
Fallbrook Union High School District	Multi-family	283	0.206	58
TOTAL NUMBER OF STUDENTS				**171**

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3.1.9 Utilities and Service Systems

The 1981 Sycamore Springs EIR found impacts to water supply and wastewater disposal to be significant but mitigable. The 1981 EIR discussed annexation for water and wastewater into either the RMWD or San Luis Rey MWD (SLRMWD). The use of well water or recycled water was discussed, and the use of recycled water for irrigation or construction of an on-site wastewater treatment plant was noted as possible mitigation measures for wastewater disposal impacts.

The 1983 Hewlett Packard EIR required the applicant to pay annexation fees to RMWD with regard to water service and to incorporate water conservation measures. Payment of sewer annexation and collection fees, and preparation of a report to determine the impact to RMWD and identify necessary facility improvements, were identified as mitigating sewer-related impacts.

Changes in existing service concerns and mitigation possibilities result in the need for new subsequent analysis for wastewater management. Further, other conclusions from the 1981 and 1983 EIRs are no longer applicable to the Proposed Project. First, well water is not proposed as part of the Project. Second, water and sewer services to the entire Project site would be provided by RMWD and would require annexation into the RMWD and an amendment to the San Luis Rey Municipal Water District's (SLRMWD) Sphere of Influence. In addition, population in the area has changed, which is the basis for assessment of services impacts.

Project Facility Availability Forms, as well as personal communications from service providers, are summarized below and included in Appendix Q. Additionally, the Proposed Project's Water Supply Assessment (WSA; ATKINS 2012a, as amended in 2014) is included as Appendix R. Finally, the Water and Sewer System Studies (ATKINS 2012), included as Appendix S, are the most recent basis for the description of proposed on-site and off-site utilities.

Specific provisions for service have been outlined in a pre-annexation agreement dated May 22, 2012 (Appendix S). Annexation into the RMWD and an amendment to the SLRMWD's Sphere of Influence (SOI) would be initiated once the Project is approved by the County.

3.1.9.1 *Existing Conditions*

Water Supply

The subject property is currently divided between two water districts. The portion north of SR-76 lies within the service area of SLRMWD (a groundwater monitoring district that does not provide imported water or wastewater service), and is not within the SDCWA service area. The portion of the site located south of SR-76 is included within the service areas of RMWD and SDCWA. RMWD is a member agency of the SDCWA and provides water and sewer service to portions of its service area, including the portions immediately west and south of the Proposed Project. RMWD's primary source of potable water is imported through the SDCWA, imported through seven turnouts located on The Metropolitan Water District of Southern California/SDCWA aqueducts. RMWD currently does not generate nor distribute recycled

water. Furthermore, due to the financial impacts of acquiring or producing recycled water and installing and maintaining a parallel recycled water transmission and distribution system, a recycled system is not planned at this time.

LAFCO would certify the annexation and detachment of the service areas to and from providers, as appropriate. The SOIs of the districts are also likely to require amendment. Factors LAFCO would consider include current and planned land uses (in particular the neighboring proposed developments of Meadowood and Campus Park), the existing probable future need for public facilities in the area, and the capacities and adequacy of existing facilities in the various districts in the area.

Regional Water Supply Considerations

Water supply issues are continuously evolving; they are affected by regulations, policies, and the plans and resources of regional water supply agencies, as discussed below.

Senate Bills 610 and 221

The WSA is required by Senate Bill 610 (specifically, Public Resources Code Section 21151.9 and California Water Code Sections 10631, 10656, 10657, 10910, 10911, 10912, and 10915). This document addresses the issue of water supply availability and is required through Senate Bill (SB) 610 to be prepared when projects subject to CEQA and larger than certain specified thresholds are under evaluation. The commercial floor space component of the Project exceeds the specified threshold (500,000 s.f.) and, therefore, preparation of a WSA is required.

SB 221, a companion bill approved at the same time as Senate Bill 610, requires verification of water supplies as a condition of tentative map approval for residential subdivisions of 500 units or more. The Proposed Project contains fewer than 500 residential units; S B 221 is therefore not applicable to the Project.

WSAs normally are prepared by the retail water provider in whose district a subject project resides. The Campus Park West WSA was prepared on behalf of RMWD.

San Diego County General Plan Policies

The San Diego County General Plan includes a Land Use Element that contains policies regarding water supply, including the following:

- LU 13.1: Adequacy of Water Supply. Coordinate water infrastructure planning with land use planning to maintain an acceptable availability of a high quality sustainable water supply. Ensure that new development includes both indoor and outdoor water conservation measures.

- LU 13.2: Commitment of Water Supply. Require new development to identify adequate water resources, in accordance with State law, to support the development prior to approval.

Regional Water Supply Agency Plans

SDCWA's 2010 Urban Water Management Plan (UWMP) provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasts of residential development as part of its municipal and industrial sector demand projections. SDCWA utilizes the SANDAG regional growth forecast to calculate future demands within their service area. This provides for consistency between San Diego County planning efforts and SDCWA demand projections, thereby ensuring that adequate supplies are being planned for existing and future water users. The demand associated with accelerated forecasted growth is intended to account for SANDAG's land use development currently projected to occur between 2035 and 2050, but with the likely potential to occur on an accelerated schedule. SANDAG estimates that accelerated residential development could occur within the planning horizon of the 2010 UWMP update. These residential units are not yet included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment can be used by member agencies to meet the demands of development projects not identified in the general land use plans, as part of general plan amendments, and/or new annexations.

As documented in the 2010 UWMP, the SDCWA is planning to meet future and existing demands, which include the demand increment associated with the accelerated forecasted growth. The SDCWA will also assist its member agencies in tracking certified EIRs provided by the agencies that include water supply assessments that utilize the accelerated forecasted growth demand increment, to demonstrate adequate supplies for the development.

Local Water Supply Considerations

As discussed previously, water service would be provided to the Project site by RMWD. Specific provisions for service have been outlined in a pre-annexation agreement dated May 22, 2012. In order to receive water service from the SDCWA aqueduct system, the portion of property north of SR-76 would need to annex to SDCWA. The Water Authority Act (the section of the Water Code under which the SDCWA operates as a special district governmental agency) specifies that annexations in the SDCWA are at the discretion of the SDCWA Board of Directors. Annexation into the RMWD and an amendment to the SLRMWD's Sphere of Influence would be initiated once the Project is approved by the SDCWA.

RMWD provides water service to the unincorporated areas of northwestern San Diego County, specifically the unincorporated communities of Rainbow, Bonsall, and portions of Fallbrook and Pala. RMWD was formed in 1953 and is a retail water supplier and a member agency of SDCWA. The RMWD service area is bounded by Marine Corps Base Camp Pendleton to the west, City of Vista to the south, Fallbrook Community Planning Area to the east, and County of Riverside to the north. RMWD covers approximately 50,000 acres and serves approximately 7,000 households/businesses through 6,300 connections. Its facilities include 17 reservoirs (total capacity 1,350 af), 46 pressure stations, and approximately 300 miles of pipeline.

The RMWD has prepared a UWMP in accordance with the California Urban Water Management Planning Act. The last update was completed in 2010 and was used to prepare the WSA for the

Proposed Project. RMWD's 2010 UMWP contains a comparison of projected supply and demands within its existing boundaries through the year 2035. Projected potable water resources to meet planned demand would be primarily supplied with imported water purchased from SDCWA.

There are two existing RMWD water service pressure zones in the vicinity of the Project site. The Canonita Zone system operates at a hydraulic grade line of 1,019 feet. The nearest facility to the Project site is a 16-inch-diameter water main in Stewart Canyon Road. From its intersection with I-15, this water main extends north and connects to the 6-million gallon Canonita Tank. The Beck Zone system operates at a hydraulic grade line of 897 feet. The nearest water line to the Project site is an 18-inch-diameter water main located in the Pala Mesa Drive overpass of I-15. The Beck Zone system includes the Beck Reservoir, which has a storage capacity of 203.7 million gallons. The hydraulic grade of both of these zones is too high to serve the Project directly.

A new reduced pressure 660 zone is planned to supply the 2011-approved Campus Park development located to the north and east of the Proposed Project. The 660 Campus Park Zone would be supplied from two pressure reducing stations (PRS). The primary supply to the 660 Zone would be from an existing Beck Zone water main in Old Highway 395 on the west side of I-15. Caltrans will be making improvements at the I-15/SR-76 interchange, which will include construction of a new RMWD 12-inch diameter pipeline in SR-76, connecting to the water main in Old Highway 395 and extending to the eastern boundary of the Caltrans right-of-way. Campus Park off-site supply facilities would include an eastward extension of this pipeline in SR-76, a pressure reducing station near the intersection of SR-76 and Pankey Road, and a 16-inch diameter 660 Zone pipeline in SR-76 and Horse Creek Road. The second PRS for the 660 Zone is planned at the intersection of Pala Mesa Heights Drive and Horse Ranch Creek Road, which would provide a redundant supply from the Canonita Zone through an extension of the existing 16-inch diameter pipeline in Stewart Canyon Road. It is anticipated that each of the pipelines described above would be in place (installed by others) prior to operations at Campus Park West. The lines in Horse Ranch Creek Road are currently in process and the Caltrans improvements would be completed as part of the SR-76 East improvements, currently begun at the west end by Mission Road and anticipated to be complete by 2017. Project status information on SR-76 East is available at http://www.transnettrip.com/Snapshot.aspx.

Wastewater Management

The San Diego County General Plan Land Use Element identifies two policies regarding wastewater relevant to the Project:

- LU 14.2: Wastewater Disposal. Require that development provide for adequate disposal of wastewater concurrent with the development and that the infrastructure is designed and sized appropriately to meet reasonably expected demands.

- LU 14.4: Sewer Facilities. Prohibit sewer facilities that would induce unplanned growth. Require sewer facilities to be planned, developed, and sized to serve the land use pattern and densities depicted on the Land Use Map. Sewer systems and services shall not be

extended beyond either Village boundaries or extant Urban Limit Lines, whichever is more restrictive except: when necessary for public health, safety, or welfare; when within existing sewer district boundaries; when necessary for a conservation subdivision adjacent to existing sewer facilities; or where specifically allowed in a community plan.

Local Wastewater Facilities

In terms of wastewater service facilities, RMWD collects wastewater generated within its boundaries and transfers the flow to the City of Oceanside through a trunk sewer that extends west along SR-76. The approximately 11-mile system of gravity pipelines, lift stations and force mains connects with Oceanside's system at Stallion Drive and North River Road. Wastewater is treated at the San Luis Rey WWTP, where RMWD has existing capacity ownership, and discharged through an ocean outfall.

The existing sewer facilities in the vicinity of the Project site consist of gravity sewer pipelines and a force main. Additionally, a gravity trunk sewer and lift station are planned to convey flows from the 2011-approved proposed Campus Park development. The existing and proposed sewer facilities are shown on Figure 1-21 and are described below.

Plant B Collector Sewer. An existing 12-inch diameter RMWD gravity sewer line called the Plant B Collector sewer extends along the eastern boundary of the Project site north of SR-76. This line heads south past SR-76 and then turns west, crosses under I-15 and connects to the Plant B Pump Station, which is located on Old Highway 395 near the RMWD office. An additional gravity sewer collects flows from a residential area just west of I-15, crosses under I-15 approximately 400 feet north of the Pala Mesa Drive overpass, and extends approximately 1,000 feet east through the Project site to connect with the Plant B Collector sewer. RMWD has been investigating options to relocate the Plant B Collector sewer north of SR-76, since it is aligned in an environmentally sensitive area with difficult access. Furthermore, the RMWD Wastewater Mater Plan Update has identified a capacity deficiency in the both the Plant B Interceptor and Plant B Sewer Lift Station, which is also in need of rehabilitation. The Plant B Sewer Lift Station will be replaced by future Campus Park facilities.

SR-76/Pala Road Main. Sewer facilities constructed as part of the Hewlett Packard Campus Park improvements in 1988 extend up to the western boundary of the Project site. A lift station, which was never built, was planned near the southwest corner of the SR-76/Pankey Road intersection. A portion of the force main for this lift station was constructed in SR-76, but never put into use. The 12-inch diameter force main extends west to the bridge over I-15, where it reduces to a 10-inch diameter section through the bridge. The force main discharges to an existing 21-inch diameter gravity sewer in SR-76 on the west side of the bridge.

Planned Campus Park Gravity Sewers. The Sewer Service Analysis for the Campus Park Project was prepared for RMWD in November 2010. Based on recommendations from this report, all sewer flows from Campus Park would be collected in on-site gravity sewers and conveyed south in a trunk sewer aligned in Horse Ranch Creek Road. The trunk sewer would turn west in SR-76 and discharge to the proposed Campus Park lift station, which would be located within the Campus Park project at the northeast corner of Pankey Road and SR-76. The trunk sewer in

Horse Creek Road would be sized for ultimate Campus Park projected flows plus Plant B interceptor flows (peak wet weatherflow = 560 gpm) and future flows from the Palomar College site (peak flow = 72 gpm). An additional 15-inch diameter gravity sewer is planned in Pankey Road to connect with the existing Plant B Interceptor and convey flows to the Campus Park Lift Station. Flows from the northern portion of Campus Park West would also discharge to this 15-inch diameter pipeline.

Planned Campus Park Lift Station. The Ten Percent Preliminary Design Report (PDR) for the Campus Park Sewer Lift Station was prepared in November 2010 for the RMWD. A summary of its planned elements, as well as a preliminary site plan, are provided in Chapter 1 of this EIR. The Campus Park Sewer Lift Station is part of the infrastructure needed for sewer service to Campus Park and would be constructed on the Project site, but it would be a public facility owned and operated by the RMWD. In the 10 percent design report, the capacity of the lift station is based on peak sewer flows from the entire Campus Park project, the Palomar Community College project, and ultimate projected flows in the Plant B Interceptor.

A new section of force main would be constructed between the Campus Park Lift Station and the existing 12-inch diameter force main in SR-76, which discharges to a 21-inch diameter gravity interceptor west of I-15. Based on the firm pumping capacity, velocities in the Campus Park lift station force main would be 4.9 fps in the 12-inch diameter sections and 7.0 fps in the existing 10-inch diameter section through the bridge over I-15.

3.1.9.2 *Analysis of Project Effects and Determination as to Significance*

The following utilities analysis does not make a distinction between on- and off-site Project effects because utility demand is not attributable such improvements. With regard to operational demands for utilities, the analysis generally evaluates the worst-case of the two land use scenarios. If there are substantive differences between **Scenarios 1** and **2**, both land use scenarios are analyzed.

Water Supply

Guideline for the Determination of Significance

A significant impact to utilities would occur if the Proposed Project would:

1. Create a demand for potable water that cannot be met with the current projected water supplies and/or that requires significant alterations to the existing water pipelines and infrastructure that is needed to convey potable water to the site.

Guideline Source

The identified guideline for significance is based on Appendix G of the CEQA Guidelines and is intended to ensure that adequate public utilities and services are available for local residents.

Analysis

Project Demand and Regional Water Supply

As noted above, water supply for the Proposed Project would be provided by RMWD, a member agency of the SDCWA and MWD. The RMWD's water supply is dependent on the SDCWA as the wholesale water supplier. Therefore, the water supply reliability assessment relies on the Water Authority's 2010 UWMP. Water Code section 10635 requires that every urban water supplier assess the reliability of its water services during normal, dry and multiple dry water years. The water supply and demand assessment compare the total projected water use with expected water supply over the next 20 years in 5-year increments. The assessment contained in the 2010 UWMP projects reliability through the next 25 years to correspond with population growth forecasted by SANDAG. The Water and Sewer Studies (Appendix S) estimated water demands directly from planned land uses, using unit use factors specific to each land use in the current Project plan. The total average water demand was estimated to be 261,120 gallons per day (gpd) as detailed in Table 3.1.9-1, Water Demand Projections.

The near-term service for the proposed water demands of the Project can be accounted for in the SDCWA's 2010 UWMP accelerated forecasted growth demand increment, discussed above. This additional demand increment (shown in Table 4.9.1-2, Total Regional Baseline Demand Forecast), can be used by member agencies to meet the demands of development projects not identified in general land use plans, as part of general plan amendments, and/or new annexations. As documented in the 2010 UWMP, SDCWA is planning to meet future and existing demands, including the demand increment associated with accelerated forecasted growth. SDCWA also will assist its member agencies in tracking the certified EIRs provided by the agencies that include water supply assessments that utilize the accelerated forecasted growth demand increment, to demonstrate adequate supplies for the development. In addition, the next update of the demand forecast for SDCWA's 2015 UWMP will be based on SANDAG's most recently updated forecast, which would include the Project.

As noted above, RMWD used SDCWA's projections for normal, dry year and multiple dry years to determine future demands for the next 20 years. The forecasted normal year water demands compared with the projected supplies from the SDCWA are shown in Table 3.1.9-3, SDCWA Normal Year Demand and Supply Comparison. This demonstrates that with existing supplies and implementation of the projects discussed in the SDCWA planning documents there would be adequate water supplies to serve the Project. Table 3.1.9-4, SDCWA Single Dry Year Demand and Supply Comparison, provides a comparison of a single dry year supply with projected water demands over the next 20 years. Tables 3.1.9-5 through 3.1.9-7 present multiple dry year scenarios. As demonstrated by Tables 3.1.9-3 through 3.1.9-7, SDCWA can reliably meet demands during normal, single dry, and multiple dry year scenarios.

In summary, the Proposed Project has been found to create a demand for potable water that could be met by water supplies that are planned for and intended to be available over a 20-year planning horizon, under normal conditions and in both single and multiple dry years. Therefore, impacts associated with water supply would be **less than significant**.

Water Supply Facilities

Specifics regarding the water supply system for the Proposed Project are described in Section 1.2.2.3, Utilities, of this EIR and in the Water and Sewer Studies contained in Appendix S. Figure 1-20 illustrates the proposed water system for the Project. As discussed in Section 1.2.2.3, in order to provide water system redundancy, two systems would be provided.

On-site Water System. The proposed on-site water system for the Proposed Project would consist of an 897 Beck Zone to 660 Campus Park Zone PRS, a 12-inch diameter transmission main in Pankey Road, and smaller distribution pipelines that would be determined as site development plans are prepared. The PRS would be located at the terminus of the existing 18-inch diameter water main in the Pala Mesa Drive I-15 overpass. A redundant supply to Campus Park West would be provided from the 16-inch diameter transmission main in SR-76 and the two 660 Zone PRSs planned for Campus Park.

Distribution lines within the Project site would be looped and designed to deliver maximum day demands plus a fire flow, which exceed the peak hour demands.

Off-site Water System. The Project site is proposed to be supplied from a new on-site 660 Zone PRS and a connection to the planned 660 Zone pipeline in SR/76 at Pankey Road. Off-site improvements would consist of a 660 Zone pipeline connection and a short section of 12-inch diameter pipeline in Pankey Road. Supply to the site would utilize the pipeline that would be constructed with the new Caltrans interchange and off-site improvements planned as part of the approved Campus Park project. Only one of these facilities is necessary for the Proposed Project. Campus Park West would be responsible for a portion of the costs for these planned off-site improvements, to be determined by RMWD.

For both on-site and off-site elements of the water supply system, the facilities would be sized to provide the capacity required, and would not necessitate significant alterations to existing systems beyond those assumed as part of Project design. Therefore, impacts to water service facilities would be **less than significant.**

Wastewater Management

Guidelines for the Determination of Significance

A significant impact to utilities would occur if the Proposed Project would:

2. Generate wastewater that cannot be treated by an existing or proposed facility and/or requires significant alterations to existing sewage systems and infrastructure.

3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Guidelines Source

The identified guidelines for significance are based on Appendix G of the CEQA Guidelines and are intended to ensure that adequate public utilities and services are available for local residents.

Analysis

Specifics regarding the sewer system are provided in the Project Description, Section 1.2.2.3, Utilities, of this EIR and in the Water and Sewer Studies (ATKINS 2012) contained in Appendix S. The sewage system and pump stations would be managed by the RMWD.

Projected wastewater flows for the Proposed Project are based on the sewage generation factors contained in Appendix S and summarized in Table 3.1.9-8. Since only the total building area for the general commercial category is defined, building areas for the three commercial planning areas (PA 2, 4 and 5) are apportioned based on the relative size of the planning areas (acres). The total average wastewater flow is projected to be 0.134 mgd or 93 gpm.

Peak wastewater flows from the Proposed Project are calculated based on the peaking factor of 3.0 and average flows of 93 GPM, for a peak wastewater flow of 280 gpm.

RMWD plans to abandon the Plant B Interceptor north of SR-76 with development of the Proposed Project and the adjacent approved Campus Park development. Flows in the gravity sewers that enter the Project site from the north and the west would be re-routed separately.

Flows in the gravity sewer entering the Project site from the north would be diverted upstream of the Project site to flow east and then south through the proposed Campus Park project. Future flows from the Palomar College site also would be conveyed through Campus Park. Flows in the existing branch gravity sewer that crosses I-15 and enters the Project site from the west are proposed to be pumped from a new RMWD lift station. The lift station would discharge to the proposed Campus Park West collection system for conveyance south. Three potential locations have been identified near Pala Mesa Drive for the proposed "Pala Mesa" lift station. These locations are shown on the proposed system map on Figure 1-22.

Option 1 would utilize the existing gravity sewer crossing I-15 and locate the Pala Mesa Lift Station within the Proposed Project. A new force main would be constructed to convey flows south and then west in Pala Mesa Drive, discharging to the proposed gravity sewer in Pankey Road. Option 2 would locate the Pala Mesa lift station on the west side of Old Highway 395, adjacent to the existing gravity sewer. A new force main extending south and then west across I-15 in a bridge cell of the Pala Mesa Drive overpass would be constructed. Option 3 would locate the lift station further south on the east side of Old Highway 395. All options require a new section of force main from the east side of the bridge to the proposed gravity sewer in Pankey Road. Option 1 would require an additional section of force main along the eastside of I-15, and Options 2 and 3 would also require sections of new force main on the west side of I-15 and in the Pala Mesa I-15 overpass.

Based on information provided by RMWD staff, the peak flow in the existing gravity sewer that crosses I-15 just north of Pala Mesa Road is 53 gpm. The proposed Pala Mesa lift station would have a minimum required design capacity of 70 gpm (peak flow times the 1.3 peak pumping safety factor). At this flow rate, a three-inch diameter force main would be required to provide the minimum force main velocity of three feet per second. Due to the small force main diameter, it is recommended that the lift station be equipped with a separate grinder pump.

The Campus Park lift station would pump all flows from the Proposed Project as well as the Campus Park Project, Palomar College Project and Plant B Interceptor (see Table 3.1.9-9, Campus Park Lift Station Pumping Capacity).

The proposed facilities would have the appropriate capacity for the Proposed Project and adjacent developments noted above. Where, as anticipated, these facilities are in place due to ongoing "first in time" implementation by adjacent projects, Conditions of approval would be placed on the Project to share in the cost of the facilities under the terms of a cost-sharing agreement to be negotiated among the parties. The Project would be consistent with relevant policies, and would not require significant alterations to existing sewage systems and infrastructure; therefore, impacts to wastewater service facilities would be **less than significant.**

3.1.9.3 *Cumulative Impact Analysis*

Several related cumulative development projects have been recently completed or are planned for development in the vicinity of the Proposed Project, as listed in Table 1-4. These future projects include residential developments totaling approximately 3,665 units, as well as other types of development, such as expansion of the Pala Mesa Resort. Cumulative impacts of these development projects are discussed below. The significance guidelines that were used to evaluate Project-specific impacts also are used here to evaluate cumulative impacts.

