The Perkins Ranch at Copper Creek Hills / 3489 Lone Jack Road / Lone Jack Road / Encinitas, CA 92024

February 11, 2018

Via Email

To Whom It May Concern,

1 We emphatically oppose the SD15 Property Specific Request for rezoning and General Plan Amendment. Further, we respectfully do not believe that this EIR provides a complete or accurate picture of the property's context or impacts of this project.

Please note that all documents cited herein are incorporated by reference in full.

The Same Standards Should Apply to this Property as to its Neighbors

2 SD15 is a 69 acre lot of an approximately 550-acre County "island" between the Cities of San Marcos, Encinitas and Carlsbad. This lot is currently zoned 1 dwelling unit ("du") per acre (SR-1) with a maximum of 61 dwellings. The proposed land use is for 362 dwelling units, an increase of 301, with a zoning of C-1, SR-0.5, VR-10.9. This is nearly a 5x increase in homes, in addition to adding commercial density.

3 Prior to General Plan 2020 ("GP2020") the remainder of the island was zoned 1 du per 2/4 acres.[1] As part of General Plan 2020, County staff recommended a zoning of 1 du/20 acres (RL-20).[2] As a result of General Plan 2020 nearly all non-open space/conservation parcels within this County island were downzoned to 1 du/10 acres (SR-10).[3]

4 These properties were downzoned because the County applied different standards to neighboring properties than those being applied to SD15 in this draft EIR.

5 For example, the County describes the context of this project very differently than under GP2020. For example, the County's 2011 General Plan 2020 EIR, that includes lots on two sides of SD15 as well as the remainder of the County island, the context is described as follows:

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[1] Appendix to General Plan Update 2011 EIR. Available at https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html

[2] Appendix to General Plan Update 2011 EIR. Available at https://www.sandiegocounty.gov/content/sdc/pds/gpupdate/environmental.html

[3] See County of San Diego Planning and Development Services Property Summary Reports for parcel numbers 223-070-07, 223-070-08, 223-070-20, 223-070-21, 223-070-22, 223-070-23, 223-081-48, 223-081-49, 223-081-50.

Consists of open preserve and undeveloped land. To the east, there is a 190-acre junkyard/dump. To the south is spaced rural residential use and there are large single family residential developments to the northwest and west.

Compare this to the EIR assessment of the context of SD15, considering that this should contain the same information and approach as the above:

5 con'd

Information Related to LU-2.3 - SD15 is located in a 550-acre County "island" which is surrounded by the cities of San Marcos, Carlsbad, and Encinitas. There is a wide range of parcel sizes in this area, due to the adjacent open space preserves and nearby higher density developments in San Marcos and Carlsbad. Unincorporated County parcel sizes range from ¼ acre to 150 acres within a one mile radius. This County island contains a majority of open space lands and other undisturbed habitat. The closest incorporated area to this County island is the western portion of Elfin Forest (part of the San Dieguito CPA), which contains mostly SR-4, RL-20, and open space preserves. Outside of some adjacent undeveloped areas within the jurisdiction of adjacent cities, there are some existing higher density developments nearby in Carlsbad and San Marcos (La Costa Oaks, University Commons, and San Elijo Hills, among others). Considering the fact that this County "island" has as much or more of a connection to the adjacent areas of San Marcos as it does to the Elfin Forest portion of the San Dieguito community, it can be considered a transition area. Higher densities are found nearby (within ½ mile) in San Marcos than proposed with the SD15 Proposed Project map. Nearby incorporated areas also contain several commercial uses. Considering these factors, the Proposed Project map has been found to be consistent with LU-2.3

6 Unlike the approach taken for SD15, under GP2020 County staff failed to consider and give deference to city sphere of influence zoning and neighboring subdivisions to County island properties. Take for example Parcels 223-081-48, 223-081-49 and 223-081-50. Prior to GP2020, these were zoned 1 du/2 acres, matching City of Encinitas sphere of influence zoning. Now these are zoned 1 du/10 acres (SR-10), despite being in the Encinitas sphere of influence, taking services from Encinitas and being immediately adjacent to the <1 acre lots of the One Oak development. This is far closer than SD15 is to the developments listed in the County description above.