Water Supply and Facilities

As discussed previously, the SDCWA's 2010 UWMP provides for a comprehensive planning analysis at a regional level and includes water use associated with accelerated forecasts residential development as part of its municipal and industrial sector demand projections. The demand associated with accelerated forecasted growth is intended to account for SANDAG's land use development currently projected to occur between 2035 and 2050, but which has the likely potential to occur on an accelerated schedule. SANDAG estimates that this accelerated residential development could occur within the planning horizon of the 2010 UWMP update. These units are not yet included in local jurisdictions' general plans, so their projected demands are incorporated at a regional level. When necessary, this additional demand increment can be used by member agencies to meet the demands of development projects not identified in the general land use plans or for new annexations.

As documented in the 2010 UWMP, the SDCWA is planning to meet future and existing demands which include the demand increment associated with the accelerated forecasted growth. SDCWA will also assist its member agencies in tracking the certified EIRs provided by the agencies that include water supply assessments that utilize the accelerated forecasted growth

demand increment, to demonstrate adequate supplies for the development. Therefore, cumulative impacts on water supply and water facilities would be **less than significant**.

Wastewater Management

Wastewater treatment would be provided by the San Luis Rey WTP in Oceanside. The San Luis Rey WTP has a current capacity of 1.5 million gpd and is operating at approximately 67 percent of its capacity (1.0 million gpd). Based on an average of 250 gpd per household, the total cumulative residential sewage generation (including the Proposed Project) would be approximately 1.3 million gpd over current levels. This estimate is considered conservative (greatest impact) in that: (1) some projects would not be within RMWD and therefore may not be treated by the San Luis Rey WTP; and (2) some projects may utilize septic systems. This would further increase sewage treatment demand over the maximum service capacity of the San Luis Rey WTP. The RMWD Wastewater Master Plan recognizes the cumulative need for additional treatment capacity. The Proposed Project and other cumulative projects served by RMWD would pay appropriate fees prior to granting of building permits for all approved projects. Because capacity is available for the Proposed Project, the Project's contribution to cumulative impacts on wastewater treatment services would be **less than significant.**

3.1.9.4 *Significance of Impacts*

According to the WSA, the RMWD has adequate water supplies to serve the anticipated growth of the Project. The RMWD Board of Directors approved the WSA on November 20, 2012 and a preliminary service agreement has already been signed by RMWD. Impacts related to water supply are, therefore, anticipated to be less than significant.

Impacts related to water and sewage conveyance facilities would be less than significant because facilities would be new, constructed and/or funded by the Project and approved Campus Park, sized to provide the capacity required, and would not necessitate significant alterations to existing systems beyond those proposed as part of Project design.

Impacts related to wastewater utilities are anticipated to be less than significant because there is adequate capacity at the San Luis Rey WTP to serve the Project and the Project would be consistent with relevant policies, and would not require significant alterations to existing sewage systems and infrastructure beyond those proposed as part of Project design.

3.1.9.5 *Conclusion*

Since the Project would have less than significant impacts related to water and wastewater utilities, no mitigation would be required. It should be noted, however, that if the Project could not meet annexation requirements of SDCWA and RMWD, the Project would not be implemented, and no impacts would occur.

Table 3.1.9-1
WATER DEMAND PROJECTIONS

Land Use	Gross Acreage	Max Square Footage/Units	Unit Use Factor	Average Annual Demand	
				gpd	gpm
Multi-Family Residential	12.4	248	300 gpd/DU	74,400	51.7
Commercial/Mixed Use	52.4	503,500	3,000 gpd/acre	157,200*	109.2
Mixed Use Residential	--	35	300 gpd/DU	10,500	7.3
Light Industrial/Office	12.6	120,000	100 gpd/1,000 SF	12,000	8.3
HOA - Irrigation	1.42	--	4,000 gpd/acre	5,680	3.9
Biological Open Space	31.0	--	0 gpd/acre	-	0.0
Right-of-Way**	6.7	--	4,000 gpd/net acre	1,340	0.9
Total	**116.5**			**261,120**	**181**

Source: ATKINS 2012
*Table 3.1.9-1 reflects water use for **Scenario 1. Scenario 2** adds an additional 2 acres to general commercial use with anticipated average annual demand equaling 163,500.
**Mostly pavement, with 5% of the area assumed irrigated (net acres).

Table 3.1.9-2
TOTAL REGIONAL BASELINE DEMAND FORECAST (AFY)

	2015	2020	2025	2030	2035
Baseline M&I Demand[1,2,3]	590,731	661,415	728,574	788,174	839,417
Baseline Agricultural Demand - Program	30,358	27,164	26,531	25,927	25,324
Baseline Agricultural Demand - Full Service	2,500	22,370	21,849	21,352	20,854
Near-Term Annexations[4]	5,709	6,670	6,670	6,670	6,670
Accelerated Forecasted Growth	2,224	4,421	6,605	8,776	10,948
Total Baseline Demand Forecast	**631,522**	**722,040**	**790,229**	**850,899**	**903,213**

Source: SDCWA 2010 UWMP (Table 2-2)
[1] Includes approximately 12,000 AF of demand for Camp Pendleton – provided by base staff.
[2] Reflects passive historic conservation savings.
[3] Includes increment of demand associated with the decay of historic active conservation program savings (2015 = 7,111 AF; 2020 = 14,221 AF; post-2020 = 21,332 AF).
[4] Known near-term annexation demands include: Escondido (314 AF), Otay Ranch Village 13 and parcels East of Village 13 (2,361 AF), Peaceful Valley Ranch (70 AF), Sycuan Reservation (392 AF), Stoddard Parcel (2 AF), San Ysidro Mt. Parcel Village 17 (148 AF), Viejas (2,000 AF), Rincon (417 AF), Meadowood Development (460 AF), Pauma Ranch (76 AF) and Warner Ranch/Sycamore Ranch (430 AF). Including the demands for these parcels does not limit the Board's discretion to deny or approve these or other annexations not contemplated at this time.

Table 3.1.9-3
SDCWA NORMAL YEAR DEMAND AND SUPPLY COMPARISON

	2015	2020	2025	2030	2035
Water Authority Supplies					
IID Water Transfer[1]	100,000	190,000	200,000	200,000	200,000
ACC and CC Lining Projects[2]	80,200	80,200	80,200	80,200	80,200
Proposed Regional Seawater Desalination	0	56,000	56,000	56,000	56,000
Sub-Total	**180,200**	**326,200**	**336,200**	**336,200**	**336,200**
Member Agency Supplies					
Surface Water	48,206	47,940	47,878	47,542	47,289
Water Recycling	38,660	43,728	46,603	48,278	49,998
Groundwater	11,710	11,100	12,100	12,840	12,840
Groundwater Recovery	10,320	15,520	15,520	15,520	15,520
Sub-Total	**108,896**	**118,288**	**122,101**	**124,180**	**125,647**
Metropolitan Water District Supplies	358,189	230,601	259,694	293,239	323,838
Total Projected Supplies	**647,285**	**675,089**	**717,995**	**753,619**	**785,685**

Source: SDCWA 2010 UWMP (Table 9-1)
[1] Imperial Irrigation District Water Transfer
[2] All-American and Coachella Canals canal lining projects

Table 3.1.9-4
SDCWA SINGLE DRY YEAR DEMAND AND SUPPLY COMPARISON

	2015	2020	2025	2030	2035
Water Authority Supplies					
IID Water Transfer	100,000	190,000	200,000	200,000	200,000
ACC and CC Lining Projects	80,200	80,200	80,200	80,200	80,200
Proposed Regional Seawater Desalination	0	56,000	56,000	56,000	56,000
Sub-Total	**180,200**	**326,200**	**336,200**	**336,200**	**336,200**
Member Agency Supplies					
Surface Water	17,932	17,932	17,932	17,932	17,932
Water Recycling	38,660	43,728	46,603	48,278	49,998
Groundwater	9,977	9,977	9,977	9,977	9,977
Groundwater Recovery	10,320	15,520	15,520	15,520	15,520
Sub-Total	**76,889**	**87,157**	**90,032**	**91,707**	**93,427**
Metropolitan Water District Supplies	430,431	305,101	338,501	376,023	409,389
Total Projected Supplies	**687,520**	**718,458**	**764,733**	**803,930**	**839,016**

Source: SDCWA 2010 UWMP (Table 9-2)

Table 3.1.9-5
SDCWA MULTIPLE DRY YEAR DEMAND AND SUPPLY COMPARISON
(THREE YEAR INCREMENTS – 2012-2014 and 2016-2018)

	2012	2013	2014	2016	2017	2018
Member Agency Supplies	69,597	84,440	103,907	78,943	93,408	112,499
Water Authority Supplies	170,200	180,200	180,200	236,200	236,200	266,200
Metropolitan Allocation (Preferential Right)	317,760	319,177	320,456	322,661	323,350	324,100
Total Estimated Core Supplies w/o Storage Tanks	557,557	583,817	604,563	637,804	652,958	702,799
Total Demands w/ SBX7-7 Conservation	658,381	679,509	711,241	682,338	705,461	740,326
Potential Supply; (Deficit) or Surplus	(100,824)	(95,692)	(106,678)	(44,534)	(52,503)	(37,527)
Utilization Carryover Supplies	40,000	40,000	30,000	44,534	40,000	30,000
Total Projected Core Supplies with Utilization of Carryover Storage Supplies	597,557	623,817	634,563	82,338	692,958	732,799
Remaining Potential Supply, (Deficit) or Surplus, that will be handled through Management Actions	(60,824)	(55,692)	(76,678)	0	(12,503)	(7,527)

Source: SDCWA 2010 UWMP (Table 9-3 and 9-4)

Table 3.1.9-6
SDCWA MULTIPLE DRY YEAR DEMAND AND SUPPLY ASSESSMENT
(THREE YEAR INCREMENTS – 2021-2023 AND 2026-2028)

	2021	2022	2023	2026	2027	2028
Member Agency Supplies	87,732	100,719	118,331	90,367	103,114	120,486
Water Authority Supplies	336,200	336,200	336,200	336,200	336,200	336,200
Metropolitan Allocation (Preferential Right)	326,697	327,671	328,695	332,058	333,272	334,532
Total Estimated Core Supplies w/o Storage Tanks	750,629	764,590	783,226	758,625	772,586	791,218
Total Demands w/ SBX7-7 Conservation	724,294	751,800	790,177	772,892	801,649	844,137
Potential Supply; (Deficit) or Surplus	26,335	12,790	(6,951)	(14,267)	(29,063)	(52,919)
Utilization Carryover Supplies	0	0	6,951	14,267	29,063	40,000
Total Projected Core Supplies with Utilization of Carryover Storage Supplies	750,629	764,590	790,177	772,892	801,649	831,218
Remaining Potential Supply, (Deficit) or Surplus, that will be handled through Management Actions	26,335	12,790	0	0	0	(12,919)

Source: SDCWA 2010 UWMP (Table 9-5 and 9-6)

Table 3.1.9-7
SDCWA MULTIPLE DRY YEAR DEMAND AND SUPPLY ASSESSMENT
(THREE YEAR INCREMENTS – 2031-2033)

	2031	2032	2033
Member Agency Supplies	92,051	104,807	122,188
Water Authority Supplies	336,200	336,200	336,200
Metropolitan Allocation (Preferential Right)	338,575	340,009	341,486
Total Estimated Core Supplies w/o Storage Tanks	766,826	781,016	799,874
Total Demands w/ SBX7-7 Conservation	811,421	842,947	882,795
Potential Supply; (Deficit) or Surplus	(44,595)	(61,931)	(82,921)
Utilization Carryover Supplies	44,595	40,000	30,000
Total Projected Core Supplies with Utilization of Carryover Storage Supplies	811,421	821,016	829,874
Remaining Potential Supply, (Deficit) or Surplus, that will be handled through Management Actions	0	(21,931)	(52,921)

Source: SDCWA 2010 UWMP (Table 9-7)

Table 3.1.9-8
SEWER FLOW PROJECTIONS

Land Use	Quantity	EDUS			Projected Sewer Flow* Average (gpd) Peak (gpm)	
		1st 5,000 ft²	>5,000 ft²	Total		
PA 1						
Industrial	120,000 s.f.	3.4	46.0	49.4	12,350	
PA 2						
General Commercial	442,525 s.f.	3.4	175.0	178.4	44,602	
Mixed Use Residential	35 units	--	--	35.0	8,750	
PA 3						
Multi-Family Residential	248 units	--	--	248.0	62,000	
Subtotal PA-1 thru PA-3				**510.8**	**127,702**	**310**
PA 4						
General Commercial	27,838 s.f.	3.4	9.1	12.5	3,134	
PA 5**						
General Commercial	32,637 s.f.	3.4	11.1	14.5	3,614	
Subtotal PA 4 and PA 5				**27.0**	**6,748**	**14**
Totals				**538 EDUs**	**134,450 gpd**	**280 gpm**

Source: ATKINS 2012

* Based on 250 gpd per EDU and RMWD sewer peaking factor equation

Table 3.1.9-8 provides anticipated sewer flow projections for **Scenario 1. Under **Scenario 2,** with an additional 10,000 s.f. of general commercial uses, the sewer flow projection would increase in PA 5 by 4 Equivalent Dwelling Units or 1,000 gallons per day.

Table 3.1.9-9
CAMPUS PARK LIFT STATION PUMPING CAPACITY

Service Area	Average Sewage Flow (gpm)	EDUs[1]	Population[2]
Campus Park West	93.4	537.8	1,345
Campus Park Project	148.0	850.1	2,125
Warner Ranch[3]	135.4	780.0	1,950
Palomar College Project	17.4	100	251
Plant B Interceptor	160	921.6	2,304
Totals	**554.2**	**3189.7**	**7,974**
Sewer Peaking Factor	3.00		
Lift Station Safety Factor	1.30		
Total Firm Pumping Capacity	**2,161 gpm**		

Source: ATKINS 2012
[1] Based on 250 gpd/EDU
[2] Based on 2.5 people/EDU
[3] Assumes 780 dwelling units for Warner Ranch

SUBCHAPTER 3.2

EFFECTS FOUND NOT TO BE SIGNIFICANT DURING INITIAL STUDY

3.2 Effects Found Not to be Significant During Initial Study

Two issues were found to have less than significant effects as detailed in the County 15162 Checklist for the Project (refer to Appendix A, Notice of Preparation [NOP] and Comments to the NOP), incorporated by reference into this EIR. Issues with effects found not to be significant are briefly discussed below, with an explanation regarding the assessed lack of significance. In both cases, the Project is evaluated as a whole and no distinction is made between on- and off-site improvements or **Scenarios 1** and **2**.

3.2.1 Agricultural Resources

During preparation of the NOP for this Project (circulated June 11, 2009), the EIRs and related findings for the two prior specific plans on the subject property were reviewed.

The findings adopted for the Sycamore Springs and Campus Park EIRs concluded that agricultural impacts would not be significant.

The findings adopted for the Sycamore Springs EIR concluded that the impact of development would be below a level of significance. The analysis concluded that economic factors outweighed the fact that the Specific Plan area included important farmland and had been used in the past for agriculture. The findings concluded that this portion of the County would not support agriculture in the long-run because of environmental constraints related to winter frosts, soil alkalinity, and adverse economic factors (e.g., high cost of water).

The findings for the 1983 Campus Park EIR, relying in part on prior studies and the findings adopted for the Sycamore Springs EIR, also determined that, due to environmental factors combined with economic factors, which limit continued agricultural production on the site, development of the subject property would not have a significant impact on agriculture.

Additional summary information/clarification relating to soils designations, recent crop types, percentage of business loss compared to County-wide agricultural resources, overall County agricultural preservation efforts and policies, as well as potential impacts on adjacent agricultural areas resulting from project implementation was added to the Final EIR in the form of responses to comments. The responses were based on information provided by Tom Escher, County Department of Agriculture. Mr. Escher noted:

> [d]espite the presence of prime soils, the proposed project will not impact the preservation of agricultural land in San Diego County. Because the site is virtually surrounded by proposed urban development, and is adjacent to I-15, this land is no longer regarded as prime agricultural land by the County's Department of Agriculture.

It was also noted that other projects surrounding the site had committed additional acreages to urban development. In addition, it was noted that the steeply sloped mountains to the east were regarded as a natural buffer protecting agricultural activities east of the mountains from encroaching development from the west. For those reasons, project implementation on what was

referred to as "rich, alluvial soils" was not considered a significant impact by the County of San Diego Department of Agriculture and Board of Supervisors. This finding is relied upon for the proposed Campus Park West Project.

Within the County overall, although percentages of specific crops have varied, agricultural use continues to provide a vibrant economic resource. In 1986, farming acreage (nursery crops, flower crops, fruit and nut crops, vegetable crops and field crops) totaled 172,948 acres (San Diego County Department of Agriculture, Weights and Measures [County Department of Agriculture] 1997). In 2010, these same crops totaled 307,291 acres (County Department of Agriculture 2010).

Specifically with regard to the Project locale, conditions critical to the above decision by the County Department of Agriculture and the Board of Supervisors related to agriculture in this area have not substantially changed.

- The Project is still immediately adjacent to I-15.
- Campus Park West is still surrounded by land committed to development. In fact, three projects in the immediate vicinity (Palomar College North, Campus Park and Meadowood) have all been approved by their respective CEQA lead agencies, and construction of some critical project elements is underway.
- The cost of water continues to be a serious consideration in the County and can be one of the determinants in decisions about type and extent of irrigated agricultural use.

Within the valley, the only active agriculture impacted by the Project would be removal of approximately 3 acres (2.9 acres) of a 12.5-acre citrus orchard remnant south of SR-76/Pala Road. This grove was previously impacted by the realignment of SR-76 by Caltrans. Based on review of historical aerial photographs available on www.historicaerials.com, the area for that grove appears to have been cleared as early as 1953 and was in place at least by 1964. That grove was present when the BOS made its decision (based in part on information from the County Department of Agriculture) regarding value of valley agriculture in 1981 and 1983.

As stated above, however, it was also noted that the steeply sloped mountains to the east provided a natural buffer protecting agricultural activities east of the mountains from encroaching development from the west. To that end, photographs on the same site from 1981 through 2005 were reviewed for Rice Canyon, the agricultural valley immediately east of the ridgeline. These were supplemented by review of the ESRI aerial for 2010. Rice Canyon was clearly agricultural in nature in 1981. Since then, some additional residential building has occurred, but agricultural uses have been retained. Comparison of the aerials indicates that agricultural activity continues on each of the parcels where it showed in 1981. Some isolated grove areas (e.g., just southwest of the agricultural pond in the southern portion of the canyon, and a large east-west oriented grove toward the northern portion of the canyon) have been slightly expanded, or have matured.

Overall, therefore, conditions are considered to be in-line with conditions anticipated during the 1981 and 1983 conclusions. Consistent with the two previous EIRs, development of the Campus Park West proposed project would not result in a significant impact on agriculture. The

environmental constraints related to climate and soil alkalinity remain present and the economic factors are even less favorable in the existing condition due to the continued development in the area and increases in water costs. Thus, no further analysis need be conducted with respect to agriculture relative to County standards because the proposed Campus Park West Project would not result in any additional impacts to agricultural resources not already considered in the previous EIRs.

In addition to review of this issue relative to County identification of significance, the Local Agency Formation Commission, or LAFCO, also requires review during its consideration of sphere of influence (SOI) amendment and changes of organization (please refer to the Permits matrix in Chapter 1 for annexations and detachments related to this Project).

A number of state laws address LAFCO's role with respect to prime agriculture and open space. The Cortese-Knox-Hertzberg Act of 2000 mandates that LAFCOs are required to consider how spheres of influence or changes of organization could affect open space and prime agricultural land. Commissions are directed to:

- Guide development away from prime agricultural lands unless that action would not promote the planned, orderly, efficient development of an area; and
- Encourage development of existing vacant or non-prime agricultural lands within a jurisdiction before approving any proposal that would allow development of open-space lands outside of an agency's boundary (Govt. Code Section 56377).

Proposals are to be reviewed for their effect on maintaining the physical and economic integrity of agricultural lands (Govt. Code Section 56668).

The San Diego LAFCO has adopted Legislative Policy L-101 (Preservation of Open Space and Agricultural Lands) to implement state objectives. Government Code Section 56064 (found in the Cortese-Knox-Hertzberg Act of 2000 governing LAFCO), defines "Prime agricultural land" as an area of land, whether a single parcel or contiguous parcels, that has not been developed for a use other than an agricultural use and that meets any of five qualifications (noted in italics below). Following each qualification is an analysis to determine if the reorganization area meets the identified criteria.

(a) Land that qualifies, if irrigated, for rating as Class I or Class II in the USDA Natural Resources Conservation Service land use capability classification, whether or not land is actually irrigated, provided that irrigation is feasible

The USDA Natural Resources Conservation Service maps show that the Proposed Project contains eight soil types, with the reorganization area including six soil types, as illustrated on: Figure 3.2-1, Water District Boundaries; Figure 3.2-2, Soils; and Table 3.2-1, Campus Park West Soil Classifications.

None of the soils are rated Class I. Approximately 67.8 acres of the reorganization area would be considered Class II (Grangeville fine sandy loam 0 to 2 percent slopes [8.2 acres], Ramona sandy loam 2 to 5 percent slopes [43.6 acres], and Visalia sandy loam [16.0 acres])

soils. The remaining soils range from Class III to Class VIII. Although irrigation is not currently present, hookups could be feasible.

(b) Land that qualifies for rating 80 through 100 Storie Index Rating

As shown in Table 3.2-1, Grangeville and Visalia sandy loam soils, which comprise approximately 24.2 acres of the reorganization area, have Storie Index Ratings between 80 and 100; with both ratings being 81, at the low end of the scale. The balance of the property has substantially lower ratings (from less than 10 to 65), with the majority of the reorganization site (43.6 acres) being rated 65.

(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the 11 United States Department of Agriculture in the National Range and Pasture Handbook, Revision 1, December 2003

The reorganization area does not currently support livestock for the production of food or fiber.

(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than four hundred dollars ($400) per acre

(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars ($400) per acre for three of the previous five calendar years

No part of the reorganization area is planted with fruit or nut-bearing trees, vines, bushes, or crops that have generated any value at all for the past several decades. As shown on Figure 2.6-1 of this EIR, vegetation types on site within the reorganization area include native habitats, non-native grassland, eucalyptus woodland, disturbed habitat, and ornamentals.

The reorganization area would be considered to be prime agriculture by LAFCO as two of the five applicable qualifications listed in Government Code Section 56064 have been met.

Legislative Policy L-101 (Preservation of Open Space and Agricultural Lands) states the policy of the Commission is to:

(1) Discourage proposals that would convert prime agricultural or open space lands to other uses unless such an action would not promote the planned, orderly, efficient development of an area or the affected jurisdiction has identified all prime agricultural lands within its sphere of influence and adopted measures that would effectively preserve all prime agricultural lands within its sphere of influence and adopted measures that would effectively preserve prime agricultural lands for agricultural use;

(2) Require prezoning of territory (city only) to identify areas subject to agricultural preservation and planned development;

(3) Follow San Diego LAFCO's adopted procedures to define agricultural and open space lands and to determine when a proposal may adversely affect such lands.

In accordance with the State Government Code 56377 and the San Diego LAFCO Policy L-101 (described above), the County is found to have adopted measures to effectively identify and preserve prime agricultural lands within its sphere of influence for agricultural use, but that preservation of the Project site for agricultural purposes would be inconsistent with the objectives of state law and adopted local policies because:

(1) Agriculture is the fifth largest component of the County's economy (County General Plan 2011). The County ranks agricultural retention high in priority as an element of overall County health. As of the 2011 General Plan Update, the County was noted as having the fourth highest number of farms of any county in the country, and the third highest number of farms in California. As a result, the County has a substantial program required for agricultural issues review. Standard procedure is for new projects to complete a full review in accordance with the County Guidelines for Determining Significance and Report Format and Content Requirements. These guidelines require review of soil capability classifications, Storie indices, water availability, etc. The County has expanded the definition of an agricultural resource over State definitions to capture smaller farms (State standards use a minimum 10-acre mapping unit). County recognition of the variety of soils that may contribute to valuable agricultural production, as well as the understanding that even small parcels may contain valuable agricultural potential, contributes to an accurate perception of the value of farmlands in the County, and results in a conservative approach (i.e., likely to show impact with required mitigation) to agricultural lands review. As a result, it can be seen that the County has adopted measures that would effectively identify and preserve prime agricultural lands for agricultural use.

For this particular Project location, however, the reorganization area has been identified by the County for non-agricultural use since 1981, a period of over 30 years. As noted by Mr. Tom Escher of the County Department of Agriculture in 1983, for reasons described above in this section, despite the presence of prime soils, non-agricultural development of the Project parcels would not impact the preservation of agricultural land in San Diego County. The long-term expectation of developed non-agricultural uses in this area is also reflected in the current County of San Diego's General Plan (2011) which anticipates development of the Project with commercial, limited impact industrial and residential uses in this area (Figure LU-A-&, the Fallbrook Land Use Map) as part of the overall smart growth designs for the County. The prior General Plan showed that the area would be developed with intensive uses related to a previously anticipated Hewlett Packard Industrial Park and associated uses. The current Project, with associated development of the reorganization parcels, is a cornerstone project for development in the I-15 and SR-76 quadrant, and would provide commercial and employment opportunities in this area that are part of a three-project development vision (and for which the other two projects,

Campus Park and Meadowood), have already received approval. Inability of the County to develop the inactive prime agricultural areas identified within the reorganization area would not only "not promote" the planned, orderly, efficient development of this quadrant, but would actively impede it.

(2) County planning and zoning both characterize the mixed commercial and residential uses in the reorganization area as a more desirable long-term objective for the Project site than agriculture. According to County Board of Supervisor directive, loss of agricultural resources and use of prime soils in this area do not constitute a significant agricultural impact in this area. Ongoing and increased agricultural activities in the nearby Rice Canyon area, however, continue to play a vital part in County agriculture and are protected from the ongoing and planned increase in non-agricultural development by the separating ridgeline. Adopted County planning and zoning designations both envision mixed use of this property rather than preserving the land exclusively for agricultural use. As described in Section 3.1.5 of this EIR, the County regional land use category for the reorganization area is identified as "Village." The Fallbrook Community Plan designates Campus Park West property as General Commercial, Limited Impact Industrial, Village Residential (VR-7.3), and Specific Plan Area (2.8). (The Specific Plan Area designation is used where a specific plan has been adopted [in this case, the 1983-approved Hewlett Packard Campus Park Specific Plan, SP-83-01]). As early as June 1, 1988, the San Diego County Board of Supervisors approved the Interstate 15/Highway 76 Interchange Master Specific Planning Area (MSPA). This area encompassed approximately 1,178 acres of land located within four quadrants of the interchange. The Project site is located within the MSPA and is identified as Hewlett Packard "Campus Park" (Areas A, C and D of Specific Plan 83-01). Because of its location at the intersection of an interstate highway and a major state highway, the MSPA envisions this area as a logical node for future development. The MSPA states that:

> *The principal land use components of the proposed plan include the adopted Campus Park/Hewlett Packard industrial/research park Specific Plan to convert approximately 100 acres of mobile home park [the anticipated land use prior to 1988] to an industrial/research park use…or to retain it for residential uses. Also proposed are residential areas to meet some of the anticipated housing needs of the community and the industrial park, supporting neighborhood commercial areas….*

The Zoning Ordinance identifies the Project site as S90 – Holding Area. This is an interim zone intended to prevent premature development from occurring in areas that are lacking adequate public services and facilities or where the determination of appropriate zoning regulations is precluded by planning proposals or by a lack of geographic, demographic, economic, or other information. In this instance, the zone addresses the lack of existing water and sewer lines to the site, both of which are being addressed as part of the current Project.

(3) The County's General Plan provides guidance for the protection, promotion and preservation of agriculture in the County. Aspects of agriculture are discussed in the

General Plan's Conservation and Open Space Element, Land Use Element, and community plans. The General Plan elements identify policies and action programs to analyze, improve and promote agriculture, and to monitor agricultural conversion, where necessary. Specific to LAFCO interests, policies are specifically focused on support of agricultural economic competitiveness and protection of agricultural operations from encroachment by incompatible land uses. The community plans address protection, promotion and preservation of agriculture on a community-by-community basis. The County has also developed ordinances and programs that provide for implementation of County policies. These include: the San Diego County Agricultural Enterprises and Consumer Information Ordinance; the Board of Supervisors Policy I-33 Support and Encouragement of Farming in San Diego County and Policy I-38 Agricultural Preserves, and the San Diego County Farming Program.

The San Diego County Agricultural Enterprises and Consumer Information Ordinance is similar to the California Right to Farm Act. The ordinance defines and limits the circumstances under which agricultural enterprise activities, operations, and facilities will constitute a nuisance. The ordinance recognizes that the commercial agricultural industry in the County of San Diego is a significant element of the County's economy and a valuable open space/greenbelt resource for San Diego County residents. The ordinance establishes a procedure whereby prospective purchasers of property are notified of the inherent potential conditions associated with agricultural operations found throughout the unincorporated area. Board of Supervisor Policy I-38 sets forth policies for the implementation of the California Land Conservation Act of 1965, known as the Williamson Act. Policy I-38 establishes criteria for the establishment, modification and disestablishment of an agricultural preserve including processing requirements, application fees, and hearing requirements. The Support and Encouragement of Farming in San Diego County Policy http://www.sdcounty.ca.gov/cob/policy/I-133.pdf] was adopted in 2005.The policy established the Board's commitment, support, and encouragement of farming in San Diego County through establishment of partnerships with landowners and other stakeholders to identify, secure, and implement incentives that support the continuation of farming as a major industry in San Diego. The intent is to develop and implement programs designed to support and encourage farming in San Diego County. The goals of the San Diego County Farming Program are to promote economically viable farming in San Diego County and to create land use policies and programs that recognize the value of working farms to regional conservation efforts. Development of a framework for the Farming Program established a partnership between the County of San Diego, the San Diego County Farm Bureau, UC Cooperative Extension/Farm and Home Advisors, and the American Farmland Trust.

(4) Excluding open space areas associated with the San Luis Rey River, the Monserate Mountain Preserve, and the Engel Family Preserve; the I-15 and SR-76 quadrant area has largely transitioned over a number of years from agriculture to other developed uses. The limited agricultural cultivation on portions of the Project site outside of the reorganization area represents a remnant of the neighborhood's transition.

(5) The Project is not proposing infrastructure extensions or other improvements which would impact existing off-site agricultural operations. In addition, in the one area where the Project would abut existing agriculture (a grove located south of SR-76), Project design requires a wall between the existing agricultural and proposed commercial uses. As a result, implementation of the proposed development would not result in significant project-level or cumulative impacts to adjacent agricultural resources.

(6) LAFCO policies support preservation of open space as well as prime agriculture. The development associated with the proposed reorganization area proposes to devote approximately 31 acres (approximately 27 percent of the site) to permanent open space, with appropriate buffers and fencing to preserve sensitive biological resources.

(7) In 2011, the County included over 300,000 acres in agricultural production. The long-term feasibility of this site for commercial farming is limited and would not be considered particularly valuable or offer a significant opportunity in the larger context of the region's agricultural resources. Although class I or II soils exist on part of the reorganization area, 90 percent of agriculture in San Diego County is conducted on soils which are not classified by LAFCO law as prime.

In conclusion, implementation of the Proposed Project would convert land considered to be Prime Farmland by LAFCO to non-agricultural use. For the reasons discussed above, however, the Proposed Project would not significantly impact agricultural resources as conversion to other uses would conform to San Diego LAFCO Policy L-101 and the Cortese-Knox-Hertzberg Act of 2000.

Table 3.2-1
CAMPUS PARK WEST SOIL CLASSIFICATIONS

Soil Map Unit Name	Class	Storie Index	Project Ac/ Reorg Ac
Grangeville fine sandy loam, 0 to 2 percent slopes	II	81	22.4/ 8.2[1]
Ramona sandy loam, 2 to 5 percent slopes	II	65	43.6/ 43.6
Ramona sandy loam, 5 to 9 percent slopes	III	58	3.1/ 3.1
Ramona sandy loam, 5 to 9 percent slopes, eroded	III	51	9.0/ 9.0
Ramona sandy loam, 9 to 15 percent slopes, eroded	IV	48	18.1/ 18.1
Riverwash	VIII	-10	0.001/ 0.0
Tujunga sand, 0 to 5 percent slopes	IV	39	1.2/ 0.0
Visalia sandy loam, 2 to 5 percent slopes	II	81	19.1/ 16.0
Total			116.5/ 98.0

[1] Approximately 2.1 acres of the Grangeville fine sandy loam, 0 to 2 percent slope acreages, are associated with the Caltrans decertification areas, both of which are outside the reorganization area).

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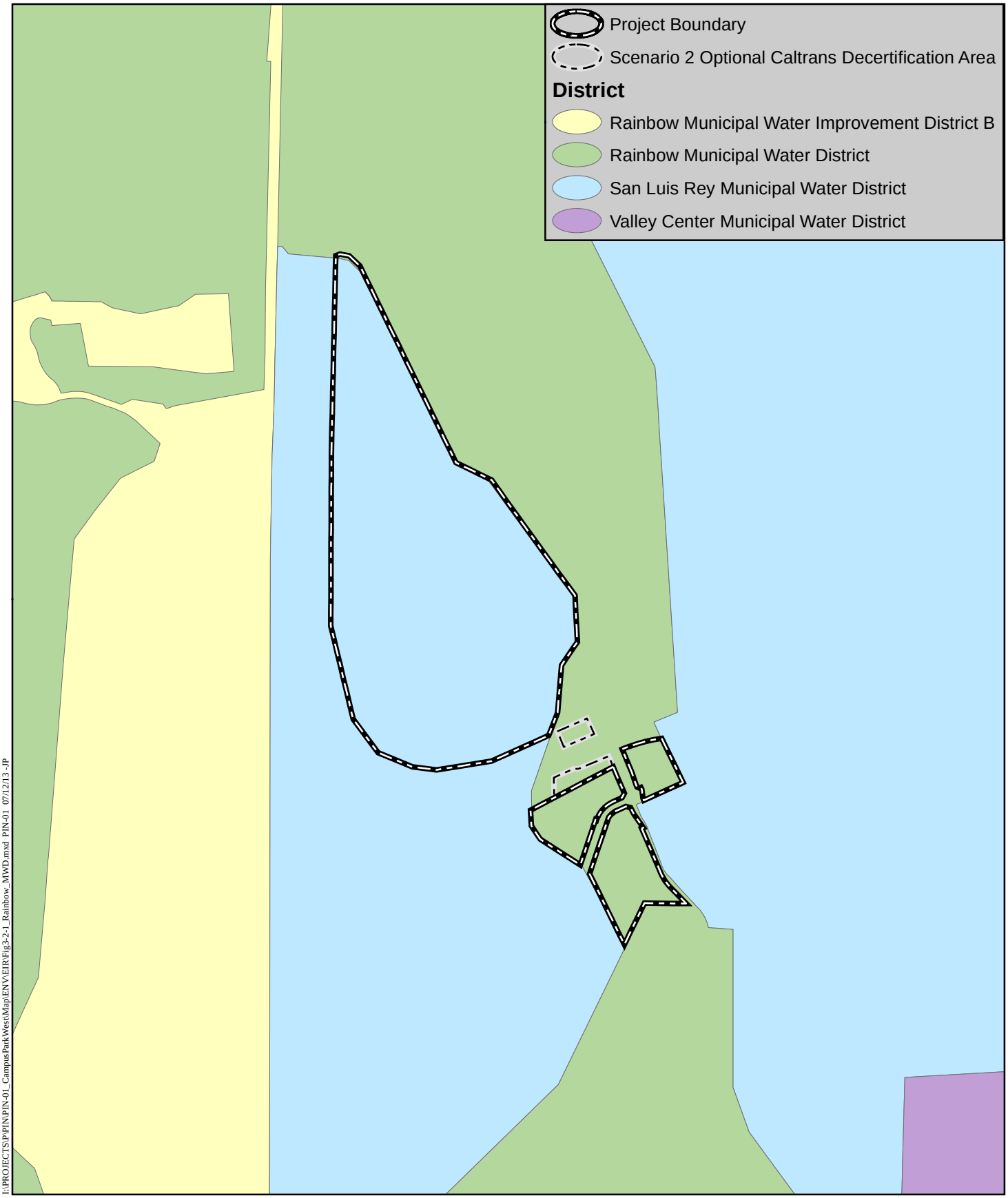


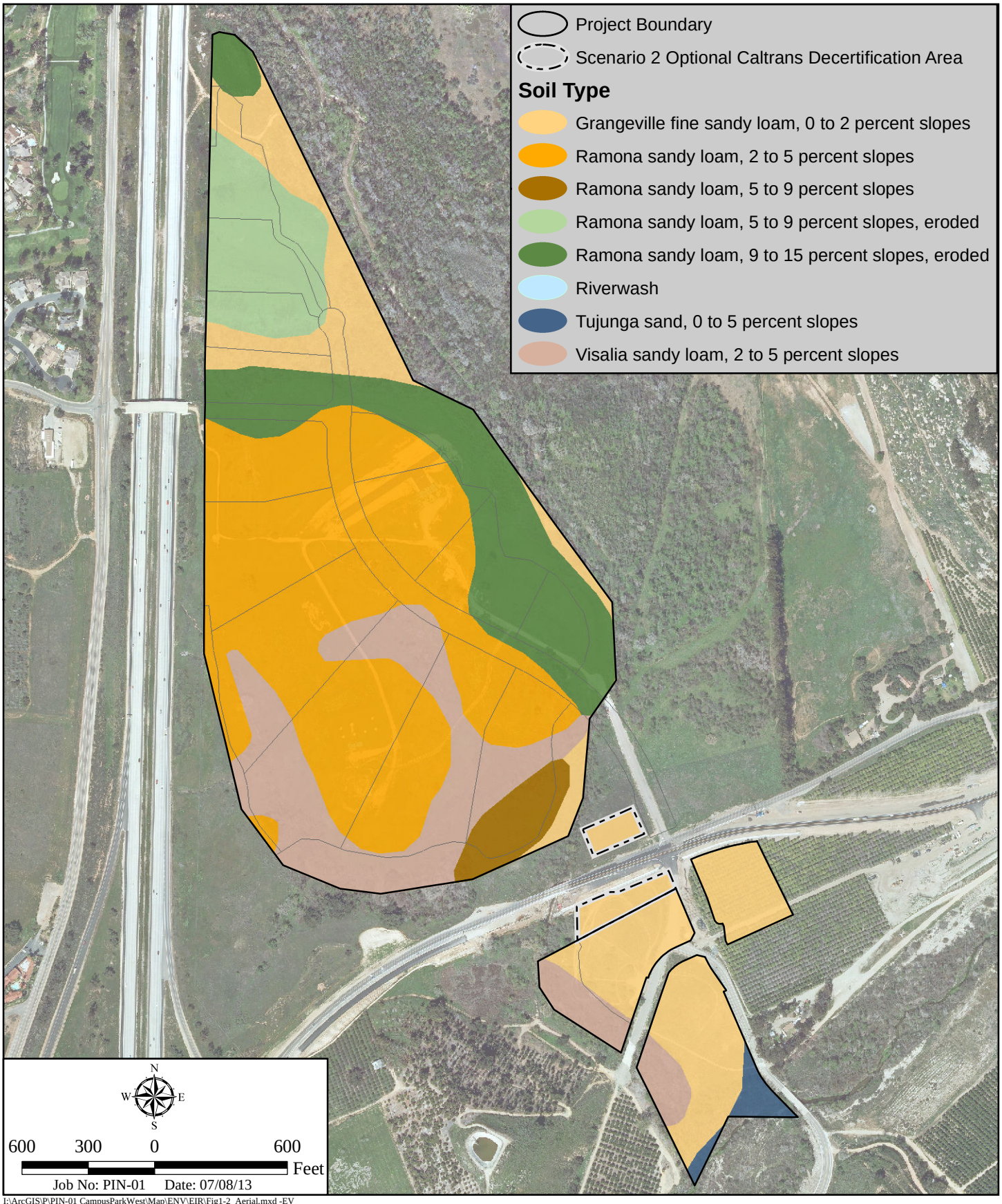
Water District Boundaries

CAMPUS PARK WEST

HELIX Environmental Planning

N 0 1,000 Feet

Figure 3.2-1



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Soils

CAMPUS PARK WEST

HELIX Environmental Planning

Figure 3.2-2

3.2.2 Recreation

The topic of recreation was not addressed in either the 1981 or 1983 certified EIRs. The Initial Study in the NOP for the Project noted that although the previous EIRs did not address recreation, no analysis is warranted because the Project would include recreation amenities for future residents.

County Parks and Recreation Department provides parks and recreational opportunities for residents and visitors in the vicinity of the Project. The more than 40,000 acres of recreational facilities within the County include local and regional parks (active and passive), campgrounds, 300 miles of trails, fishing lakes, recreation centers and sports complexes, ecological preserves, and open space preserves. County recreational facilities in the vicinity of the Project include Wilderness Gardens Preserve, Guajome Park, Fallbrook Sports Park, Live Oak County Park, Don Dussault Park, and Rainbow Sports Park.

The General Plan recreational facilities standard is 15 acres of recreational uses per 1,000 population. New development is required to provide a portion of this requirement. The standard is 3 acres per 1,000 persons unless the unincorporated areas of the County already exceed this standard, in which case a standard of 5 acres per 1,000 persons is applied. The current estimated population for the unincorporated County area is 678,270 (County General Plan EIR 2011:2-14); therefore, the General Plan requirement would be satisfied by approximately 2,035 to 3,390 acres of parkland.

Although the County's current 40,000 plus acres of parkland far exceed the County's parkland goal, park demand is generally increased through the increasing residential population. The Project would include a maximum of 283 multi-family residences, which would increase the demand for recreational facilities. Assuming an estimated population of 2.95 people per household (SANDAG 2009), it is assumed that the project would increase population by 835. Based on the need for 5 acres of parkland per 1,000 residents for new development, this would lead to a demand for approximately 4.2 acres of parkland.

The Proposed Project would provide land or payment of Park Land Dedication Ordinance (PLDO) funds, as required by the County. The PLDO is the mechanism that enables the funding or dedication of local parkland in the County. The PLDO establishes several methods by which developers may satisfy their park requirements. Options include the payment of park fees, the dedication of a public park, the provision of private recreational facilities, or a combination of these methods. PLDO funds must be used for the acquisition, planning, and development of local parkland and recreation facilities.

The San Luis Rey River Park is located south of the Project site, and the Project would provide connection to this park via a proposed pathway along Pankey Road/Shearer Road that would connect to a trail identified in the San Luis Rey River Park Master Plan. The Project also would provide sidewalks and pathways along the Project's roadways, which would be used by pedestrians and bicyclists. Project detention basins and adjoining perimeter areas also may be designed as passive open space areas for residential and commercial users where appropriate. Finally, although not necessary to address recreational needs of the Project, if approved, adjacent

properties such as Campus Park would be developed with public recreational facilities (e.g., trails, trail staging area, active sports park) that could be used by future Project residents and would be accessible via Project-connecting sidewalks or pathways. The development of Palomar College also would allow Project residents to utilize the college's playing fields.

Taking all of the above into consideration, recreation demands generated by the Project would be satisfied through the inclusion of connections to adjacent recreational amenities (including connections to a future trail within the San Luis Rey River Park) and payment of PLDO fees or dedication of land that would be used for development of local parkland as needed. Recreation impacts would be **less than significant**.

CHAPTER 4.0

PROJECT ALTERNATIVES

CHAPTER 4.0 – PROJECT ALTERNATIVES

4.1 Rationale for Alternative Selection

Section 15126.6(a) of the State CEQA Guidelines requires the discussion of "a reasonable range of alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." The Proposed Project was determined to result in potentially significant and unmitigable direct and/or cumulative impacts related to aesthetics, air quality, and transportation/traffic. The Project was also determined to have significant (or potentially significant) direct, indirect and/or cumulative but mitigated impacts to biological resources, cultural resources, noise, and paleontology.

Section 15126.6(f) of the CEQA Guidelines states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The State CEQA Guidelines provide several factors that should be considered in regard to the feasibility of an alternative. Those factors include: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated). The following five alternatives are evaluated in Subchapters 4.2 through 4.6 of this chapter:

- No Project/No Development Alternative
- No Project/Existing Specific Plan Alternative
- General Plan Alternative
- Reduced Footprint Alternative
- Fewer Residential Units Alternative

Each of these alternatives was selected in order to avoid or minimize significant impacts associated with the proposed project as analyzed in this Supplemental EIR. Specifically, the following criteria were considered.

The No Project/No Development Alternative was included because it would allow retention of uses similar to those currently existing on site, thereby avoiding both construction-period and long-term impacts (i.e., to aesthetics, air quality and transportation/traffic) associated with development of the proposed project.

The No Project/Existing Specific Plan Alternative was included because it represents the uses approved by the Board of Supervisors for the Project site in the original Specific Plan in 1983.

The General Plan Alternative was included to provide a comparison between the Proposed Project and the current long-term plan for the Project site contained in the County General Plan (adopted in 2011).

The Reduced Footprint Alternative was included in this analysis in order to reduce the development footprint in areas where sensitive habitats occur and, therefore, minimize impacts to biological resources and place more acreage into biological open space. The Reduced Footprint Alternative also would have the added benefit of reducing traffic and traffic-related environmental impacts, such as to air quality and noise.

The Fewer Residential Units Alternative was selected because it would reduce the intensity of development while still achieving the internal capture rate (30 percent) for trips generated within the Interstate 15/Highway 76 Interchange Master Specific Planning Area (MSPA) community, of Campus Park West, Campus Park and Meadowood projects.

These five alternatives represent a reasonable range for alternatives, as defined in the State CEQA Guidelines, because they present feasible alternate development patterns that would reduce and/or eliminate significant impacts associated with the Proposed Project. These alternatives are compared to the impacts of the Proposed Project (with an overview of Proposed Project and alternative impacts provided in Table 4-1, Comparison of Project Alternative Impacts to Proposed Project Impacts), and are assessed relative to their ability to meet the basic objectives of the Proposed Project. In addition to the above described alternatives, residential design elements of alternatives addressed in the 1981 Sycamore Springs Specific Plan EIR are also incorporated by reference into this Subsequent EIR. These would replace multi-family design uses in PA 3 of the Proposed Project. Modifications to this residential area would be as described for the Reduced Density Alternative (which would replace PA 3 multi-family uses with single-family homes on two to five acres), and the Uniform Density Alternative (which would replace PA 3 multi-family uses with single-family homes on 2.75 acres each). These alternatives are additionally discussed in the Project Findings.