7 The primary reason provided for the GP2020 downzone was "Fire Service Deficiency" because the County refused to consider service from nearby City of Encinitas stations (<10 minutes) and calculated fire response from Rancho Santa Fe. In contrast, in this EIR, SD15 gets credit for city services.

8 Although factors applicable to County island properties are also applicable here (e.g., designation as part of the MSCP Pre-Approved Mitigation Area/MHCP County Core), under GP2020, County staff recommended downzoning to 1 du/20 acres for County island properties yet, next door, SD15 proposes approximately 5.25 du/acre, plus approximately 2000 square feet of commercial space per acre.

9 SD15's immediate neighbors to the west, parcels 223-070-08 and 223-070-07 were downzoned under General Plan 2020 to SR-10. Note that the latter parcel, unlike SD15, is adjacent to a San Elijo Hills development.

10 The same factors cannot be used to reach such opposite conclusions for similarly situated properties in two different County EIRs arising out of General Plan 2020. The General Plan principles and property facts have been applied differently to this project than its neighbors. The standards of assessment under this EIR reopen the County downzoning of the County island and the SD15 standard of analysis should restore pre-General Plan 2020 zoning to SD15's neighbors. Even in this scenario, there should still be no increase to SD15's existing zoning as it would remain significantly more generous than its next door neighbors.

Biological Resources Impacts

11 Likewise, as described above, while the EIR considers nearby City developments, the EIR does not give equal attention to City of San Marcos biological resources or adjacent preserves.

This is an Out of Character Project Proposing Zoning of Up to 52.5x Neighboring County Island Properties (Excluding the Proposed Commercial Zoning)

12 This property is more isolated from nearby developments than downzoned properties described above, and if approved, would be an isolated island of development south of San Elijo Road, where its neighbors are open space or larger lots zoned SR-10 (1 du/10 acres).

13 Already SD15 has the highest zoning in the 550 acre County island. Because its neighbors were downzoned under General Plan 2020, this property already has 10x the current development potential of neighboring properties south of San Elijo Road in the 550 acre County island. Increasing residential density as proposed will create a final density of approximately 52.5x the density of its next-door neighbors, excluding the estimated 138,000+ square feet of commercial proposed (this yields 2000 square feet per acre of commercial space).

14 There can be no County justification for these numbers or the selective interpretation of facts and the General Plan principles in the two County prepared General Plan EIRs.

This SD15 request to upzone is especially egregious because the density should be kept to the current 1-2 acres/du to reflect the habitat, landfill, community and other issues.

This Project Will Likely Divert Fire Resources from Nearby Communities

15 As an isolated island of development south of San Elijo Road, surrounded by hills, this will be very difficult to defend on up to three sides from fire and would cause significant diversion of fire defense resources from the surrounding community. Because of the density concentration, the Fire Departments would likely prioritize this property over single family homes, especially in areas with larger lot sizes such as Elfin Forest.

16 Existing roads and connectors are already inadequate to provide safe exit from the San Elijo Hills/Elfin Forest Community in Fires and approval of this project will exacerbate already dangerous conditions. Per the article attached as Annex 1, residents were unable to evacuate for hours during the Cocos Fire evacuation. Increasing zoning from the existing density is inappropriate.

This Project Would Increase Traffic nearly 27x

17 The EIR estimates that vehicular trips will increase by 16,231 average daily trips (see EIR Table 2.15-4). That is approximately a 27x increase over the existing zoning. This will negatively change the quality of life of the community as we know it.

This Project Will Harm Copper Creek/Escondido Creek

18 Copper Creek runs on the South-East of this property, although it is not reflected on any of the SD15 maps. Please see landfill study maps at Annex 2 as this describes surface water monitoring being taken from SD15 land (at SMSP-4).

19 Copper Creek (leading to Escondido Creek and San Elijo Lagoon) is already suffering from siltation, sedimentation, scouring and flooding from projects such as this that did not adequately mitigate the impacts in previous EIRs. The intensity of this proposed development/hardscape will only increase the harms to the Creek and property downstream.

This Project Is Harmful to Habitat, Including Nearby Preserved Lands and There is a Selective
20 **Consideration of Impacts**

Approval of SD15 will yield an isolated island of development surrounded predominantly by habitat.