As described in Subchapter 1.1, Project Objectives, the Proposed Project includes the following overall objectives:

- Create a mix of land uses for the Campus Park West Specific Plan area that is compatible with and contributes to the existing character and planned balanced mix of land uses proposed for the SR-76 and I-5 quadrant communities, as well as community and resource agency open space planning goals and objectives.
- Provide housing, retail, and jobs so that residents have an opportunity to work and shop within a walkable/bikeable distance to their homes.
- Conserve significant environmental resources consistent with the goals of the Fallbrook Community Plan and the MCSP.
- Develop a logical multi-modal Project transportation network encouraging safe and efficient travel throughout the Project and neighboring areas.
- Provide for adequate public services and facilities to accommodate the permitted Specific Plan land uses.
- Create a unique identity for the Project which is compatible with surrounding development and the character of the Fallbrook community.
- Incorporate sustainable design concepts into the development.

4.1.1 Alternatives Considered But Rejected from Further Study

The following alternatives were considered but ultimately rejected for detailed consideration as discussed below:

Alternative Location

In accordance with CEQA Guidelines Section 15126.6(f)(2), an alternative project site location should be considered if development of another site is feasible, and if development of another site would avoid or substantially lessen significant impacts of the Proposed project. Factors that may be considered when identifying an alternative site location include the size of the site, its location, the General Plan (or Community Plan) land use designations, and availability of infrastructure. CEQA Guidelines Section 15126.6(f)(2)(A) states that a key question in looking at an off-site alternative is "…whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."

Appropriateness of the Proposed Project is initially based on approved proposed uses in the 1983 Campus Park Specific Plan. That plan was developed to take advantage of its location at the intersection of two major County thoroughfares, having been developed specifically for the site's geographic location along the I-15 corridor and consistency with the County's long-range plans for I-15/SR-76 node development.

The Project Applicant purchased 116.5 acres of the approved 1983 Specific Plan area, with the intention of developing a mixed-use project consistent with the overall objectives of the Specific Plan. As a mixed-use proposal, the Proposed Project would be sited in an area already slated for development, and would offer amenities to the surrounding existing residential uses in addition to or exceeding those in the approved 1983 Specific Plan (e.g., light industrial opportunities and more extensive commercial development).

No other similar, 116.5-acre, property is known to be available for development in the immediate vicinity (i.e., the I-15/SR-76 node as described). Specifically, the areas immediately to the east and north are proposed for approved development (Campus Park and Palomar College sites) currently being implemented, along with additional property further to the east (Meadowood site). The areas south of the San Luis Rey River have already been largely developed with single-family residences, while the areas west of I-15 include existing residential and commercial development (e.g., Pala Mesa Resort), as well as designated open space (Engel family Preserve).

If another parcel in the vicinity of the Project site were to become available, associated development would likely result in impacts similar to those identified for the Proposed Project for issues including aesthetics, air quality, energy, noise, transportation/traffic, and utilities (i.e., due to the similar location and nature of development on such a parcel). Greater impacts related to land use inconsistency and community character aspects would be anticipated as a result of proposing denser mixed uses into an area not already planned for such development within the Fallbrook community. Additionally, depending on the specific characteristics of the

alternative off-site parcel, impacts greater than those identified for the Proposed Project could potentially result for issues including cultural resources, biological resources, and paleontology.

Because: (1) the property was purchased with the intention of developing the site with a density similar to that allowed under the existing approved Campus Park Specific Plan (as well as the 2011 General Plan), (2) there are no similar parcels in the vicinity suitable for this type and scale of development, and (3) it is unlikely that a local alternative site would substantially reduce significant environmental effects relative to the Proposed Project, the need for additional evaluation of an off-site alternative was rejected from further consideration.

Retention of Agriculture Alternative

Under the Retention of Agriculture Alternative, all development for PAs 1, 2, 3, 5 and 6 would occur exactly as identified for the Proposed Project (see Chapter 1.0). In PA 4, however, the Proposed Project would convert three acres of citrus south of SR-76 and adjacent to Shearer Crossing to general commercial uses. Under this alternative, the existing agricultural use would have remained and the commercial development in that planning area would be reduced.

Loss of three acres of agriculture would not constitute a significant impact under CEQA. As described in Section 3.2.1 of this EIR, "the Proposed Project [would] not impact the preservation of agricultural land in San Diego County. Because the site is virtually surrounded by proposed urban development, and is adjacent to I-15, this land is no longer regarded as prime agricultural land by the County's Department of Agriculture." Implementation of this alternative also would not support development of SR-76/I-15 node activities to the same level as proposed in the Specific Plan.

This consideration, combined with the conclusion that the conversion of three acres of agriculture in this area would be considered less than significant by the Board of Supervisors based on a prior evaluation of agriculture conversions in the (then current) Specific Plan, leads to a conclusion that the Retention of Agriculture Alternative should be rejected for its inability to reduce any significant impacts of the Project.

2005 Development Scenario Alternative

As described in Chapter 1 of this document, the initial project (Figure 1-3a) proposed by the current Applicant included 37 acres of residential use, comprised of 109 single-family residential units and 457 multi-family residential units. Office-professional uses were proposed on eight acres, and included another 87 multi-family residential units (for a total of 566 units). General commercial and freeway commercial uses were allotted 12 and 10 acres, respectively. Approximately 23 acres would have been in open space and parks. Based on the large number of residential units in an area planned for the I-15/SR-76 business node, and the presence of many residential uses immediately adjacent to I-15, the 2005 Development Scenario Alternative was rejected from further consideration and did not receive further study.

2008 Development Scenario Alternative

This design alternative (see Figure 1-3b of this EIR) deleted residential uses adjacent to I-15, deleted all single-family residential uses, and eliminated 136 multi-family residences. It also eliminated freeway commercial uses and expanded general commercial uses (to 28.81 acres). Approximately 20.6 acres of light industrial uses were added. In addition, a 6.1-acre mixed use area was identified to bridge the commercial and residential uses on site; this included 48 multi-family units in the area central to industrial, general commercial, and multi-family residential uses, respectively. Overall, residential uses totaled 369, a reduction of 197 units from the 2005 plan. Biological open space increased to approximately 23.4 acres, with another 11.8 acres of maintained open space. This design also realigned Pankey Road to the eastern perimeter of the site, with the goal being to decrease through traffic and to function as a buffer between developed uses and adjacent open space. The 2008 Development Scenario Alternative was rejected by County staff as comprising too high a development intensity, as well as not providing adequate buffer from on-site and adjacent wetlands within Horse Ranch Creek. In addition, the 2008 Development Scenario Alternative would not reduce any of the significant impacts of the Proposed Project. Therefore, it was rejected from additional consideration.

4.2 Analysis of the No Project/No Development Alternative

In accordance with Section 15126.6(e) of the State CEQA Guidelines, a "no project" alternative shall be evaluated, along with its impact. Two potential scenarios are identified for the no project alternative: (1) the No Project/No Development Alternative, in which the proposed development would not occur and the existing conditions at the Project site as of the date that the NOP was published would continue over the long-term; and (2) the No Project/Existing Plan Alternative, in which the proposed development would not occur and it is assumed that development would occur in the foreseeable future based on the existing allowable land use (i.e., in accordance with the approved Specific Plan). The two described no project alternatives are evaluated below.

4.2.1 No Project/No Development Alternative Description and Setting

Under the No Project/No Development Alternative, the Project site would remain in its current condition. The approximately 96 acres of native and non-native habitat throughout the site would remain intact, as would the existing paved/unpaved roadways, agricultural operations, and the unpermitted recreational use area for radio-controlled model aircraft and cars.

The proposed mixed-use community with multi-family residential, general commercial, mixed-use areas (residential/commercial), and limited impact industrial development would not be constructed (along with supporting infrastructure such as roadways, sewer pump station, and other utilities). In addition, the biological open space preserves and HOA-maintained landscaped areas (as well as related amenities such as trails and pathways) would not be created.

4.2.2 Comparison of the Effects of the No Project/No Development Alternative to the Proposed Project

The anticipated environmental effects resulting from the No Project/No Development Alternative are described below, along with comparisons of these impacts to the Proposed Project (refer to Table 4-1).

Aesthetics

Under the No Project/No Development Alternative, the Project site would continue to appear as a primarily undeveloped area. Potentially significant aesthetic impacts related to cumulative effects would be avoided under this alternative. Although the construction-period aesthetic impacts ultimately would be eliminated following Project buildout and vegetation maturity, long-term cumulative effects were determined to be unmitigable for the Proposed Project and would be avoided by this alternative.

Air Quality

The only activities associated with the No Project/No Development Alternative that would potentially affect air quality are ongoing vehicle-generated emissions from a small number of trips to and from the unpermitted radio-controlled model-aircraft recreation center and occasional agricultural activity support. Based on the minimal nature of emissions associated with these activities, no significant impacts to air quality would occur from the No Project/ No Development Alternative. Accordingly, this alternative would avoid the significant and unmitigated air quality impacts identified for the Proposed Project.

Transportation/Traffic

Very minimal traffic is currently generated from the existing on-site uses, including trips to and from the unpermitted recreation center and infrequent activities associated with agricultural operations. Accordingly, no significant transportation/traffic impacts would occur as a result of implementing the No Project/No Development Alternative. This alternative would thus avoid the significant and unmitigated transportation impacts identified for the Proposed Project, although associated upgrades from the implementation of (or contribution to) General Plan Mobility Element goals would also not occur.

Biological Resources

The No Project/No Development Alternative would avoid the significant, direct and indirect impacts to biological resources identified for the Proposed Project, with generally minor levels of existing encroachment expected to continue (e.g., from the unpermitted recreation use area for radio-controlled model aircraft). Specific biological impacts identified for the Proposed Project, which would be avoided by this alternative include: (1) direct and indirect (e.g., noise-related) effects to the federally and state-listed as endangered least Bell's vireo; and (2) approximately 60 acres of impacts to sensitive habitats including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub habitat and non-native grassland.

Cultural Resources

While no documented historic or prehistoric resources occur within the Project site, the potential exists for currently unknown cultural resources to be present. In addition, off-site facilities identified under the Proposed Project could potentially impact recorded prehistoric and historic sites. Because the No Project/No Development Alternative would not result in any related on- or off-site grading (or other activities which could encounter unknown resources), no associated significant impacts to cultural resources would occur. Based on these conditions, this alternative would avoid the potential significant (but mitigable) impacts to cultural resources identified for the Proposed Project.

Noise

Current activities on the site (e.g., vehicular access and on-site unpermitted recreation and agricultural uses) create no discernible noise to off-site sensitive noise receptors. Accordingly, no significant noise effects would occur as a result of the No Project/No Development Alternative. This alternative would therefore avoid the potential noise impacts identified for the Proposed Project, although these impacts were determined to be less than significant with implementation of identified mitigation measures and design features.

Paleontology

The No Project/No Development Alternative would not result in any on- or off-site grading (or other activities) which could generate significant impacts from disturbance of sensitive paleontological resources. Accordingly, this alternative would avoid the potentially significant paleontology impacts identified for the Proposed Project, although these impacts were determined to be less than significant with implementation of identified mitigation measures.

Conclusions

The No Project/No Development Alternative would avoid a number of significant and potentially significant impacts associated with the Proposed Project, including: (1) significant and unmitigated aesthetic, air quality and transportation/traffic impacts; and (2) significant and/or potentially significant impacts related to biological resources, cultural resources, noise, and paleontology, all of which would be avoided or reduced below a level of significance through identified mitigation measures and/or design features. The No Project/No Development Alternative would, however, be inconsistent with existing land use designations under the approved Specific Plan, as well as the General Plan. This alternative would also fail to meet all of the Proposed Project objectives listed above in Subchapter 4.1.

4.3 Analysis of the No Project/Existing Specific Plan Alternative

4.3.1 No Project/Existing Plan Alternative Description and Setting

This alternative addresses the land uses and densities currently permitted under the approved Specific Plan for the Project site. The uses proposed for the Campus Park West portion of the

approved Specific Plan include a 10.5-acre neighborhood commercial center and open space area located south of SR-76, a 150-unit condominium development located in the northern portion of the Campus Park West Project site (north of Pala Mesa Drive), and a 336-unit mobile home park located in the southern portion of the Campus Park West Project site (between Pala Mesa Drive and SR-76, refer to Figure 3.1.5-2). Because the 10.5-acre area south of SR-76 was identified as neighborhood commercial center and biological open space," those parcels potentially could contain either more or less development than proposed under the Proposed Project, although it is considered most likely that they would be in open space. Although this alternative would be lower in development intensity than the Proposed Project, the same potable water and sewage lines and on-site roads (and focused off-site road improvements) would still be required to service and gain access to the various residential and commercial uses that would be constructed on site under the No Project/Existing Specific Plan Alternative (refer to Figure 3.1.5.2). As shown in the figure, the location of Pankey Road would not, however, be consistent with the alignment presented in the Proposed Project. Similarly, the pump stations discussed in Chapter 1.0 would still be required to serve the Project site and Campus Park.

4.3.2 Comparison of the Effects of the No Project/Existing Specific Plan Alternative to the Proposed Project

A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the No Project/Existing Specific Plan Alternative would introduce a number of large-scale buildings and related development into a primarily undeveloped portion of the I-15 corridor valley. The associated buildings, pavement and related features would replace the existing expanses of low-growing grassland and clusters of trees within the Project site. Accordingly, this alternative would result in on-site land uses generally similar to the Proposed Project, with the following exceptions: (1) the overall extent of commercial development under this alternative would be less than that for the Proposed Project; (2) the overall extent of open space under this alternative would be less than that for the Proposed Project (based on the inclusion of approximately two acres of commercial development in the southernmost portion of the site in an area proposed as open space by the Proposed Project); (3) areas identified for commercial and industrial use under the Proposed Project would encompass residential sites (condominiums and mobile homes) under this alternative; and (4) the configuration and character of mobile home residential units under the No Project/Existing Specific Plan Alternative would be different from multi-family units in equivalent areas of the Proposed Project site (refer to Figure 3.1.5-2). Additionally, the construction-period impacts would be less under this alternative.

The mobile homes would be anticipated to be lower scale than the 35-foot-high structures proposed for the Project. A large configuration of over 300 mobile homes also could be notable in this area—the relatively small size of the homes, combined with the individual hardscape layouts surrounding them would be visually different from surrounding developments, which feature larger-scale structures. These would also be placed in the most highly visible portion of

the site, immediately adjacent to the I-15/SR-76 interchange. Their lower scale, however, would balance their smaller size, with residual visual effects being roughly equivalent to the Proposed Project. Based on the described conditions, this alternative would be anticipated to result in overall similar aesthetic impacts as identified for the Proposed Project. Specifically, this would include significant and unmitigable cumulative impacts related to past and ongoing changes to the visual character and quality of the area, and physical changes that would substantially detract from the panoramic vistas available from scenic highways and recreational areas.

Air Quality

Based on the ADT figures identified below for the approved Campus Park Specific Plan, the No Project/Existing Specific Plan Alternative would generate much fewer trips (and related mobile source emissions) than the Proposed Project. Accordingly, this alternative would conform to the RAQS and SIP since those planning documents are based on the population and development assumptions contained in the existing Specific Plan (and previous General Plan). Similar to the Proposed Project, this alternative would not expose sensitive receptors to substantial pollutant concentrations because the amount of traffic at local intersections would be less than the volumes analyzed at local intersections, which were not significant. In contrast, however, the approximately 51 percent reduction in trips from the Proposed Project also would result in emissions of this alternative not exceeding air quality standards or contribute substantially to an existing or projected air quality violations related to VOCs. It is anticipated that exceedance of the PM_{10} emission threshold would still occur, although to a small extent.

Thus, the No Project/Existing Specific Plan Alternative would avoid most of the significant and unmitigated long-term operational impacts to air quality that would occur under the Proposed Project.

Transportation/Traffic

Trip generation associated with the No Project/Existing Specific Plan Alternative was calculated at 7,861 ADT in the 1983 EIR, including 1,411 ADT for the mobile home park, 1,200 ADT for the condominiums, and 5,250 ADT for the neighborhood commercial area. The trip generation rates used for these calculations include 4.2 trips per unit for the mobile home park (336 units), 8 trips per DU for the condominiums (150 units), and 500 trips per acre for commercial uses (10.5 acres). However, should the Project site be developed now, updated trip generation rates would be applied, as described below.

Assuming current trip generation rates, the No Project/Existing Specific Plan Alternative would produce a total daily volume of 15,480 ADT, comprised of 1,680 ADT for mobile home units (at 5 trips per DU), 1,200 ADT for the condominium units (at 8 trips per DU) and 12,600 ADT for the neighborhood commercial development (at 1,200 trips per acre). The number of daily trips generated by the No Project/Existing Specific Plan Alternative would, therefore, be substantially fewer (i.e., 51 percent fewer trips) than the Proposed Project, and would produce a commensurate reduction in direct and cumulative impacts to local roads and intersections in the near-term. Similar to the Proposed Project, the No Project/Existing Specific Plan Alternative

would not result in the degradation of any roadways to worse than LOS D in the buildout condition.

Based on the described information, the No Project/Existing Plan Alternative would likely avoid some, but not all, of the significant unmitigable transportation impacts identified for the Proposed Project.

Biological Resources

Impacts to biological resources under the No Project/Existing Specific Plan Alternative would encompass similar areas as those identified for the Proposed Project, as well as an additional approximately two-acre area of non-native grassland in the southernmost portion of the site. Specifically, significant impacts identified for the Proposed Project include: (1) direct and indirect (e.g., noise-related) effects to the federally and state-listed as endangered least Bell's vireo; (2) approximately 58 acres of impacts to sensitive habitats including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub habitat and non-native grassland and (3) inconsistency with the MHPA hardliner established for the Project site. In addition, by not realigning Pankey Road and constructing it closer to wetlands (and the sensitive wildlife that inhabit that habitat) the No Project/Existing Specific Plan Alternative would cause detrimental direct and indirect edge effects that would not occur under the Proposed Project. Accordingly, the No Project/Existing Specific Plan Alternative would result in significant direct and indirect effects to the least Bell's vireo, as well as impacts to approximately 60 acres of the noted habitats. Similar to the Proposed Project, all identified biological impacts under the No Project/Existing Specific Plan Alternative would be reduced below a level of significance through mitigation measures such as appropriate habitat preservation and/or creation.

Cultural Resources

No documented historic or prehistoric resources occur within the Project site, although the potential exists for currently unknown cultural resources to exist therein. In addition, off-site facilities identified under the Proposed Project could potentially impact recorded prehistoric and historic sites. Based on these conditions, impacts to cultural resources under the No Project/Existing Specific Plan Alternative are associated with the potential to encounter currently unknown sites during project grading and construction. These potential impacts are essentially the same as those described for the Proposed Project. Similar to the Proposed Project, potential impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures.

Noise

Per the above discussion of transportation/traffic, the No Project/Existing Specific Plan Alternative would result in reduced ADT and associated lessened potential short- and long-term on-site noise impacts. Similar to the Proposed Project, any potential noise impacts under this alternative would be reduced below a level of significance through applicable mitigation measures.

Paleontology

The grading and construction footprint for the No Project/Existing Specific Plan Alternative would be the same as that noted for the Proposed Project, with the exception of the previously described additional two-acre commercial area in the southernmost portion of the site. Accordingly, this alternative would result in potentially significant impacts to paleontological resources similar to those identified for the Proposed Project. As described for the Proposed Project, any potential paleontological impacts under this alternative would be reduced below a level of significance through applicable mitigation measures.

Conclusions

The No Project/Existing Specific Plan Alternative would lessen some, but not all, of the significant and unmitigable impacts identified for the Proposed Project under the issues of air quality and transportation/traffic. Similarly, this alternative would lessen significant and mitigable noise impacts identified for the Proposed Project, although these conclusions are also qualified as noted above. The No Project/Existing Specific Plan Alternative would result in similar contributions to significant and unmitigable cumulative aesthetic impacts as identified for the Proposed Project, based on visual conflicts with existing visual quality/character, and effects to panoramic views from scenic highways and recreational areas in concert with other projects proposed east of I-15. This alternative would also result in similar significant but mitigable impacts as described for the Proposed Project in the areas of biological resources, cultural resources and paleontology, based on the generally comparable nature, location and extent of associated development.

Based on the above discussion, the No Project/Existing Specific Plan Alternative could result in an overall minor reduction of impacts identified for the Proposed Project, although it would fail to meet the identified Project objectives regarding creating a mix of land uses; provision of both housing and employment opportunities; and incorporating sustainable design concepts and balanced environmental, economic and social equity concerns. Additionally, this alternative would not conserve significant environmental resources consistent with the goals of the Fallbrook Community Plan and the MCSP since it would not feature the same amount of open space as the proposed project.

4.4 Analysis of the General Plan Alternative

4.4.1 General Plan Alternative Description and Setting

This alternative would result in development of a mix of uses identified in the General Plan (Figure 4-1, General Plan Alternative). Unlike the Proposed Project, which includes a mix of commercial, industrial and residential uses, the majority of the site under this alternative would be designated as general commercial. Specifically, general commercial development would encompass approximately 79.2 acres in the western portion of the northern Project site (i.e., north of SR-76), with 5.6 acres of limited impact industrial located in the northernmost portion of the project adjacent to I-15. Approximately 12.4 acres in the eastern portion of the northern Project site would be designated as multi-family residential, with a density of 7.3 DUs

per acre allowing up to 90 multi-family DUs. Areas south of SR-76 are identified as Specific Plan, with potential uses in this area including neighborhood commercial and open space consistent with the Campus Park West portion of the adopted Specific Plan. Although this alternative would be lower in development intensity than the Proposed Project, the same potable water and sewage lines and on-site roads (and focused off-site road improvements) would still be required to serve and gain access to the various residential, industrial and commercial uses that would be constructed on site under the General Plan Alternative (refer to Figure 4-1). Similarly, the pump stations discussed in Chapter 1.0 would be required to serve the Project site and Campus Park.

4.4.2 Comparison of the Effects of the General Plan Alternative to the Proposed Project

The anticipated environmental effects resulting from the General Plan Alternative are described below. A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the General Plan Alternative would introduce structures and related facilities (e.g., pavement associated with circulation roads and parking lots) in a primarily undeveloped area of the I-15 valley corridor. Associated views within the Project site are characterized by low-growing grassland, clusters of trees in areas such as drainages, and a rugged mountainous backdrop. This alternative would have an overall appearance similar to the Proposed Project, and the extent of grading would be essentially the same. Native/non-native vegetation and open space (along with minor existing development) would be replaced with industrial/commercial buildings and multi-family residences, as well as associated facilities such as roads, infrastructure and landscaping. This alternative would result in fewer multi-family residential structures than the Proposed Project, with a much lower residential density (7.3 DUs per acre versus 20 DUs per acre) and no mixed-use areas. Commercial buildings would dominate the views from I-15, and would generally block views to the residential area farther east. The rural areas in the southern portion of the site would provide a more open visual character for viewers from SR-76, although these open areas would be flanked by adjacent commercial uses to the north. The I-15 Corridor Scenic Preservation Guidelines address development on ridgelines (not anticipated under this alternative), grading, fire suppression, public utilities, parking, lighting as well as architecture and landscape design. The Proposed Project has been carefully designed to comply with the requirements of these guidelines, and County staff also would require this alternative to meet these same standards. As a result, it is assumed that the General Plan Alternative would be consistent with the I-15 Corridor Scenic Preservation Guidelines. Similar to the Proposed Project, implementation of this alternative would be anticipated to result in significant and unmitigable visual effects related to long-term cumulative changes to views from a designated scenic highway, and alteration of the overall local visual character.

Air Quality

The General Plan Alternative would not conform to the RAQS and SIP assumptions as those plans are based on the land use assumptions (and related emissions) associated with the prior General Plan, which anticipated more residential units, fewer general commercial uses, and less industrial development than anticipated in the current General Plan. No sensitive receptors would be exposed to substantial pollutant concentrations (similar to the Proposed Project). Under the General Plan Alternative, impacts to air quality would be similar to those described for the Proposed Project, particularly for construction-related emissions, since site preparation and grading requirements would be similar. All criteria pollutants during construction would be below the daily thresholds. Compared to the proposed project, General Plan Alternative emissions from mobile sources would be less than the Proposed Project, due to fewer total residential units and smaller industrial/office spaces and a commensurate reduction in local vehicle trips. It is estimated that under the General Plan Alternative, emissions of criteria pollutants during near-term operations would exceed the daily thresholds for VOCs and PM_{10}. Because operational emissions under this alternative would be associated primarily with vehicular traffic from on-site trips, there would be no feasible mitigation measures to reduce emissions below a level of significance. Therefore, significant unavoidable operational impacts of the long-term criteria pollutants VOCs and PM_{10} associated with alternative-related traffic also would be above the significance criteria.

CO emissions potentially resulting in CO hot spot impacts would be lower under the General Plan Alternative than under the Proposed Project, due to the corresponding decrease in traffic. Decreased traffic at area intersections would result in decreased congestion at area intersections. This, in turn, would decrease CO emissions and no CO hot spots would be produced, similar to the Proposed Project.

Diesel emission impacts would also be lower under the General Plan Alternative than under the Proposed Project, because of the decrease in traffic and associated fewer diesel vehicle trips. Decreased diesel vehicle trips would result in lower diesel particulate emissions, thereby decreasing the diesel toxic emission impacts.

In summary, the General Plan Alternative would result in would result in lower air quality emissions than the Proposed Project, but these emissions would still exceed identified screening thresholds.

Transportation/Traffic

The General Plan Alternative would generate a total of 29,328 external ADT, including 600 trips from light industrial uses, 28,000 trips from general commercial development, 728 trips from village residential sites (LLG 2014). Based on these figures, potential transportation/traffic impacts from this alternative are anticipated to be slightly less than, but generally similar to, those identified for the Proposed Project. This alternative would result in slightly fewer ADT than the Proposed Project and lower overall a.m. and p.m. peak period volumes. This alternative, like the Proposed Project, would include significant and unmitigated direct impacts, as well as significant and mitigable cumulative impacts, to a number of roadway segments and

intersections in the near-term. Similar to the Proposed Project, the General Plan Alternative would not result in the degradation of any roadways to worse than LOS D in the buildout condition.

Biological Resources

Impacts to biological resources under the General Plan Alternative would encompass similar areas as those identified for the Proposed Project, although the portion of the site located south of SR-76 could potentially experience fewer impacts to DCSS and non-native grassland, depending on the nature of the planned uses in that portion of the site. That is, as described in Section 4.4.1, this area could potentially be developed for uses such as neighborhood commercial (which could entail biological impacts) or could be preserved as open space. Significant biological impacts identified for the Proposed Project include: (1) direct and indirect (e.g., noise-related) effects to the federally and state-listed as endangered least Bell's vireo; and (2) approximately 57 acres of impacts to sensitive habitats including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub habitat and non-native grassland. Under this alternative, no open space areas would occur on the project site. The lack of dedicated open space would, however, result in greater impacts to biological resources than the Proposed Project.

Similar to the proposed project, the General Plan Alternative would have the potential to result in direct and/or indirect impacts to special status plant and wildlife species, riparian habitat, and other sensitive natural communities and wetlands from the development of proposed land uses. When compared to the Proposed Project, the General Plan Alternative would result in greater impacts to the least Bell's vireo, yellow-breasted chat, coastal sage scrub, southern riparian forest, southern riparian scrub and non-native grasslands, due to the loss of the open space areas proposed under the Project. The General Plan Alternative would also result in greater impacts to wildlife corridors than the Proposed Project because the small, southeastern portion of the site that functions as a regional wildlife corridor would not be protected as open space.

Accordingly, the General Plan Alternative would result in significant direct and indirect effects to the least Bell's vireo, as well as impacts to the noted sensitive habitats. Similar to the Proposed Project, all identified biological impacts under this alternative would be reduced below a level of significance through mitigation measures such as appropriate habitat preservation and/or creation.

Cultural Resources

No documented historic or prehistoric resources occur within the Project site, although the potential exists for currently unknown cultural resources to be present. In addition, off-site facilities identified under the Proposed Project could potentially impact recorded prehistoric and historic sites. Based on these conditions, impacts to cultural resources under the General Plan Alternative are associated with the potential to encounter currently unknown sites during grading and construction. These potential impacts are essentially the same as those described for the Proposed Project, although they would potentially not include all or part of the portion of the site located south of SR-76. Similar to the Proposed Project, potential impacts to cultural resources

under this alternative would be reduced below a level of significance through applicable mitigation measures.

Noise

Development of the General Plan Alternative would generate short-term (construction) noise impacts similar to the Proposed Project (due to the similar nature and extent of related activities), but would be expected to slightly decrease long-term noise impacts (due to the generation of approximately seven percent fewer ADT). Similar to the Proposed Project, potential noise impacts under this alternative would be significant but mitigable through the implementation of identified mitigation measures.

Paleontology

The grading and construction footprint for the General Plan Alternative would be generally the same as that noted for the Proposed Project, with the potential exception of the area south of SR-76. Accordingly, this alternative would result in potentially significant impacts to paleontological resources similar to those identified for the Proposed Project. As described for the Proposed Project, any potential paleontological impacts under this alternative would be reduced below a level of significance through applicable mitigation measures.

Conclusions

The General Plan Alternative would be expected to result in impacts generally similar to those described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise, and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as design features (e.g., development types and potentially more or less open space preservation south of SR-76), as well as related modifications to factors including traffic generation, air quality emissions, noise generation, water demand and wastewater generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The General Plan Alternative would fail to meet the identified Project objectives to create a mix of land uses on these parcels to the same extent as the Proposed Project since the commercial uses would be expanded, and residential and limited impact industrial uses would be minimized.

4.5 Analysis of the Reduced Footprint Alternative

4.5.1 Reduced Footprint Alternative Description and Setting

This alternative would delete development of the northernmost portion of the Project site north of Pala Mesa Drive in order to reduce the intensity of proposed development and increase the amount of biological open space. Specifically, 6.6 acres of limited impact industrial development would be eliminated from the Proposed Project, which proposes a total of

12.6 acres of this use. All other uses south of Pala Mesa Drive proposed under the Proposed Project would remain the same, including the 283 DUs and 53 acres of general commercial acreage. Figure 4-2, Reduced Footprint Alternative, illustrates the configuration of this alternative.

Although this alternative would be lower in development intensity than the Proposed Project, the same potable water and sewage lines and on-site roads (and focused off-site road improvements) would be required to serve and gain access to the various residential, industrial and commercial uses that would be constructed on site under the Reduced Footprint Alternative (refer to Figure 4-1). Similarly, the pump stations discussed in Chapter 1.0 would still be required to serve the Project site and Campus Park.

4.5.2 Comparison of the Effects of the Reduced Footprint Alternative to the Proposed Project

The anticipated environmental effects resulting from the Reduced Footprint Alternative are described below. A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the Reduced Footprint Alternative would introduce structures and related facilities (e.g., pavement associated with circulation roads and parking lots) in a primarily undeveloped area of the I-15 valley corridor. Associated views within the Project site are characterized by low-growing grassland, clusters of trees in areas such as drainages, and a rugged mountainous backdrop. This alternative would have a similar overall appearance to the Proposed Project, although the extent of grading would be less since the northern 6.6 acres would be placed in biological open space (Figure 4-2). Native/non-native vegetation and open space (along with minor existing development) would be replaced with industrial/commercial buildings and multi-family residences, as well as associated facilities such as roads, infrastructure and landscaping. Industrial/office buildings north of Pala Mesa Drive would be minimized, and Diegan coastal sage scrub, non-native grassland, coast live oak woodland and southern riparian forest would be retained. This retention of native habitat in the northern portion of the project, however, is not anticipated to visually outweigh the magnitude of development to the south, especially when combined with other development in this quadrant. The I-15 Corridor Scenic Preservation Guidelines address development on ridgelines (not anticipated under this alternative), grading, fire suppression, public utilities, parking, lighting as well as architecture and landscape design. The Proposed Project has been carefully designed to comply with the requirements of these guidelines, and County staff also would require this alternative to meet these same standards. As a result, it is assumed that the Reduced Footprint Alternative would be consistent with the I-15 Corridor Scenic Preservation Guidelines. Similar to the Proposed Project, implementation of this alternative would be anticipated to result in significant and unmitigable visual effects related to long-term cumulative changes to views from a designated scenic highway, and alteration of the overall local visual character.

Air Quality

The Reduced Footprint Alternative would conform to the RAQS, and no sensitive receptors would be exposed to substantial pollutant concentrations, similar to the Proposed Project. Under the Reduced Footprint Alternative, impacts to air quality also would be similar to those described for the Proposed Project, particularly for construction-related emissions, since site preparation and grading requirements would be similar. All criteria pollutants during construction would be below the daily thresholds. Compared to the Proposed Project, Reduced Footprint Alternative emissions from mobile sources would be lower, due to the reduced industrial office space (approximately 57,500 s.f., or 62,500 fewer s.f. of industrial office than the Proposed Project) and a commensurate reduction in local vehicle trips. It is estimated that under the Reduced Footprint Alternative, emissions of criteria pollutants during operation would exceed the daily thresholds for VOCs and PM_{10}. Because operational emissions under this alternative would be associated primarily with vehicular traffic from on-site trips, there would be no feasible mitigation measures to reduce emissions below a level of significance. Therefore, significant unavoidable operational impacts of the criteria pollutants VOCs and PM_{10} due to Project-related traffic would be above the significance criteria in 2025 even under the Reduced Footprint Alternative.

CO emissions potentially producing CO hot spot impacts would be lower under the General Plan Alternative than under the Proposed Project, due to the corresponding decrease in traffic. Decreased traffic at area intersections would result in decreased congestion at area intersections. This, in turn, would decrease CO emissions and CO hot spots would not be anticipated, similar to the Proposed Project.

Diesel emission impacts also would be lower under the Reduced Footprint Alternative than under the Proposed Project, because of the decrease in traffic and associated less diesel vehicle trips. Decreased diesel vehicle trips would result in lower diesel particulate emissions, thereby decreasing the diesel toxic emission impacts.

Therefore, the Reduced Footprint Alternative would result in would result in lower air quality emissions than the Proposed Project but impacts would still be significant and unmitigated in the long-term.

Transportation/Traffic

The Reduced Footprint Alternative would generate a total of 29,996 external ADT, including 1,200 trips from light industrial uses, 26,500 trips from general commercial development, and 2,296 trips from residential (LLG 2014). Therefore, this alternative would amount to a 1,400 ADT trip reduction from traffic anticipated for the Proposed Project, including minor reductions during a.m. and p.m. peak hours (refer to Table 13-1 in Appendix D). Based on these figures, potential transportation/traffic impacts from this alternative are anticipated to be slightly less, but generally similar to, those identified for the Proposed Project. This alternative, like the Proposed Project, would include significant and unmitigated direct impacts, as well as significant and mitigable cumulative impacts, to a number of roadway segments and intersections in the

near-term. Similar to the Proposed Project, the Reduced Footprint Alternative would not result in the degradation of any roadways to worse than LOS D in the Buildout condition.

Biological Resources

Under the Reduced Footprint Alternative, open space areas in the northern portion of the project site would be increased. Similar to the Proposed Project, these areas would be preserved within an easement and would be subject to a Resource Management Plan (RMP). When compared to the Proposed Project, the increase in dedicated open space would result in fewer impacts to biological resources (such as wetlands and wetland-dependant species such as least Bell's vireo).

Similar to the Proposed Project, the Reduced Footprint Alternative would have the potential to result in direct and/or indirect impacts to special status plant and wildlife species, riparian habitat, and other sensitive natural communities and wetlands from the development of proposed land uses. The Reduced Footprint Alternative would reduce impacts to Palmer's sagewort, coastal sage scrub, non-native grassland, southern riparian forest and coast live oak woodland, due to the proposed increase in open space in the northern portion of the site. The Reduced Footprint Alternative would result in similar impacts to wildlife corridors as the Proposed Project because the small, southeastern portion of the site that functions as a regional wildlife corridor would remain protected as open space. Similar to the Proposed Project, the Reduced Footprint Alternative would also be required to comply with local, state and federal policies related to biological resources. Overall, however, when compared to the Proposed Project, the increase in open space preservation under the Reduced Footprint Alternative would result in fewer direct and indirect biological resource impacts. All significant impacts would be mitigated to below a level of significance, similar to the Proposed Project.

Cultural Resources

No documented historic or prehistoric resources occur within the Project site, although the potential exists for currently unknown cultural resources to exist therein. In addition, off-site facilities identified under the Proposed Project could potentially impact recorded prehistoric and historic sites. Based on these conditions, impacts to cultural resources under the Reduced Footprint Alternative are associated with the potential to encounter currently unknown sites during grading and construction. These potential impacts are essentially the same as those described for the Proposed Project. Similar to the Proposed Project, potential impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures.

Noise

Development of the Reduced Footprint Alternative would generate similar short-term (construction) noise impacts as the Proposed Project (due to the similar nature and extent of related activities), but would be expected to slightly decrease long-term noise impacts (due to the generation of approximately four percent fewer ADT as noted above under Transportation/Traffic). Similar to the Proposed Project, potential noise impacts under this alternative would be significant but mitigable through identified mitigation measures.

Paleontology

The grading and construction footprint for the Reduced Footprint Alternative would be generally the same as that noted for the Proposed Project, with the exception of the northernmost 6.6 acres of the Project site, which would be preserved as biological open space. Accordingly, this alternative would require less grading but would still result in potentially significant impacts to paleontological resources similar to those identified for the Proposed Project. As described for the Proposed Project, any potential paleontological impacts under this alternative would be reduced below a level of significance through applicable mitigation measures.

Conclusions

The Reduced Footprint Alternative would be expected to result in generally similar impacts as described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise, and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as design features (e.g., development types and potentially more open space preservation in the northern portion of the site), as well as related modifications to factors including traffic generation, air quality emissions, noise generation, water demand and wastewater generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Reduced Footprint Alternative would meet the identified Project objectives, although to a slightly lower extent than the Proposed Project relative to the ability to provide a mix of employment opportunities on site.

4.6 Analysis of the Fewer Residential Units Alternative

4.6.1 Fewer Residential Units Alternative Description and Setting

This would eliminate all residential use (35 units) from the mixed-use core within commercial area in PA 2, and 25 units from the PA 3 multi-family residential (see Figure 4-3, Fewer Residential Units Alternative, which illustrates these changes to the development area). These unit reductions would allow the Applicant to develop up to 223 DUs (as compared to the 283 proposed DUs). All other uses associated with the Proposed Project would remain the same, including the acres of limited impact industrial development and general commercial. Although this alternative would be lower in development intensity than the Proposed Project, the same potable water and sewage lines and on-site roads (and focused off-site road improvements) would still be required to serve and gain access to the various residential, industrial and commercial uses that would be constructed on site under this alternative. Similarly, the pump stations discussed in Chapter 1.0 would still be required to serve the Project site and Campus Park.

4.6.2 Comparison of the Effects of the Fewer Residential Units Alternative to the Proposed Project

Aesthetics

Similar to the Proposed Project, implementation of the Fewer Residential Units Alternative would introduce structures and related facilities (e.g., pavement associated with circulation roads and parking lots) in a primarily undeveloped area of the I-15 valley corridor. Associated views within the Project site are characterized by low-growing grassland, clusters of trees in areas such as drainages, and a rugged mountainous backdrop. This alternative would have a similar overall appearance to the Proposed Project, and the extent of grading would be the essentially the same. Native/non-native vegetation and open space (along with minor existing development) would be replaced with industrial/commercial buildings and multi-family residences, as well as associated facilities such as roads, infrastructure and landscaping. This alternative would result in fewer multi-family residential structures than the Proposed Project, with a lower residential density and no residential uses mixed into the commercial uses west of Pankey Road. This would not necessarily be visible, however. The loss of residential use in PA 2 would not be anticipated to reduce structure mass—the buildings would simply be dedicated wholly to commercial uses. Some reduction in density and mass could be visible from higher viewing elevations, where the viewer looks down upon, or over, the Project site and can look into PA 3. For those viewers, the loss of 35 residential units would be expected to show increased open space and less structure in the eastern portion of the Project. For viewers more in line with the Project, however (such as along I-15, commercial buildings would dominate the views from I-15, and would generally block views to the residential area east of Pankey Road. The I-15 Corridor Scenic Preservation Guidelines address development on ridgelines (not anticipated under this alternative), grading, fire suppression, public utilities, parking, lighting as well as architecture and landscape design. The Proposed Project has been carefully designed to comply with the requirements of these guidelines, and County staff also would require this alternative to meet these same standards. As a result, it is assumed that the Fewer Residential Units Alternative would be consistent with the I-15 Corridor Scenic Preservation Guidelines. Similar to the Proposed Project, implementation of this alternative in combination with other development in the quadrant would be anticipated to result in significant and unmitigable visual effects related to long-term cumulative changes to views from a designated scenic highway, and alteration of the overall local visual character.

Air Quality

The Fewer Residential Units Alternative would conform to the RAQS, and no sensitive receptors would be exposed to substantial pollutant concentrations similar to the Proposed Project. Under the Fewer Residential Units Alternative, impacts to air quality would be similar to those described for the Proposed Project, particularly for construction-related emissions, since site preparation and grading requirements would be similar. All criteria pollutants produced during construction would be below the daily thresholds. Compared to the Proposed Project, the Fewer Residential Units Alternative emissions from mobile sources would be lower, due to fewer total residential units (which would translate to a 488 ADT reduction), and a commensurate reduction in local vehicle trips. It is estimated that under this alternative, emissions of criteria pollutants during Project operations would still exceed the daily thresholds for VOCs and PM_{10} because

operational emissions under this alternative would be associated primarily with vehicular traffic from on-site trips (and there would be no feasible mitigation measures to reduce emissions below a level of significance). In addition, there would still be overlap between operations and construction phases, which would result in near-term emissions that would exceed thresholds. Therefore, significant unavoidable operational impacts of the criteria pollutants VOCs and PM_{10} due to Project-related traffic would be above the significance criteria in 2025 under the Fewer Residential Units Alternative.

CO emissions potentially producing CO hot spot impacts would be lower under the Fewer Residential Units Alternative than under the Proposed Project, due to the corresponding decrease in traffic. Decreased traffic at area intersections would result in decreased congestion at area intersections. This, in turn, would decrease CO emissions and no CO hot spots would be anticipated, similar to the Proposed Project.

During construction, diesel emission impacts would also be lower under the Fewer Residential Units Alternative than under the Proposed Project, because of the decrease in traffic and associated less diesel vehicle trips. Decreased diesel vehicle trips would result in lower diesel particulate emissions, thereby decreasing the diesel toxic emission impacts.

Therefore, the Fewer Residential Units Alternative would result in would result in lower air quality emissions than the Proposed Project, but impacts would remain be significant and unmitigated in the long-term.

Transportation/Traffic

The Fewer Residential Units Alternative would generate a total of 30,908 ADT, including 2,600 trips from limited impact industrial uses, 26,500 trips from general commercial development, and 1,808 trips from multi-family residential (LLG 2014). This alternative would result in an anticipated 488 fewer ADT than the Proposed Project, with peak period flows reduced by 113 trips in the a.m. and 119 trips in the p.m. (refer to Table 13-1 in Appendix D), Potential transportation/traffic impacts from this alternative are therefore anticipated to be slightly less, but generally similar to those identified for the Proposed Project. This alternative, like the Proposed Project, would include significant and unmitigated direct impacts, as well as significant and mitigable cumulative impacts, to a number of roadway segments and intersections in the near-term. Similar to the Proposed Project, the Fewer Residential Units Alternative would not result in the degradation of any roadways to worse than LOS D in the Buildout condition.

Biological Resources

When compared to the Proposed Project, impacts related to special status plant and wildlife species, riparian habitat, other sensitive natural communities, federally protected wetlands, wildlife movement corridors, and local policies and ordinances, would be the same since the amount of graded area would not change under this alternative. As such, the development footprint and open space areas would remain the same as the Proposed Project.

Biological impacts related to project footprint would therefore remain the same as identified for the Proposed Project. Significant biological impacts identified for the Proposed Project include: (1) direct and indirect (e.g., noise-related) effects to the federally and state-listed as endangered least Bell's vireo; and (2) approximately 58 acres of impacts to sensitive habitats including southern riparian forest, southern riparian scrub, coast live oak woodland, Diegan coastal sage scrub habitat and non-native grassland. Accordingly, the Fewer Residential Units Alternative would result in significant direct and indirect effects to the least Bell's vireo. Similar to the Proposed Project, all identified biological impacts under this alternative would be reduced below a level of significance through mitigation measures such as appropriate habitat preservation and/or creation.

Cultural Resources

No documented historic or prehistoric resources occur within the Project site, although the potential exists for currently unknown cultural resources to be present. In addition, off-site facilities identified under the Proposed Project could potentially impact recorded prehistoric and historic sites. Based on these conditions, impacts to cultural resources under the Fewer Residential Units Alternative are associated with the potential to encounter currently unknown sites during grading and construction. Because the footprint of ground disturbance associated with this alternative is the same as the Proposed Project, potential impacts also are expected to be the same. Similar to the Proposed Project, potential impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures.

Noise

Development of the Fewer Residential Units Alternative would generate similar short-term (construction) noise impacts as the Proposed Project (due to the similar nature and extent of related activities), but would be expected to slightly decrease long-term noise impacts (due to the generation of approximately 488 ADT, or approximately two percent fewer ADT). Nonetheless, potential noise impacts under this alternative would be significant but mitigable through identified mitigation measures, similar to the Proposed Project.

Paleontology

The grading and construction footprint for Fewer Residential Units Alternative would be the same as that noted for the Proposed Project. Accordingly, this alternative would result in potentially significant impacts to paleontological resources similar to those identified for the Proposed Project. As described for the Proposed Project, any potential paleontological impacts under this alternative would be reduced below a level of significance through applicable mitigation measures.