21 This property serves as an important connector/corridor from the County Core to the San Marcos habitat areas. Please see Annex 3 for a map of preserved areas within San Marcos that were not considered in this EIR.[4] Development of this property as proposed will fragment the habitat and decrease habitat connectivity between the County and San Marcos. Edge effects will harm neighboring habitats and fuel modification arrangements will cut into habitat. Light and glare effects will affect neighboring preserves.

22 Please note that this EIR only considers County owned open-space preserves within two miles. It does not include consideration of the habitat impacts to the adjacent Center for Natural Land Management ("CNLM") preserves or to the San Marcos landfill which the County paid at least $2 million to revegetate with native habitat.[5] Further information about the County's view of the ecological importance of the revegetated landfill habitat is available at Annex 4.

23 The area within the County Core is subject to enormous daily public use beginning before dawn and stretching into 10-11pm. I have witnessed vandalism, trail blazing and habitat destruction on adjacent preserved land caused by users from surrounding communities including Carlsbad and San Marcos. More users = more problems. The trails on the CNLM property are already overcapacity.

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[4] Available at http://maps.san-marcos.net/mapgallery/map.html?webmap=5b762031658c493cb7dc604654b5d9ce

[5] See http://www.sandiegouniontribune.com/sdut-county-to-accelerate-san-marcos-landfill-2005jul28-story.html

24 Changing SD15 zoning to add an additional estimated 894 residents plus commercial visitors/workers into this area is unconscionable and will cause further environmental degradation that spills far beyond the boundaries of this project.

25 Again, this EIR selectively presents information and does not appear internally consistent. For example, as discussed above, city developments are considered in the Land Use section of the EIR, but city habitat and connectivity is not considered in the Biological Resources section. Likewise, the EIR (and County zoning maps) are not sufficiently clear about and descriptive of adjacent non-County owned preserves and the impacts of this project.

SD15 Should Not Receive Additional Density Because SD15 Appears to Have Landfill Gas (or Leachate) Intrusion Which Poses Possible Health Threats and the County Has Limited Enforcement and Monitoring Powers

26

The EIR states "it is important to note that none of the PSR Analysis Areas or former CGSP Area have been identified as contaminated." This does not appear to be correct when the County's monitoring and other landfill documents are reviewed as landfill impacts are recorded on the SD15 site.

27 In brief, County reports show the SD15 onsite groundwater well, in addition to other wells within feet of the SD15 boundary, routinely testing positive for "Constituents of Concern" ("COCs").[6] The County ascribes the COCs as deriving from landfill gas ("LFG"), or less likely, landfill leachate. Note that the geology underlying the landfill is fractured rock, and could easily transmit leachate and landfill gas.

Landfill Background

28 The San Marcos landfill was in operation from June 1979 to March 1997. According to the County, it reportedly accepted residential, commercial and agricultural waste including paint and paint thinners, oil, treated sewage sludge and medical waste.[7]

The San Marcos landfill is made of 18.75 million tons of material.[8]

San Marcos Landfill is Unlined and Generating Landfill Gas and Leachate

Unlike modern landfills, the San Marcos landfill was unlined. The purpose of landfill lining is to keep landfill materials and contaminants onsite.

It wasn't until 1992, as part of the landfill expansion, parts of the existing landfill were covered by a 24" compacted clay liner at an elevation of 750 feet above mean sea level.[9] A method of collecting leachate was put in place only for new waste collected after that time.[10]

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[6] The list of Constituents of Concern is available at October 2016 – March 2017 Semi-Annual and 2016 Annual Monitoring Report, San Marcos II Landfill, page 7 (Annex 7). These are constituents that "have been tested and verified in samples collected from the leachate."

[7] Revised Workplan for Modification of Corrective Action Plan for San Marcos II Landfill, prepared for San Diego County Department of Public Works, Landfill Management by Geosyntac Consultants (May 2010), page 3.

[8] San Marcos II, Inactive Landfill Maintenance Plan, County of San Diego, (April 2014).

28 con'd A 2017 letter from the County (attached as Annex 5) states, "While the San Marcos Landfill has closed, it can be expected to remain biologically active and generate landfill gas and leachate for more than 30-50 years after closure." A County official said monitoring may need to continue forever in an article in Annex 6.