Conclusions

The Fewer Residential Units Alternative would be expected to result in generally similar impacts to those described for the Proposed Project. Specifically, this would include potentially

significant and unmitigable impacts related to aesthetics, air quality and transportation/traffic; as well as significant (or potentially significant) but mitigated impacts for the issues of biological resources, cultural resources, noise, and paleontology. A number of these impacts may vary slightly from those identified for the Proposed Project, based on considerations such as reductions in units, as well as related modifications to factors including traffic generation, air quality emissions, noise generation, water demand and wastewater generation. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Fewer Residential Impacts Alternative would meet the identified Project objectives, although to a slightly lower extent than the Proposed Project relative to the ability to provide housing within a walkable distance of work and shops.

4.7 Environmentally Superior Alternative

Although the No Project alternatives would result in minimal to substantially reduced environmental impacts, Section 15126.6(e)(2) of the State CEQA Guidelines requires identification of an alternative other than the No Project as the environmentally superior alternative.

Based on the above CEQA requirement, the Reduced Footprint Alternative is identified as the environmentally superior alternative. This is the result of elimination of 6.6 acres of limited impact industrial use north of Pala Mesa Drive in PA 1 (see Figure 4-2); which would result in reduction of approximately 1,400 fewer ADT (with associated incremental improvements in Project-related traffic effects and air quality), as well as fewer biological impacts to non-native grassland, coast live oak woodland, southern riparian forest and Diegan coastal sage scrub; with a resultant increase in retained biological open space, as described in Section 4.5.2, above.

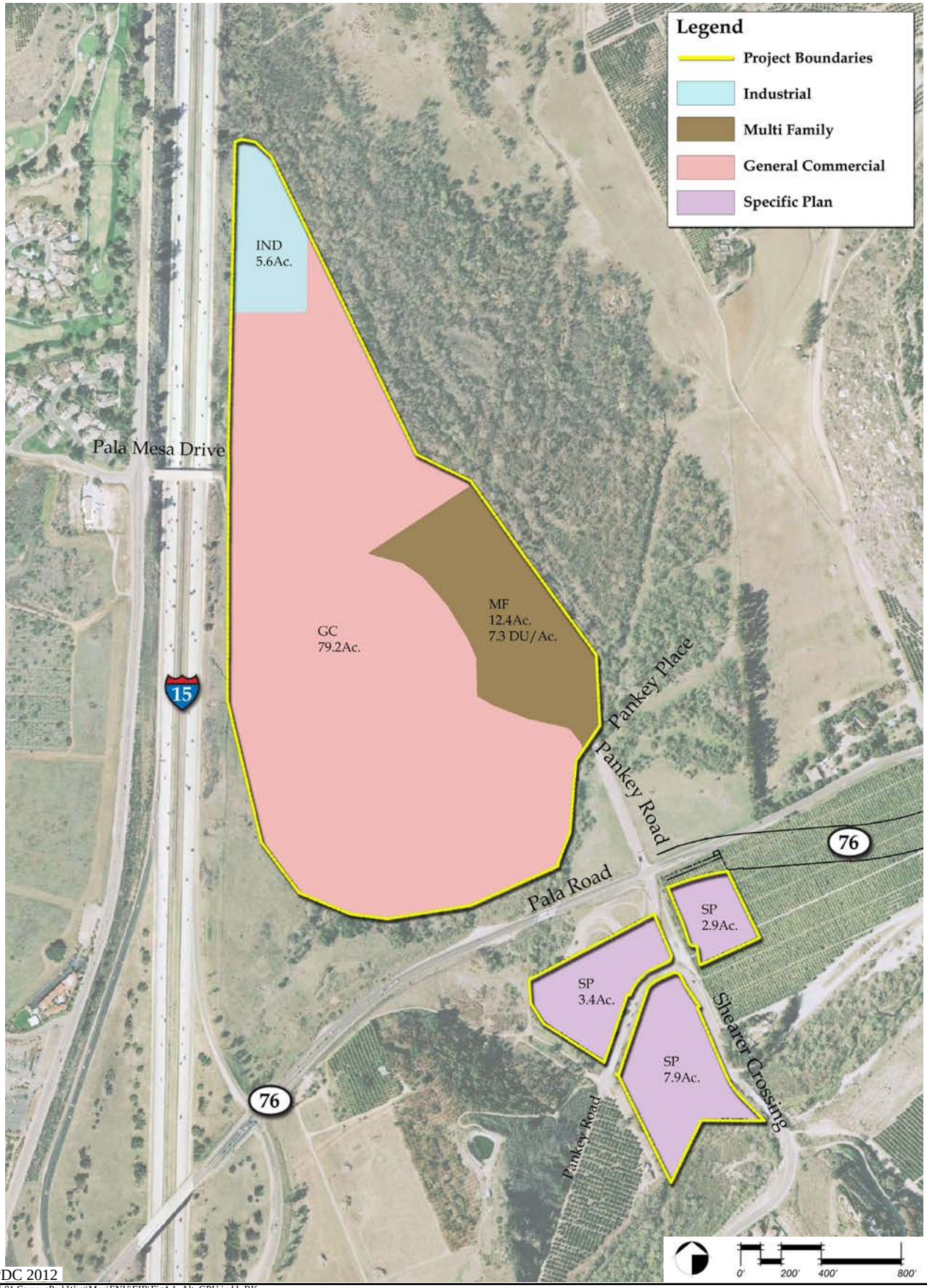
4.8 Summary of Alternatives

Table 4-1, below, summarizes the potential impacts identified for alternatives in comparison with those identified for the Proposed Project.

Table 4-1
COMPARISON OF PROJECT ALTERNATIVE IMPACTS TO PROPOSED PROJECT IMPACTS

Environmental Issue	Proposed Project	Alternative				
		No Project/ No Development	No Project/ Existing Specific Plan	General Plan	Reduced Footprint	Fewer Residential Units
Aesthetics	SU Direct and Cumulative	Less; NI	Similar; SU	Similar; SU	Similar; SU	Similar; SU
Air Quality	SU Direct and Cumulative	Less; NI	Less; SU	Similar; SU	Similar; SU	Similar; SU
Transportation/Traffic	SU Direct and SM Cumulative	Less; NI	Less; SU	Similar; SU	Similar; SU	Similar; SU
Biological Resources	SM	Less; NI	Greater; SM	Similar; SM	Less; SM	Similar; SM
Cultural Resources	SM	Less; NI	Similar; SM	Similar; SM	Similar; SM	Similar; SM
Noise	SM	Less; NI	Less; SM	Similar; SM	Similar; SM	Similar; SM
Paleontology	SM	Less; NI	Similar; SM	Similar; SM	Similar; SM	Similar; SM

NI = no impact
SM = significant but mitigable
SU = significant and unmitigable



Source: PDC 2012

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General Plan Alternative

CAMPUS PARK WEST

Figure 4-1

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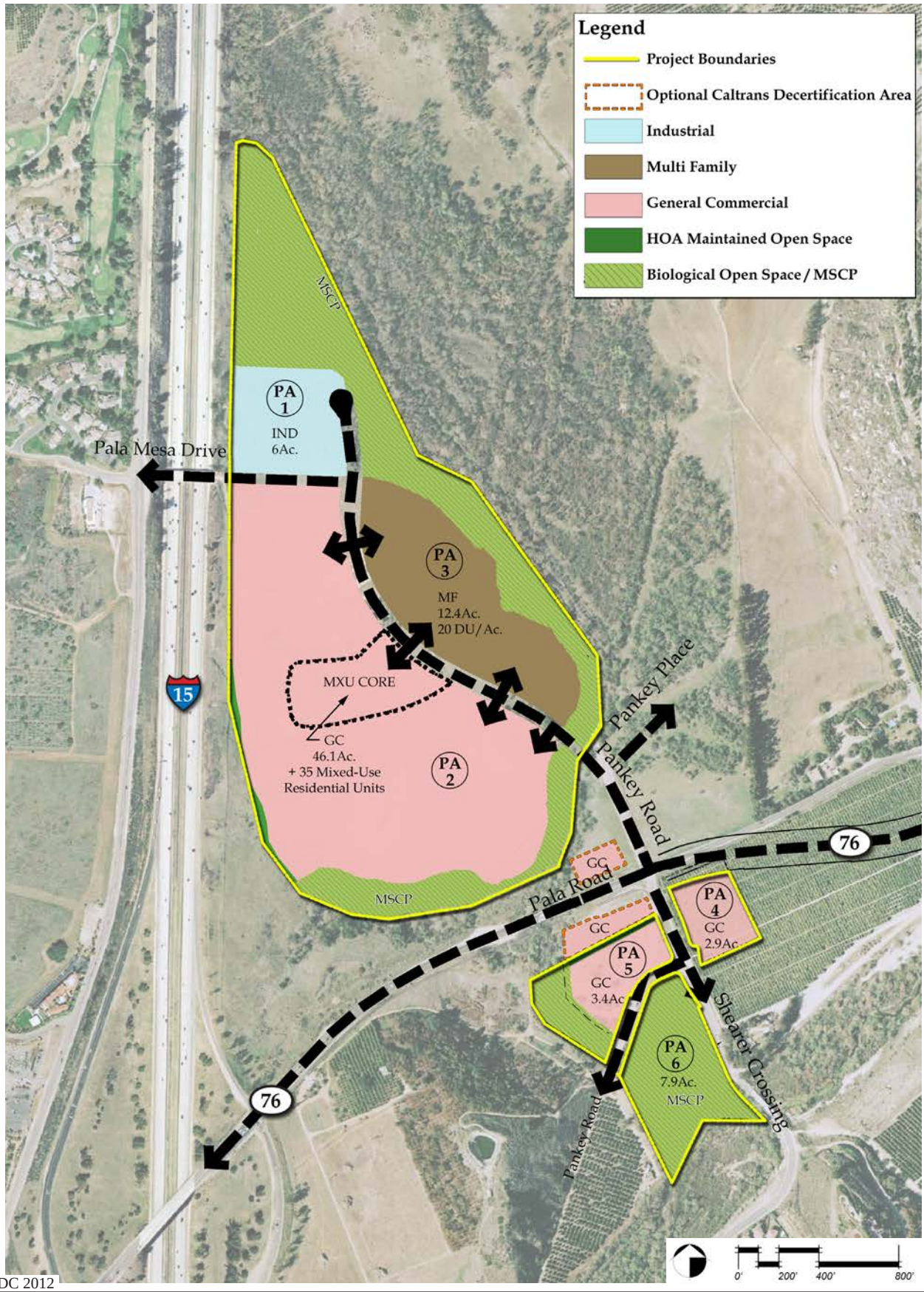

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Reduced Fo print Alternative

CAMPUS PARK WEST

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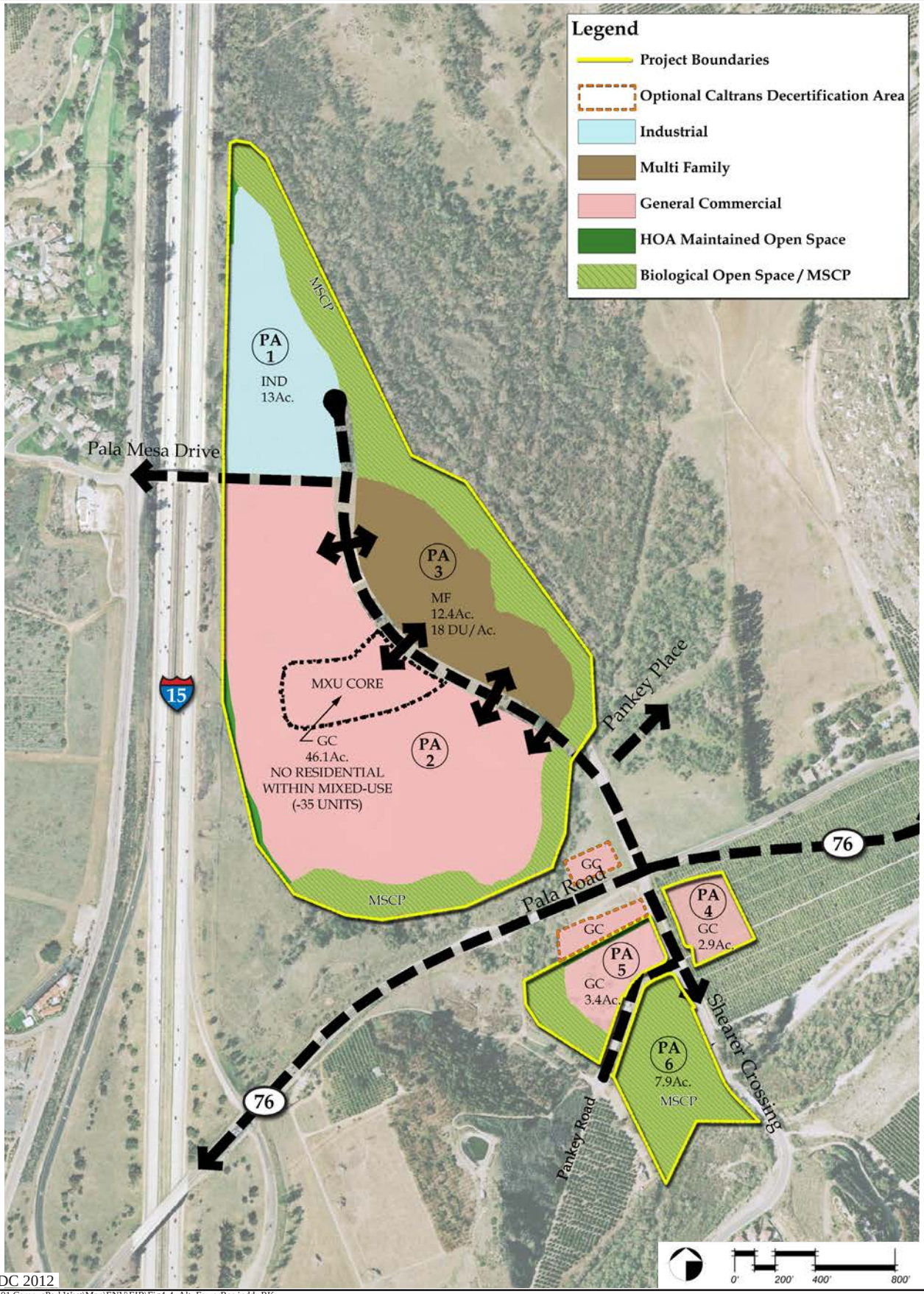
Figure 4-2



Source: PDC 2012

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Fewer Residential Units Alternative

CAMPUS PARK WEST

Figure 4-3

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CHAPTER 5.0

LIST OF REFERENCES

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CHAPTER 6.0

LIST OF EIR PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

CHAPTER 6.0 – LIST OF EIR PREPARERS AND PERSONS AND ORGANIZATIONS CONTACTED

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CHAPTER 7.0

LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS

CHAPTER 7.0 – LIST OF MITIGATION MEASURES AND ENVIRONMENTAL DESIGN CONSIDERATIONS

7.1 Comprehensive Listing of Mitigation Measures

7.1.1 Mitigation for Air Quality Impacts

M-AQ-1 Future tenants shall implement a Low VOC Consumer Products Educational Program through the provision of educational materials (such as a display case, kiosk, or brochures) regarding the use of Low-VOC paints and consumer products in a prominent area accessible to residents and employees.

M-AQ-4a All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, BACT documentation, and CARB operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/specifications shall be met unless one of the following circumstances exists and the contractor is able to provide proof that any of these circumstances exists:

- A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;
- A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the Proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or
- A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the proposed Project has the controlled equipment available for lease.

M-AQ-4b All on-road heavy-duty diesel trucks with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater used on site or to transport materials to and from the site shall comply with 2010 emission standards, where available. In addition, all on-road trucks shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel

emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified EPA rating, BACT documentation, and CARB or SDAPCD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. The above standards/ specifications shall be met unless the contractor is able to provide proof that any of these circumstances exists:

- A piece of specialized equipment is unavailable in a controlled form within the state of California, including through a leasing agreement;
- A contractor has applied for necessary incentive funds to put controls on a piece of uncontrolled equipment planned for use on the Proposed Project, but the application process is not yet approved, or the application has been approved, but funds are not yet available; or
- A contractor has ordered a control device for a piece of equipment planned for use on the proposed Project, or the contractor has ordered a new piece of controlled equipment to replace the uncontrolled equipment, but that order has not been completed by the manufacturer or dealer. In addition, for this exemption to apply, the contractor must attempt to lease controlled equipment to avoid using uncontrolled equipment, but no dealer within 200 miles of the Proposed Project has the controlled equipment available for lease.

M-AQ-4c The following measures, at minimum, shall be part of the contractor dust control plan:

- Contractors shall apply approved nontoxic chemical soil stabilizers to all inactive construction areas or replace groundcover in disturbed areas;
- Construction contractors shall provide temporary wind fencing around sites being graded or cleared;
- Trucks hauling dirt, sand, or gravel shall be covered or shall maintain at least two feet of freeboard in accordance with Section 23114 of the California Vehicle Code;
- During wet conditions, construction contractors shall install wheel washers where vehicles enter and exit unpaved roads onto paved roads or wash off tires of vehicles and any equipment leaving the construction site; and
- Trucks hauling materials such as debris or fill shall be fully covered while operating off the property site.

M-AQ-4d The following types of measures shall be required on construction equipment (including on-road trucks):

- Use diesel oxidation catalysts and catalyzed diesel particulate traps.
- Maintain equipment according to manufacturers' specifications.
- Restrict idling of construction equipment to a maximum of five minutes when not in use.
- Install high-pressure fuel injectors on construction equipment vehicles.

7.1.2 Mitigation for Transportation/Traffic Impacts

M-TR-1 Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening), which will improve these segments to four lanes by 2017 and mitigate the Project's direct impacts. In addition the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over build out of the Project.

M-TR-2 and 2a and M-TR-3 and 3a

Caltrans is currently constructing the SR-76 East Project (TransNet SR-76 Widening) and has completed improvements to the SB and NB ramp intersections identified in these impacts. In addition the Applicant has agreed to pay Caltrans $2.28 million toward the SR-76 East Project. The Applicant will pay this amount over buildout of the Project.

M-TR-4 A traffic signal warrant analysis will be performed prior to construction of the first unit to determine the need for a traffic signal. The Project Applicant shall install a traffic signal at Reche Road/Old Highway 395 based on the warrant analysis and final engineering to the satisfaction of the Director of PDS.

M-TR-5 Development of the Project would require signalization, widening and improvement of the SR-76/Pankey Road intersection, as follows:

- NB approach: provide two left lanes, one through lane and one right lane
- SB approach: provide one left lane, one through lane and two right lanes (with overlap phase)
- EB approach: provide two left lanes, two through lanes and one right lane
- WB approach: provide one left lane, one through lane and one right lane

M-TR-6 The Project will pay the TIF to mitigate significant cumulative impacts occurring during Existing Plus Cumulative Plus Project conditions along eight analyzed roadway segments, including:

- Five segments of Old Highway 395 from East Mission Road to SR-76 (all LOS E, except the segment from Reche Road to Stewart Canyon Road which is LOS F)
- Old Highway 395 from Dulin Road to West Lilac Road (LOS E)
- Reche Road from Live Oak Park Road to Gird Road (LOS E)
- Pala Mesa Drive from Wilt/Sage Road to Old Highway 395 (LOS E)

M-TR-7 and 7a

The Project will pay the TIF to mitigate significant cumulative impacts occurring during Existing Plus Cumulative Plus Project conditions along 11 segments of SR-76, including:

- Nine segments from Melrose Drive to I-15 SB ramps (LOS F)
- Rice Canyon Road to Couser Canyon Road (LOS F)
- Couser Canyon Road to Pala Mission Road (LOS F)

M-TR-7b The Project will pay the TIF to mitigate significant cumulative impacts occurring during Existing Plus Cumulative Plus **Scenario 2** conditions along the segment of SR-76 from Old Highway 395 to I-15 SB Ramps.

M-TR-8a The Project will pay the TIF to mitigate significant cumulative impacts occurring under Existing Plus Cumulative Plus Project conditions at the following 11 signalized intersections:

- East Mission Road/Old Highway 395 (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- Mission Road/I-15 SB ramps (LOS F during the p.m. peak period)
- Mission Road/I-15 NB ramps (LOS F during the p.m. peak period)
- SR-76/East Vista Way (LOS F during the a.m. and p.m. peak periods)
- SR-76/North River Road (LOS E during the p.m. peak period)
- SR-76/Olive Hill Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/South Mission Road (LOS E during the p.m. peak period)
- SR-76/Gird Road (LOS E during the p.m. peak period)
- SR-76/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

M-TR-8b The Project will pay the TIF to mitigate significant cumulative impacts occurring under Existing Plus Cumulative Plus **Scenario 2** conditions at the following two signalized intersections:

- SR-76/I-15 SB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)
- SR-76/I-15 NB ramps (LOS E during the a.m. peak period and LOS F during the p.m. peak period)

M-TR-9 The Project will pay the TIF to mitigate significant cumulative impacts occurring during Existing Plus Cumulative Plus Project conditions, at the following eight unsignalized intersections:

- Reche Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Stewart Canyon Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)
- Pala Mesa Drive/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)

- SR-76/Via Monserate (LOS F during the a.m. and p.m. peak periods)
- SR-76/Sage Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Pankey Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Rice Canyon Road (LOS F during the a.m. and p.m. peak periods)
- SR-76/Couser Canyon Road (LOS F during the a.m. and p.m. peak periods)
- Dulin Road/Old Highway 395 (LOS F during the a.m. and p.m. peak periods)

7.1.3 Mitigation for Cultural Resources Impacts

M-CR-1, 2, and 3

Prior to approval of grading or improvement plans, the Applicant shall implement a grading monitoring and data recovery program to mitigate potential impacts to undiscovered, buried archaeological resources to the satisfaction of the Director of PDS and to a level below significant. This grading monitoring program shall include, but not be limited to, the following actions:

1. Provide evidence to the PDS that a County-approved archaeologist (consulting archaeologist) has been contracted to implement a grading monitoring and data recovery program to the satisfaction of the Director of PDS. A letter from the consulting archaeologist shall be submitted to the Director of PDS. The letter shall include the following guidelines:

    a. The consulting archaeologist shall contract with a Luiseño Native American monitor to be involved with the grading monitoring program as outlined in the 2007 County Report Format and Content Guidelines.

    b. The consulting archaeologist/historian and Luiseño Native American monitor shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program as outlined in the 2007 County Report Format and Content Guidelines.

    c. The consulting archaeologist and Luiseño Native American Monitor shall monitor all areas identified for development, including off-site improvements.

    d. An adequate number of monitors (archaeological/historical/Native American) shall be present to ensure that all earthmoving activities are observed and shall be on site during all grading activities for areas to be monitored (on and off site).

    e. During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and Luiseño Native American monitor(s) shall be on site full time to perform full-time monitoring. Inspections will vary based on the rate of excavation, materials excavated, and presence and abundance of artifacts and features. The frequency and location of

inspections will be determined by the Principal Investigator in consultation with the Native American monitor. The Principal Investigator, in consultation with the Luiseño Native American monitor, will determine whether to monitor the cutting of previously disturbed deposits.

f. Isolates and clearly non-significant deposits shall be minimally documented in the field, and the monitored grading can proceed. Should the cultural materials or isolates and non-significant deposits not be collected by the Project Archaeologist, then the Luiseño Native American monitor may collect the cultural material for transfer to a Tribal curation facility or repatriation program.

g. In the event that previously unidentified potentially significant cultural resources are discovered, the archaeological monitor(s) or, Luiseño Native American monitor, shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Principal Investigator shall contact the County Archaeologist at the time of discovery. The Principal Investigator, in consultation with the County staff archaeologist and Luiseño Native American monitor, shall determine the significance of the discovered resource(s). The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. A Research Design and Data Recovery Program to mitigate impacts to significant cultural resources shall be prepared by the consulting archaeologist in coordination with the Luiseño Tribes. The County Archaeologist shall review and approve the Program, which shall be carried out using professional archaeological methods. Coordination with the Luiseño Tribes shall consist of providing a copy of the Data Recovery Program for review and comment. The Tribes shall have 14 days to provide comment. The Research Design and Data Recovery Program shall include: (1) reasonable efforts to preserve (avoid) unique cultural resources as defined in CEQA Section 21083.2(g) or sacred sites; (2) the capping of identified sacred sites or unique cultural resources and placement of development over the cap, if avoidance is infeasible; and (3) data recovery for non-unique cultural resources as defined in CEQA Section 21083.2(h). The preferred option is preservation (avoidance).

h. If any human remains are discovered, the Principal Investigator shall contact the County Coroner. In the event that the remains are determined to be of Native American origin, the MLD, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5(b and c) and Public Resources Code Section 5097.98 shall be met. As part of the consultation, the MLD shall be given the opportunity to review the artifacts identified in proximity to the burial site.

i. Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The Principal Investigator shall determine the amount of material to be recovered for an adequate artifact sample for analysis. The Project Archaeologist shall consult with the Luiseño Native American monitor regarding artifact sensitivity and type.

j. In the event that previously unidentified cultural resources are discovered:
   (1) All prehistoric cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility or Tribal curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation. Documentation of this curation shall be in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

   Or

   Alternatively, the prehistoric archaeological materials may be repatriated to the appropriate Luiseño Native American Tribe. Evidence of repatriation shall be in the form of a letter from the tribe confirming that the archaeological materials have been received.