Radioactive materials

29 There were no laws preventing "certain types of low level radioactive waste, known as decommissioned materials" from disposal in the San Marcos Landfill during its years of operation.[11] It cannot be excluded that such low-level radioactive waste has been disposed of in the San Marcos Landfill.

Groundwater Contamination / Landfill leachate and LFG

30 Groundwater under the landfill and SD15 is testing positive for chemical COCs. According to the County, there are two likely sources: landfill leachate and landfill gases.[12] Per County documents, "[t]he source of COCs outside the waste area is likely due to migration of LFG and, to a lesser degree, leachate."[13]

31 The County also states in Annex 5 that "Landfill gas has been documented to travel in the subsurface 1,000 feet or more from the source. The underlying geology of [SD15] is fractured rock, which adds another layer of complexity to potential gas migration."

Groundwater flows

32 According to the map at Annex 2[14], most of the groundwater from the landfill flows towards the west, towards SD15.

Landfill Gas

33 According to the County, nothing more can be done to minimize groundwater Constituents of Concern caused by landfill gases.

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[9] Revised Workplan for Modification of Corrective Action Plan for San Marcos II Landfill, prepared for San Diego County Department of Public Works, Landfill Management by Geosyntac Consultants (May 2010), page 3.
[10] Revised Workplan for Modification of Corrective Action Plan for San Marcos II Landfill, prepared for San Diego County Department of Public Works, Landfill Management by Geosyntac Consultants (May 2010), page 3.
[11] http://www.waterboards.ca.gov/rwqcb9/board_decisions/adopted_orders/2002/2002_0330.pdf
[12] Revised Workplan for Modification of Corrective Action Plan for San Marcos II Landfill, prepared for San Diego County Department of Public Works, Landfill Management by Geosyntac Consultants (May 2010), page 11 ("The likely source of the constituents of concern (COCs) detected in groundwater is diffusion from LFG beneath the landfill that has contacted the groundwater surface. Also, landfill leachate has possibly directly contacted groundwater, resulting in COC impacts.").
[13] Revised Workplan for Modification of Corrective Action Plan for San Marcos II Landfill, prepared for San Diego County Department of Public Works, Landfill Management by Geosyntac Consultants (May 2010), page A-8.
[14] This is Figure 2 of the October 2016 – March 2017 Semi-Annual and 2016 Annual Monitoring Report, San Marcos II Landfill, page 37. The body of this Report is excerpted as Annex 7. The other reports relating to the San Marcos Landfill accessible via the waterboards.ca.gov website are also incorporated by reference.

> [d]etections of low concentrations of COCs in groundwater resulting from minor LFG migration will likely continue regardless of optimal LFG extraction system operation (there is currently no LFG extraction technology that would be effective to eliminate LFG migration and potential contact with groundwater).[15]

33 Con'd.

Further in the attached 2017 County letter,

> Landfill gas represents a health and safety issue throughout the life of an active landfill and for many years after closure. For regulated closed landfills, the [Solid Waste Local Enforcement Agency] and the landfill owner ensure that control measures contain landfill gas to the landfill through the use of a landfill gas collection system. Even so, gas can still migrate off site. Landfill gas consists of approximately 50% methane and 50% carbon dioxide. Trace amounts of non-methane organics and air toxics are also found in landfill gas. These gases can pose an explosion and human health threat. The lower explosive limit for methane is 5% methane in air.

Water Monitoring

According to recent and historical Semi-Annual and Annual Monitoring Reports prepared for the County, including the 2016 report attached, the landfill groundwater wells are testing positive for constituents of concern. As mentioned in the EIR, and 2017 County letter, and depicted in Annex 2, SD15 has an onsite water monitoring well (SMGW-40). [16] Per historical annual/semiannual monitoring reports, SD15's onsite well is routinely testing positive for 1,1-Dichloroethane, which pursuant to the federal Agency for Toxic Substances and Disease Registry/CDC ("ATSDR") data, may have effects on the kidney and liver. A number of other wells are testing water within a short distance of this property, for example, well SMGW-39 appears on the boundary of SD15 and other wells are within just a few hundred feet. These are testing positive for chemicals including, but not limited to: Benzene, Diethyl Ether, Methyl-Tert-Butyl Ether (MTBE), amongst others. Per the ATSDR data, these cause cancer and potentially damage neurology, nephrology (kidney) and hepatology (liver).