   (2) Historical cultural material collected during the grading monitoring program shall be processed and curated at a San Diego curation facility that meets federal standards per 36 CFR Part 79 and, therefore, would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records, including title, shall be transferred to an appropriate curation facility within San Diego County, and shall be accompanied by payment of the fees necessary for permanent curation. Documentation of curation shall be in the form of a letter from the curation facility confirming that the archaeological materials have been received and that all fees have been paid.

k. Monthly status reports shall be submitted to the Director of PDS and the Luiseño Native American Tribes starting on the date of the notice to proceed through termination of implementation of the grading monitoring program. The reports shall briefly summarize all activities during the period and the status of progress on overall plan implementation. Upon completion of the implementation phase, a final report shall be submitted to the Director of PDS and the Luiseño Native American Tribes describing

the plan compliance procedures and site conditions before and after construction.

l. In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the Director of PDS, prior to the issuance of any building permits. The report shall include Department of Parks and Recreation Primary and Archaeological Site forms. A copy of the report shall be submitted to the Luiseño Native American Tribes.

m. In the event that no cultural resources are discovered, a brief letter to that effect shall be sent to the Director of PDS and the Luiseño Native American Tribes by the consulting archaeologist confirming that the grading monitoring activities have been completed.

2. If the Proposed Project would construct any facilities within 100 feet of archaeological site CA-SDI-682, including loci A and B, the Project Applicant shall prepare and implement a temporary fencing plan to protect the site. The fencing plan shall be prepared in consultation with a qualified archaeologist and in coordination with the Luiseño Native American monitor to the satisfaction of the Director of PDS. The fenced area shall include a buffer sufficient to protect the archaeological site; in no event shall the buffer be less than 20 feet in width. The fence shall be installed under the supervision of the qualified archaeologist and the Luiseño Native American monitor, prior to commencement of grading or brushing and be removed only after grading operations in the vicinity of CA-SDI-682 have been completed. A Luiseño Native American monitor shall be invited to be present during the removal of the temporary fencing.

M-CR-4 If the Proposed Project uncovers resources in areas that are not RPO exempt, and scientific excavation is not authorized, grading will be halted or diverted in accordance with M-CR-1, 2, and 3.

7.1.4 Mitigation for Noise Impacts

On-site Exterior Noise

M-N-1 Buildout traffic noise levels at the elevated outdoor uses areas within proposed within proposed PA 2 mixed-core residential uses and PA 3 multi-family residential uses shall be mitigated to County standards of 65 dBA CNEL through the following measure:

- All elevated outdoor residential use areas in PAs 2 and 3, including decks and balconies, will require noise shielding by a 5.5-foot high noise control barrier. Required sound attenuation barriers shall be solid and constructed of masonry,

wood, plastic, fiberglass, steel, or a combination of those materials, with no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be either a single layer of tongue and groove (which must be at least one-inch total thickness or have a density of at least 3½ pounds per s.f.) or a double layer of overlapped fencing (shiplap) so that no seam between boards or sheets matches with a seam on the other layer. Where architectural or aesthetic factors allow, glass or clear plastic 3/8 of an inch thick or thicker may be used on the upper portion, if it is desirable to preserve a view. Sheet metal of 18-gauge (minimum) may be used, if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Any door(s) or gate(s) must be designed with overlapping closures on the bottom and sides and meet the minimum specifications of the wall materials described above. The gate(s) may be of one-inch thick or better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with prefabricated door jambs.

- The conservative analysis indicates that a barrier is required when no consideration is given to potential shielding provided by the Project buildings or additional attenuation due to distance. Final building design, however, may provide substantial shielding, thus reducing the final required barrier heights necessary to provide compliance with the 65 CNEL exterior requirements. The Applicant may provide an updated acoustical analysis by a County-approved noise consultant demonstrating compliance for all required exterior outdoor use areas with the County 65 dBA CNEL requirement, completed to the satisfaction of the Director of the PDS with a lower height balcony noise control barrier.

M-N-2 Buildout traffic noise levels at ground level outdoor use area within proposed PA 3 multi-family residential uses shall be mitigated to County standards of 65 dBA CNEL through the following measure:

- A 5.5-foot-high sound attenuation barrier shall be sited along the eastern side of Pankey Road (excluding driveway entrances) for the length of the multi-family housing area with returns to the north and south. The wall shall follow the curved portion of the driveway entrance terminating at a location where it would run parallel to the entrance. The final barrier shall conform to the standards identified in M-N-1, above.

On-site Interior Noise

M-N-3 An exterior to interior noise control plan provided by a County-approved noise consultant for the second story or higher living areas of all multi-family homes in PAs 2 and 3 on the Project site shall be prepared prior to obtaining building permits for the Project. Consistent with the County Noise Ordinance, the report shall confirm that interior noise levels will not exceed 45 dBA CNEL. The report shall finalize the noise requirements based on actual building design specifications, and shall be

completed to the satisfaction of the Director of PDS. Noise reduction measures could include the following:

- A "windows closed" condition shall be provided that requires a means of mechanical ventilation for the second floors of all multi-family residences.
- The second floors of all multi-family residences shall be provided with weather-stripped solid-core exterior doors.
- Exterior wall/roof assemblies shall be free of cutouts and openings.
- Upgraded windows shall be provided for the second or higher floors of multi-family residences.

On-site Operational Noise

M-N-4 Potential impacts to proposed multi-family residences from commercial uses and residential HVAC units shall be mitigated as follows:

- A final noise study for the second story or higher living areas of all mixed use residential areas and businesses proposed in or adjacent to the mixed use areas shall be prepared during site plan and building permit approval for the mixed use portion of the Project. The report shall finalize the noise requirements based on actual building design specifications to ensure compliance with the County Ordinance limitations of 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. (arithmetic average of multi-family and commercial noise limits) or 65 CNEL at multi-family residential locations. Exterior and interior noise reduction requirements necessary to comply with the County Noise Ordinance for residential uses shall be presented in the final noise report. Noise control methods may include screening noise sources, relocating noise sources at a greater distance from residences and/or a combination of these measures. Implementation of noise control features would ensure compliance with County standards.

M-N-5 Siren test noise at the on-site Sheriff's station shall not exceed the following Noise Ordinance standards: 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits], or 65 CNEL at the property line. These maximum noise levels shall be attained through site plan design. Two options are available: selecting the location of the sheriff's station such that it is not in close proximity to the residences, and using an assumed on-site building as an intervening noise control structure; or constructing the parking area further away from the residences, and designating a specific siren test location. If the latter option is chosen for implementation, the location could be selected so that the sirens would face away from the residential structures, and a wall could be erected on both sides of the test area to further attenuate noise. A final noise study for the Sheriff's station shall be prepared during site plan approval. The report shall finalize the noise control requirements based on actual building design specifications, including identification of additional noise reducing measures as necessary to ensure compliance with County

noise standards (i.e., 57.5 dBA between 7:00 a.m. and 10:00 p.m. and 52.5 dBA between 10:00 p.m. and 7:00 a.m. [arithmetic average of multi-family and commercial noise limits] or 65 CNEL at the property line between the sheriff's station and proposed multi-family residential uses).

Cumulative Noise

Cumulative commercial and residential noise impacts (**Impact N-6**) in PAs 2 and 3 will be mitigated through the implementation of M-N-4.

7.1.5 Mitigation for Biological Resources Impacts

M-BI-1 The significant impacts to three least Bell's vireos will be mitigated through the creation, enhancement, and preservation of habitat occupied by the least Bell's vireo (refer to M-BI-4a and M-BI-4b for additional details).

M-BI-2 The loss of up to 43.75 acres of raptor foraging habitat (non-native grassland and pasture) will be mitigated through implementation of measures M-BI-4e and M-BI-4f, below.

M-BI-3a Indirect impacts to habitat and associated sensitive species shall be largely addressed through Project design features identified in Subchapter 2.6 and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of construction outside the breeding season. A Resource Avoidance Area (RAA) shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction surveys, noise monitoring and noise attenuation measures shall be utilized. Surveys shall be done to determine if any nests are located within 300 feet of brushing, clearing and/or grading activities. If nests are located within this distance, no brushing, clearing or grading shall be done in this area until the nests are no longer active or until temporary barriers adequate to ensure that noise does not exceed 60 dBA at the nests have been installed.

M-BI-3b Indirect impacts to nesting success shall be largely addressed through Project design features identified in Subchapter 2.6 and on Table 1-3 of this EIR. In addition, the following mitigation measures are required: the presence of a biological monitor during brushing, clearing and grading to ensure that construction activities remain within identified limits; implementation of the Resource Management Plan, on-site enhancement plan and off-site revegetation plan to ensure that appropriate ratios of habitat are retained; and confirmation of construction outside the breeding season. A RAA shall be shown on all plans identifying areas to be avoided during least Bell's vireo, southwestern willow flycatcher, and other nesting or breeding birds breeding season (February 1 to August 31). If avoidance is not possible, pre-construction

surveys, noise monitoring and noise attenuation measures shall be completed as required in M-BI-3a.

M-BI-4a Significant **Scenario 2** direct impacts to 7.56 acres on site and 1.10 acres off site of southern riparian forest shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 25.98 acres. **Scenario 1** impacts to southern riparian forest would total 7.55 acres on site and 1.10 acres off site, for a total of 8.65 acres. These impacts shall be mitigated by the on-site preservation of a minimum of 10.93 acres (**Scenario 1**) and 10.95 acres (**Scenario 2**) of southern riparian forest. In addition, a minimum acreage of 8.66 creation and 6.37 enhancement (**Scenario 2**) or 8.65 creation and 6.35 enhancement (**Scenario 1**) of southern riparian forest shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4b Significant direct impacts to 3.31 acres of southern riparian scrub shall be mitigated at a 3:1 ratio, including 1:1 creation and 2:1 enhancement, for a total of 9.93 acres. Up to 1.21 acres of southern riparian scrub shall be preserved/enhanced on site. The remaining required acreage shall be created/enhanced off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land that shall be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4c Significant direct impacts to 0.20 acre of coast live oak woodland shall be mitigated at a 3:1 ratio, for a total of 0.6 acre preserved off site.

M-BI-4d Significant direct impacts to 2.27 acres of Diegan coastal sage scrub on and off site shall be mitigated at a 2:1 ratio, for a total of 4.54 acres. A total of 1.29 acres shall be preserved/restored on site and 3.25 acres shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4e Under **Scenario 2**, significant direct impacts to 43.17 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 21.59 acres. A total of 7.98 acres shall be preserved/restored on site and 13.61 acres shall be preserved off site. Under **Scenario 1**, significant direct impacts to 41.9 acres of non-native grassland shall be mitigated at a 0.5:1 ratio, for a total of 20.95 acres. A total of 7.98 acres shall be preserved/restored on site and 12.97 acres shall be preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-4f Significant direct impacts to 0.58 acre of off-site pasture shall be mitigated at a 0.5:1 ratio, for a total of 0.29 acre preserved off site. Off-site mitigation acreage shall be located within a PAMA (if the NCMSCP has been adopted when the Project is approved), at an approved mitigation bank, or on purchased land to be managed by an RMP, as approved by the Director of the County PDS.

M-BI-5 Significant direct impacts to southern riparian forest and southern riparian scrub shall require permits from the ACOE and CDFW as jurisdictional wetlands/waters and mitigation at a ratio of 3:1, with a minimum 1:1 creation component to ensure no net loss of wetlands. The Project shall include on-site preservation/enhancement of 12.16 acres of riparian habitat as described in the Conceptual On-site Wetland Enhancement Plan (Appendix K of EIR Appendix G) and creation/enhancement of additional wetland habitat off site as described in the Conceptual Off-site Wetland Creation and Enhancement Plan (Appendix L of EIR Appendix G; also see M-BI-4). Additional off-site mitigation will be provided for any of the proposed on-site habitat enhancement that is not accepted by the County.

M-BI-6 Significant, temporary impacts to low-quality non-native grassland and disturbed habitat areas from grading within the wetland buffers shall be mitigated through revegetation of the slopes with native (yet low fuel) vegetation. The revegetation of these slopes will provide higher quality buffer habitat to the adjacent riparian habitat, and the buffer areas shall be included in the Resource Management Plan to ensure that the sensitive resources of the adjacent habitat are protected.

7.1.6 Mitigation for Paleontological Resources Impacts

M-P-1 and 2

A qualified paleontologist shall be at the pre-construction meeting to consult with the grading and excavation contractors concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual having an M.S. or Ph.D. in paleontology or a related field (e.g., sedimentary or stratigraphic geology, evolutionary biology, etc.), and who has knowledge of San Diego County paleontology and documented experience in professional paleontological procedures and techniques.

A qualified paleontologist or paleontological monitor (under the supervision of the qualified paleontologist) shall be on site on a full-time basis during the original cutting of previously undisturbed deposits of moderate paleontological resource sensitivity (i.e., Quaternary river terrace deposits) to inspect exposures for fossils. A paleontological monitor is defined as an individual with at least one year of experience in field identification and collection of fossil materials. The paleontological monitor shall work under the direct supervision of the qualified paleontologist.

The Project Applicant shall: (1) submit a copy of a letter signed by the qualified paleontologist or paleontological monitor which states that the Applicant has retained their services and acknowledges agreement to perform and/or be responsible for concurrence with the Project mitigation measures; and (2) authorize the qualified paleontologist to direct, divert, or halt any grading activity, and to perform all other acts required by the provisions listed below. If the qualified paleontologist or paleontological monitor ascertains that the river terrace deposits are not fossil bearing, the qualified paleontologist shall have the authority to terminate the monitoring program.

If paleontological resources are unearthed, the qualified paleontologist or paleontological monitor shall:

1. Direct, divert, or halt any grading or excavation activity until the sensitivity of the resource can be determined and the appropriate recovery implemented.

2. Salvage unearthed fossil remains.

3. Record stratigraphic and geologic data to provide a context for the recovered fossil remains.

4. Prepare collected fossil remains for curation.

5. Curate, catalog, and identify all fossil remains to the lowest taxon possible, inventory specimens, assign catalog numbers, and enter the appropriate specimen and locality data into a collection database.

6. Transfer the cataloged fossil remains to an accredited institution (museum or university) in California that maintains paleontological collections for archival storage and/or display.

The qualified paleontologist shall prepare a final Paleontological Resources Mitigation Report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection.

7.2 Environmental Design Considerations/Conditions of Approval

7.2.1 Design Considerations for Aesthetics – Construction

- Native topsoil stockpiles will not be greater than six feet high and will be re-spread following completion of construction activities.

7.2.2 Design Considerations for Aesthetics – Operation

- High solid walls located along public streets will be minimized. Where scenic views are available, transparent panels may be evaluated as an alternative method of attenuating unwanted sound.
- Where cost and space permit, the installation of berms in conjunction with landscaping would be preferred for noise attenuation.
- All walls and fences over three feet in height facing a public street will provide a fully landscaped buffer at least five feet deep at plant maturity between the street and wall or fence.
- Where safety fencing is required for a dual use detention/play area that will be visible from a street or common area, rural character wood fencing would be allowed.
- No loading areas in mixed use areas will be permitted between a building front and the central parking bay, Pankey Road, or internal streets.
- All trash dumpsters/compactors/receptacles within mixed use areas will be screened (by buildings or screen walls) if they would otherwise be visible from a street or common area. Mechanical units also will be screened.
- Screen walls will be compatible with building architecture and exterior wall materials, and also will be landscaped with a minimum hedge row with a height of three to six feet at maturity.
- Extensive flat roofs will be avoided. When flat roofs are necessary in large commercial and industrial buildings, they will incorporate shed roofs, trellises, loggias, changes in parapet height, turrets and towers, and architectural embellishments.
- Roof-top equipment would be screened from view from adjacent roads, properties, and pedestrian areas in PAs 2, 3, 4 and 5. This equipment is expected to include HVAC, etc. In the area north of Pala Mesa Drive, where shielding of routine roof equipment may not be possible, equipment would be organized in an orderly, uncluttered fashion and painted to match the roof color. Rooftop equipment screening would be identified on site plans.
- To ensure consistency in format and content of signs, as well as conformance with Sections 6250 and 6263 of the County Zoning Ordinance, a comprehensive sign package will be developed and submitted to DPLU as part of the site plan application.
- Prohibited signage includes: roof and parapet signs, light box signs (rectangular plastic signs that are intentionally illuminated), pole signs greater than six feet in height, portable or mobile signs, and signs that cover or interrupt architectural features.

7.2.3 Design Considerations for Air Quality – Construction

- The entire construction fleet will be required to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters, and/or CARB-certified Tier 4 equipment.
- Low VOC coatings will be utilized in accordance with SDAPCD Rule 67.0 requirements.
- A minimum of three applications of water will be applied during grading between dozer/scraper passes, as necessary. Additional watering or acceptable non-toxic SDAPCD dust control agents will be applied during dry weather or windy days until dust emissions are not visible.

- Dirt storage piles will be enclosed, covered, watered three times daily, if necessary, or stabilized by chemical binders, tarps, fencing or other non-toxic erosion control according to manufacturers' specification.
- A 15-mph speed limit will be enforced on unpaved surfaces.
- On dry days, dirt and debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.
- Haul trucks hauling dirt, sand, soil, or other loose materials will be covered or two feet of freeboard will be maintained.
- When active construction ceases on the site, disturbed areas shall be hydroseeded, landscaped, or developed as quickly as possible and as directed by the County and/or SDAPCD to reduce dust generation.
- After completion of grading, internal roadways will be paved, chip sealed, or chemically stabilized.
- Sweepers or water trucks will be used to remove "track-out" at any point of public street access.
- Grading will be suspended if winds exceed 25 mph or if visible dust plumes emanate from a site; disturbed areas will be stabilized if construction is delayed.
- In accordance with the SDAPCD Rule 55 - Fugitive Dust Control, no dust and/or dirt will leave the property line. The following measures would be implemented to ensure the requirements of this rule are met:

    - Airborne Dust Beyond the Property Line: No person will engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
    - Track-out/Carry-out: Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out will be:
        (i) Minimized by the use of any of the following or equally effective track-out/ carry-out and erosion control measures that apply to the Project or operation:
            (a) Track-out grates or gravel beds at each egress point
            (b) Wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks
            (c) Secured tarps or cargo covering, watering, or treating of transported material
        (ii) Removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM_{10}-efficient street sweepers certified to meet the most current SCAQMD Rule 1186 requirements will be used. The use of blowers for removal of track-out/carry-out will be prohibited under any circumstances.

7.2.4 Design Considerations for Air Quality – Operation

- The Project has been designed with a balance of uses including residential, commercial, limited impact industrial, and open space within close proximity (0.25 mile) to encourage walking and other non-automobile modes of transport between uses and to minimize external

(off-site) trips by including local opportunities for employment and shopping for goods and services.

- The Project site will maximize access to transit lines to accommodate bus travel, and to provide lighted shelters at transit access points.
- Streets have been designed to maximize pedestrian access to transit stops.
- The landscape plan includes trees that provide shading of buildings and parking lots, and includes native drought-resistant plants (ground covers, shrubs and trees.
- The Project will be designed to meet or exceed current Title 24 energy efficiency standards.
- Flat roofs on non-residential structures will include a white or silver cap sheet to reduce energy demand.
- Building design will include roof anchors and pre-wiring to allow for the installation of photovoltaic systems and/or participate in SDG&E incentive programs for energy efficient development where feasible.
- Preferential parking for carpools will be included to accommodate carpools and vanpools in employment areas (e.g. commercial, business-professional uses).
- Bike racks will be provided throughout the development.
- All truck loading and unloading docks will be equipped with one 110/208 volt power outlets for every two-dock doors. Signs will be posted stating "Diesel trucks are prohibited from idling more than five minutes and trucks requiring auxiliary power shall connect to the 110/208-volt outlets to run auxiliary equipment."
- Electrical outlets will be installed on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment. Installation of a gas outlet in the rear of residential buildings will be required for the use of outdoor cooking appliances, such as gas burning barbeques.
- Installation of low nitrogen oxide (NO_X) hot water heaters will be required for residences.
- Notices will be provided to homebuyers of incentive and rebate programs available through SDG&E or other providers that encourage the purchase of electric landscape maintenance equipment.
- Only natural-gas fireplaces will be permitted in residential uses.
- Two conductive/inductive electric vehicle charging stations will be provided in a commercial land use space. Signage prohibiting parking for non-electric vehicles in the designated parking spaces will be installed.
- Chemical feed addition at the pump station will be included to minimize odors. A back-up chemical injection system will be included for redundancy.

7.2.5 Design Considerations for Biological Resources – Construction

- Brushing, clearing, and grading activities will not be permitted during the avian breeding season (February 15 through August 31).
- Native topsoil (top three to five inches) will be salvaged and stockpiled within a disturbed on-site location. Stockpiles will not be greater than six feet high and will not be mixed with other excavated materials. Following completion of construction activities, stockpiled native topsoil will be re-spread as applicable.
- Dirt storage piles will be stabilized by chemical binders, tarps, fencing or other erosion control.

- Temporary protective fencing will be used to keep construction equipment and people out of sensitive habitats that are not proposed to be graded.
- Grading will be terminated if winds exceed 25 mph.
- The Project will comply with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions.
- Project landscaping will include native vegetation and drought tolerant plant materials.
- Storm water and non-storm water flows will be properly managed to minimize runoff.
- Erosion control/stabilizing measures, such as geotextiles, mats, plastic sheets/tarps, fiber rolls, soil binders, or temporary hydroseeding (or other plantings) established prior to October 1 in appropriate areas (e.g., disturbed areas and graded slopes), will be used.
- Sediment controls will be used to protect the construction site perimeter and prevent off-site sediment transport, including measures such as temporary inlet filters, silt fence, fiber rolls, gravel bags, temporary sediment basins, check dams, street sweeping/vacuuming, energy dissipators, stabilized construction access points/sediment stockpiles, and properly fitted covers for sediment transport vehicles.

7.2.6 Design Considerations for Biological Resources – Operation

- The proposed storm drain system will accommodate peak 100-year storm flows and be designed so that off-site flows from the west do not comingle with on-site flows (except for drainage from the northernmost Caltrans storm drain tributary to the site).
- Appropriate energy dissipation facilities (e.g., riprap aprons) will be used at the proposed discharge locations.
- The Project will replace the North Pankey Bridge and realign/raise applicable portions of Pankey Road, as well as raise applicable graded pad elevations such that all proposed roadways, bridges, and graded pads will be located outside of the mapped Horse Ranch Creek and San Luis Rey River 100-year floodplains.
- Lighting will be shielded to minimize light impacts to adjacent riparian and other sensitive habitats and no buildings will be allowed within limited building zones.
- The Project will provide a 25- to 100-foot buffer between riparian areas and proposed development.
- Biological open space areas will be fenced off from the proposed development.
- Signage will be placed along the edge of the biological open space area to deter human incursion.
- Open space areas will be preserved within an easement and will be subject to an RMP.
- The amount of hazardous materials used and stored on site will be minimized, and storage/use locations will be restricted to areas at least 50 feet from storm drains and surface waters.

7.2.7 Design Considerations for Transportation/Traffic – Construction

- The Proposed Project will include the preparation and approval of a TCP, including measures to reduce traffic delays and minimize public safety impacts, such as the use of flagpersons, traffic cones, detours and advanced notification signage, pedestrian/equestrian detours,

movement restrictions, and temporary lane closures. In addition, the construction contractor will provide a means for public liaison/contact information for public inquiries and concerns.
- Grading will be balanced on site, with no import, and potential export restricted to oversized rock transfer to Granite Construction, approximately 0.3 mile east of the Project.
- Pankey Road's intersections with Pala Mesa Drive, SR-76, and Shearer Crossing will be signalized under Existing Plus Project conditions.

7.2.8 Design Considerations for Transportation/Traffic – Operation

- Bicycle spaces shall conform to the standards provided within the County Zoning Ordinance Sections 6758-6783, 6787, and 6792.

7.2.9 Design Considerations for Climate Change – Operation

- The Proposed Project will be designed in accordance with the Building Industry Association's California Green Builder (CGB) program.
- The Project will exceed the current 2008 California Energy Code's residential and non-residential efficiency standards by 15 percent through improved HVAC systems and duct seals; enhanced ceiling, attic and wall insulation; Energy Star appliances; high-efficiency water heaters; energy-efficient three-coast stucco exteriors; energy-efficient lighting; and high efficiency window glazing.
- The Project will reduce the overall use of potable water within each home by 20 percent by including advanced plumbing systems, such as parallel hot water piping or hot water recirculation systems, and fixtures such as low flow toilets, water-saving showerheads and kitchen faucets, and buyer-optional high-efficiency clothes washers.
- The Project's outdoor landscaping plan will minimize turf, maximize drought-tolerant plants, and incorporate weather-based irrigation controllers, multi-programmable irrigation clocks, and high-efficiency drip irrigation systems. At the time of final inspection, a manual shall be placed in each building that includes, among other things, information about water conservation.
- In accordance with CalGreen criteria and state and local laws, at least 50 percent of on-site construction waste and ongoing operational waste will be diverted from landfills through reuse and recycling. To further minimize waste, the Project will incorporate recycled materials for flooring, and certified sustainable wood products and other recycled or rapidly renewable building materials where possible. Areas for storage and collection of recyclables and yard waste would be provided for each residence.
- To maximize shade and reduce heat island effects, the landscape plan will include strategic location of deciduous trees and other vegetation. Impervious surfaces, including paved parking areas, will also be minimized and pervious pavers used instead where practical. No CFC-based refrigerants will be used, and interior finishes, adhesives, sealants, paints and coatings, and carpet systems will be low in VOCs, and meet the testing and product requirements of one or more nationally recognized green product labeling programs. Compliance with these requirements of the CGB program shall be verified through documentation.

7.2.10 Design Considerations for Geologic Hazards – Construction

- Project grading, excavation and construction activities (including all on- and off-site areas) will be subject to on-the-ground geotechnical observations and testing by the Project Geotechnical Engineer to verify or (if applicable) modify the design measures and recommendations identified in the Project geotechnical investigations, based on site-specific conditions.
- The Project design will incorporate measures to accommodate projected seismic loading pursuant to recommendations in the Project geotechnical investigations and the on-the-ground observations/testing noted above, as well as applicable seismic elements of the IBC and County Building Code. Specifically, such measures will include incorporating the recommended peak ground acceleration levels, as well as parameters related to subsurface profile types, acceleration and velocity coefficients, seismic zone, and seismic source (including type and distance).
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard measures will be implemented to reduce the potential for liquefaction and related effects in applicable areas, including efforts such as removal/replacement of unsaturated soils, vibro-compaction of saturated materials, deep soil mixing (i.e., introducing cement to consolidate loose soils), and the use of stone or sand columns and/or vibro-replacement/densification techniques.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, if expansive soils are determined to be present on the Project site or at the locations of off-site facilities in areas that could pose a risk to life or structures, standard measures will be implemented to address related potential impacts. Specifically, this may include efforts such as burial in deeper fills, use of stiffer slab/foundation design, presaturation, overexcavation, or other IBC-recommended measures.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard measures will be implemented to address potential impacts related to compression and settlement in potentially susceptible areas including fill, topsoil/colluvium, alluvium and weathered terrace deposits. Depending on site-specific conditions, this may include removal and recompaction or replacement of compressible deposits with engineered fill, and/or placement of settlement monuments and related monitoring in applicable areas after completion of Project grading and prior to construction of proposed improvements. Monitoring of the settlement monuments will be conducted to verify when settlement ceases or is no longer a hazard to Project facilities, with 13 preliminary settlement monument locations identified in areas of substantial alluvial deposits (Figure 3.1.2-1, Geologic Map). Associated monitoring is anticipated to extend over a period of approximately three to six months, and could potentially extend up to one year locally. Once it is determined that significant settlement is no longer occurring in the monitored areas, proposed construction of Project improvements will be allowed to commence.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, the proposed Pankey Road bridge foundation design (consisting of driven plies or cast-in-drilled-hole piles) would be verified or modified as necessary to ensure conformance with all applicable regulatory requirements and industry standards.
- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, applicable standard measures will be implemented to address the potential generation

and use/disposal of oversize materials, including efforts such as selective disposal (e.g., burial in deeper fills), use in landscaping/decorative efforts or off-site disposal.

- Based on geotechnical recommendations and on-the-ground observations/testing as noted above, standard industry measures will be implemented to address potential effects from corrosive soils, including efforts such as: (1) removal of unsuitable deposits and replacement with non-corrosive fill; (2) use of corrosion-resistant construction materials (e.g., coated or non-metallic facilities); and (3) installation of cathodic protection devices (e.g., use of a more easily corroded "sacrificial metal" to serve as an anode and draw current away from the structure to be protected).

7.2.11 Design Considerations for Hazards and Hazardous Waste – Construction

- The RC Flyers Club is being notified to either repair the tractor so that it is not leaking oil or remove it from the premises as a matter of Project design.
- Upon removal of storage containers from the Project site, areas beneath the containers will be inspected for hydrocarbon stined or odorous soils. If such soils are discovered, they will be removed in accordance with standard procedures as part of Project design.
- If proposed grading at the residential site (corresponding to Boring B-4) requires a cut of two feet or more, the applicant or successors in assigns shall perform further testing to determine the contamination of Dieldrin. If soil removal is required based on the results of testing, it shall be completed in accordance with USEPA and/or DTSC standards.

7.2.12 Design Considerations for Hazards and Hazardous Waste – Operation

- A minimum of 100 feet of fuel treatment will be placed around all structures that abut flammable native vegetation located north and east of the Project. The first 50 feet from a structure will be landscaped and irrigated, with an additional 50 feet of fuel treatment (non-irrigated thinning zone). On the west and south sides of the project, 75 feet of fuel treatment will provide fire protection and reduce the fire threat to less than significant levels.
- A 6-foot-high and approximately 2,300-foot-long fire wall would be located on the southernmost developable portion of PA 2 and an approximately 450-foot long wall would be located on the northern boundary of PA 5. Both barriers would be of non-combustible solid wood and or tempered glass (also non-combustible and solid).
- All newly constructed structures will be built to "Enhanced" building requirements, as specified in the FPP. The installation of automatic interior sprinkler systems (National Fire Protection Association – NFPA Standard 13R – Standard for the Installation of Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height) will be required. Tempered glass will be used in at least one panel of all windows and openings in the outer walls.
- Per the Fire Code Amendments of January 28, 2008, all buildings and structures will be set back a minimum of 30 feet from the property line unless the County Zoning Ordinance requires a greater minimum. When the property line abuts a roadway, the setback will be measured from the centerline of the roadway. All buildings located along the western project boundary will be set back from the boundary a minimum of 75 feet to allow space for fuel treatment as discussed above. All buildings will be located outside of fuel treatment zones.

- Additional features include minimum street widths and turning radii for streets and cul-de-sacs, all-weather road paving capable of supporting fire apparatus, fire access roadways throughout the development free of speed control devices, clear street signs and marking, a lighted directory map at each driveway entrance, minimum setbacks if gates are proposed, and a continuous water supply.
- Buildings will be no more than 35 feet in height above grade, unless otherwise approved by NCFPD. Architectural projections may extend above 35 foot height requirement, subject to NCFPD review and approval. Unless NCFPD acquires upgraded facilities/equipment or otherwise determines greater heights may be safely allowed, residential structures with pitched roofs are limited to a top of fascia height of 24 feet and a topmost ridgeline of 35 feet and non-residential buildings with flat roofs over 24 feet will require an exterior ladder at that point in order to reach the roof.
- If fencing will be located within a brush management zone, the appearance may remain rustic, but materials will be non-combustible and require a minimum one-hour fire resistance rating, such as wood treated with a fire-retardant coating or Class A fire-rated composite or treated wood.
- Site furnishings in brush management zones will be fire resistant or fire proof.
- Only plant species listed in the County of San Diego PDS Approved Plant List will be used. Other recommended plant species meeting the criteria for fire resistive plant characteristic may be planted within any fuel treatment zone only after these plants have been certified by the Project Applicant's landscape architect and fire consultant in conjunction with the NCFPD Fire Marshal.
- Each lot owner will be individually responsible for fuel treatment on property lots, including all measures included in the FPP. Property owners will be members of a legally constituted HOA, which will support the maintenance of common areas (including roadsides) in perpetuity. Refer to the FPP (Appendix K) for specific requirements for the ongoing fuel modification maintenance.

7.2.13 Design Considerations for Hydrology/Water Quality – Construction

Erosion/Sedimentation

- The Project will comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) during all grading and land-disturbance activities. This includes preparation of a Construction Site Monitoring Plan (CSMP), a Risk Assessment to determine the Project's Risk Level (1, 2 or 3), and appropriate Risk Level Requirements as outlined in the Construction General Permit. Prior to land disturbance activities, a SWPPP will be prepared by a qualified SWPPP preparer, with this plan to be located on site at all times.
- If the site is determined to be a Risk Level 2 or 3 site, a REAP will be prepared and implemented 48 hours prior to any likely precipitation event (50 percent or greater probability of producing precipitation in the Project area). The REAP shall be prepared for all phases of construction and implemented for construction activities to provide enhanced erosion and sediment control measures during predicted storm events.
- The Project will comply with seasonal grading restrictions during the rainy season (October 1 to April 30) for applicable locations/conditions.

- Existing vegetation will be preserved wherever feasible, and phased grading schedules will be used to limit the area subject to erosion at any given time.
- Storm water and non-storm water flows will be properly managed to minimize runoff.
- Erosion control/stabilizing measures, such as geotextiles, mulching, mats, plastic sheets/tarps, fiber rolls, soil binders, compost blankets, soil roughening, and/or temporary hydroseeding (or other plantings) in appropriate areas (e.g., disturbed areas and graded slopes), will be used.
- Sediment controls will be used to protect the construction site perimeter and prevent off-site sediment transport, including measures such as temporary inlet filters, silt fence, fiber rolls, silt dikes, biofilter bags, gravel bag berms, compost bags/berms, temporary sediment basins, check dams, street sweeping/vacuuming, ATS (if applicable based on risk assessment), energy dissipators, stabilized construction access points/sediment stockpiles, and properly fitted covers for sediment transport vehicles.
- BMP materials will be stored in applicable on-site areas to provide "standby" capacity adequate to provide complete protection of exposed areas and prevent off-site sediment transport.
- Full erosion control will be provided in disturbed areas not scheduled for additional activity for 14 or more consecutive calendar days.
- Appropriate training will be provided for the personnel responsible for BMP installation and maintenance.
- Solid waste management efforts, such as proper containment and disposal of construction debris, will be used.
- The Project will comply with local dust control requirements.
- Permanent landscaping, with emphasis on native and/or drought-tolerant varieties, will be installed as soon as feasible after construction.
- Appropriate monitoring and maintenance efforts (e.g., prior to and after storm events) will be implemented to ensure proper BMP function and efficiency.
- Monitoring/reporting and post-construction management programs will be implemented per NPDES and/or County requirements.
- Additional BMPs as necessary will be implemented to ensure adequate erosion and sediment control (e.g., enhanced treatment and more detailed monitoring/reporting).
- The Project will implement sampling/analysis, monitoring/reporting and post-construction management programs per NPDES and/or County requirements.
- The Project will implement additional BMPs as necessary to ensure adequate erosion and sediment control (e.g., enhanced treatment and more detailed monitoring/reporting).

Hazardous Materials

- The amount of hazardous materials used and stored on site will be minimized, and storage/use locations will be restricted to areas at least 50 feet from storm drains and surface waters.
- Rose (e.g., on pallets), covered, and/or enclosed storage facilities will be used for all hazardous materials.
- Accurate and up-to-date written inventories and labels will be maintained for all stored hazardous materials.

- Berms, ditches, and/or impervious liners (or other applicable methods) will be used in material storage and vehicle/equipment maintenance and fueling areas to provide a containment volume of 1.5 times the volume of stored/used materials and prevent discharge in the event of a spill.
- Warning signs will be placed in areas of hazardous material use or storage and along drainages and storm drains (or other appropriate locations) to avoid inadvertent hazardous material disposal.
- All construction equipment and vehicles will be properly maintained.
- Paving operations will be restricted during wet weather, appropriate sediment control devices/methods will be used downstream of paving activities, and wastes and/or slurry from sources including concrete, dry wall and paint will be contained or disposed of by using properly designed and contained washout areas.
- Training for applicable employees will be provided in the proper use, handling and disposal of hazardous materials, as well as appropriate action to take in the event of a spill.
- Absorbent and clean-up materials will be stored in readily accessible on-site locations.
- Portable wastewater facilities will be properly located, maintained, and contained.
- Solid waste management efforts such as proper containment and disposal of construction debris, and restricting construction debris storage areas to appropriate locations at least 50 feet from storm drain inlets and water courses will be implemented.
- A licensed waste disposal operator will be employed to regularly (at least weekly) remove and dispose of construction debris at an authorized off-site location.
- Recycled or less hazardous materials will be used, wherever feasible.
- Regulatory agency telephone numbers and a summary guide of clean-up procedures will be posted in a conspicuous on-site location.
- Hazardous material use/storage facilities and operations will be regularly (at least weekly) monitored and maintained to ensure proper working order.
- Additional BMPs will be implemented as necessary (and in conformance with applicable requirements) to ensure adequate hazardous material control.

Demolition-related Debris Generation

- Appropriate (i.e., non-hazardous) construction debris will be recycled for on- or off-site use whenever feasible.
- Dust-control measures such as watering to reduce particulate generation will be used for pertinent locations/activities (e.g., concrete removal).
- Appropriate erosion prevention and sediment control measures will be used downstream of all demolition activities.
- The Project will conform with applicable requirements related to the removal, handling, transport and disposal of hazardous materials generated during demolition, including efforts such as implementing appropriate sampling and monitoring procedures; proper containment of contaminated materials during construction; providing protective gear for workers handling contaminated materials; ensuring acceptable exposure levels; and ensuring safe and appropriate handling, transport and disposal of hazardous materials generated during Project construction.

Disposal of Extracted Groundwater

- Dewatering operations conducted during Project construction, if required, will conform with all applicable treatment and disposal requirements under the NPDES General Permit for Discharges from Groundwater Extraction and Similar Discharges to Surface Waters within the San Diego Region Except for San Diego Bay (Groundwater Permit). This may include standard measures such as: (1) using appropriate erosion and sediment controls in applicable areas/conditions (e.g., disposal of extracted groundwater on slopes or graded areas); (2) testing extracted groundwater for appropriate contaminants prior to discharge; and (3) treating extracted groundwater prior to discharge, if required, to provide conformance with applicable Groundwater Permit discharge criteria, through methods such as filtration, aeration, adsorption, disinfection, and/or conveyance to a municipal wastewater treatment plant.

7.2.14 Design Considerations for Hydrology/Water Quality – Operation

Runoff Rates/Amounts

- The proposed storm drain system will accommodate peak 100-year storm flows and be designed so that off-site flows from the west do not comingle with on-site flows (except for minor drainage from the northernmost Caltrans storm drain tributary to the site).
- Appropriate energy dissipation facilities (e.g., riprap aprons) will be used at the proposed discharge locations.

Hydromodification

- The Project design will include four appropriately located and sized detention basins to address post-development flows and provide conformance with County of San Diego Final Hydromodification management Plan, pursuant to recommendations in the Project Preliminary Hydromodification Management Study.

Floodplains/Flooding

- The Project will replace the North Pankey Bridge and realign/raise applicable portions of Pankey Road, as well as raise applicable graded pad elevations such that all proposed roadways, bridges, and graded pads will be located outside of the mapped Horse Ranch Creek and San Luis Rey River 100-year floodplains.

Water Quality

- **LID Site Design BMPs**
  - Well-draining (Type A and B) soils, significant trees, critical areas (e.g., floodplains and steeper slopes), and areas near drainages will be preserved wherever feasible to provide natural buffer zones.
  - Appropriate set-backs from drainages will be provided for development envelopes, and construction equipment access will be restricted in planned green/open space areas.

- Clustered lot designs will be used and landscaping will be provided in applicable paved areas such as parking lots.
- Curb cuts will be provided to drain applicable areas to landscaping.
- Pitched and/or permeable pavement will be used in appropriate areas to drain impervious surfaces to landscaping.
- Downspouts and cisterns/rain barrels will be provided to direct drainage into vegetated areas where deemed appropriate.
- Appropriate soil amendments will be used, native soils will be reused, 'smart' irrigation systems (e.g., appropriate water schedules and rain/pressure-sensitive shutoff devices) and appropriate landscaping, including street trees, will be installed.

- **Source Control BMPs**
  - "No dumping" stencils/tiles and/or signs with prohibitive language (per current County guidelines) will be installed at applicable locations such as drainages, storm drain inlets, catch basins and public access points to discourage illegal dumping.
  - Outdoor material storage areas, food service facilities, water features, loading docks, maintenance bays, vehicle/equipment wash areas, outdoor processing areas, and non-retail fueling areas (if proposed) will be designed to reduce pollutant discharge through methods such as: (1) providing appropriate storage facilities for hazardous materials (e.g., cabinets, sheds or similar structures that prevent runoff contact and discharge to storm drains; (2) providing appropriate on-site pre-treatment and/or directing flows to the sanitary sewer; (3) installing impermeable floors, covers and secondary containment structures such as berms, dikes, or curbs; and (4) using pavement grades, containment or other appropriate measures to prevent run-on.
  - Trash storage areas will be designed to reduce pollutant discharge through methods such as paving with impervious surfaces, precluding run-on, installing screens or walls to prevent trash dispersal, providing attached lids and/or roofs for trash containers to prevent direct precipitation contact, and providing pre-treatment prior to discharge of associated runoff to the sanitary sewer.
  - Regular street sweeping will be implemented in areas such as plazas, sidewalks and parking lots, and associated debris and washwater will be precluded from entering the storm drain system.
  - Site landscaping will be designed to maximize the use of appropriate native and/or drought-tolerant varieties, and use efficient irrigation systems as described above for Site Design and LID BMPs.
  - Drainage from private roadways will be directed into water quality basins or other appropriate treatment control BMP.
  - Whenever feasible, driveways will be designed to include shared access, flared lanes (i.e., a single lane at the street), wheelstrips (i.e., pavement only under tires), and/or drainage to landscaped areas prior to entering the storm drain system.
  - Landscaping will be incorporated into parking area drainage systems, wherever applicable.
  - Manufactured or disturbed slopes will be revegetated/stabilized as soon as feasible, and appropriate drainage structures will be used to preclude concentrated flows on slopes.
  - Pet waste disposal bags and related educational materials will be provided at trail heads, open space corridors, or other applicable locations to encourage clean-up efforts.

- Applications of chemical pesticides, herbicides and fertilizers will be minimized; licensed professionals will be used for application of such chemicals in common landscaped areas; the rates and times of fertilizer applications will be restricted to minimize potential discharge in irrigation or precipitation runoff; and native landscaping will be used to reduce fertilizer use.
- An educational program will be implemented for home and business owners/tenants to prevent illegal or inadvertent pollutant discharge, including the distribution of materials regarding dry-clean methods, protection of storm drain inlets, prevention/proper disposal of pet wastes, proper handling/disposal of hazardous wastes, water conservation, swimming pool chemical use/maintenance, IPM methods, employee training, secondary containment, minimizing hazardous material use, proper clean-up procedures, street and parking lot sweeping, and proper collection/disposal of wash water.

- **LID and Treatment Control BMPs**
  - Water quality basins or BMPs of equivalent effectiveness (e.g., underground storage devices, mechanical control devices, etc.), will be used to treat runoff from most of the site prior to discharge, Attachment C of the Project SWMP in Appendix M).
  - Media filters will be used to treat Project runoff from applicable areas not covered by the described water quality basins. Specifically, this includes areas around the proposed intersection of SR-76/Pankey Road, with a series of curb inlets proposed to direct associated flows to the filters prior to discharge into the Project storm drain system (refer to Attachment C of the Project SWMP In Appendix M).
  - A baffle separator (or equivalent device) will be used to treat runoff from Shearer Crossing and the proposed commercial development south of SR-76. In addition, one or more supplemental treatment devices will also be required in the commercial areas to ensure regulatory conformance, potentially including media filters, biofilters, vegetated swales, bioretention facilities, and/or infiltration devices as outlined in the Project SWMP. The specific types and locations of these additional BMPs will be determined after completion of preliminary site design for the noted commercial areas.
  - Monitoring and maintenance efforts for the water quality basins will be implemented by the Project owner(s) through entering into a written BMP Maintenance Agreement with the County. Specific monitoring and maintenance efforts associated with proposed BMP facilities and programs include monitoring and reporting to document that programs/activities are being implemented as designed, inspection and maintenance of physical facilities, and making necessary modifications to ensure that intended BMP functions and regulatory requirements are being met.

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