34

Per the attached news article at Annex 6, the San Marcos landfill "is leaching chemicals known to cause cancer, reproductive harm and other health problems." It continues, "officials said that because these chemicals don't occur naturally, any leak exceeds standards set for those sites" and "[a]ny volatile (organic compound) that's detected in groundwater is an indication of release from the landfills" (emphasis added).

35

We know from recent monitoring studies that County contractors are "assessing potential causes of trace VOC detections in groundwater samples collected from monitor wells SMGW-39 and SMGW-40 and is coordinating with the County's LFG subcontractor to maximize the efficiency of the landfill gas

36

[15] Revised Workplan for Modification of Corrective Action Plan, page 12.

[16] October 2016 – March 2017 Semi-Annual and 2016 Annual Monitoring Report, San Marcos II Landfill, page 5. Attached. The maps of water monitoring wells is attached as Annex 2. These are figures to the October 2016 – March 2017 Semi-Annual and 2016 Annual Monitoring Report, San Marcos II Landfill.

extraction system in an effort to improve water quality."[17] As described above, these efforts may succeed as "there is currently no LFG extraction technology that would be effective to eliminate LFG migration and potential contact with groundwater."[18]

37 Per the above documents, it appears likely that SD15 already has landfill gas intrusion as its onsite and adjacent wells are testing positive for COCs.

Once a project is entitled, the County has limited ability to protect residents/tenants from Landfill Gases and Landfill Impacts

38 The EIR states "Any potential existing hazardous materials site impact resulting from the Proposed Project would be reduced to a level below significant due to the existing regulations, policies, plans and guidelines addressing contaminated sites." This does not appear to be correct or complete based on County documentation.

Pursuant to the letter at Annex 5, because SD15 is not located "on" the Landfill property, the Solid Waste Local Enforcement Agency "has no regulatory authority to require the Project to be constructed with measures to mitigate the effects of the landfill" (emphasis added).

39 The County has only the power to request the following:

- Enrollment into the Department of Environment Health's Voluntary Assessment Program "for evaluation of the health risks associated with a project in such close proximity to a closed landfill"; and
- Notification to residents and purchasers of proximity to the San Marcos Landfill.
- To mitigate landfill gas migration, within 1000 feet,
    - Explosion proof conduits/sealing;
    - Trench dams in utility trenches;
    - Use of a gas migration barrier with passive venting; and
    - Hard-wired methane detectors.

As on-site structures will not be thoroughly monitored, per the above, the EIR is not accurate as drafted.

40 It is absolutely inappropriate to increase the zoning on a property like this given the lack of required governmental protections and oversight given the potential for future harm to residents/tenants from the landfill. Maintaining the existing, lower, density means fewer potentially affected homes/workplaces/people.

Condemnation

41 The County has already condemned 80 acres further away from the landfill than SD15 for $3.4 million as a landfill buffer.[19]

[17] October 2016 – March 2017 Semi-Annual and 2016 Annual Monitoring Report, San Marcos II Landfill, page 5. Attached.

[18] Revised Workplan for Modification of Corrective Action Plan, page 12.

It seems like a very inappropriate risk for taxpayers to increase zoning of this property, thereby increasing the value at time of condemnation.

Conclusion

42 This EIR does not fully address the impacts of this project. This project is terrible for the community, future residents/tenants of this project, and taxpayers. The developer should not receive a GP2020 windfall from its neighbors' loss of density and risk possible health impacts to future residents/tenants given the documented landfill impacts onsite and nearby.

Zoning should be maintained at the very generous 1 du/acre, 61 du maximum.

Please let me know if I can provide any materials cited but not attached.

Thank you in advance for your attention.

Kind regards,

/s/

Camille Perkins

Attachments

[19] http://www.sddt.com/News/article.cfm?SourceCode=l990726td and at Annex 8. According to this news article, San Elijo Hills was 1000 feet to 1.5 miles away from the landfill. This project is within 1000 feet per the EIR and attached County letter.

Annex 1

Cocos fire traffic jams to be reviewed

Traffic backs up along San Elijo Road at its intersection with Elfin Forest Road during the Cocos fire on May 14. (/ Photo courtesy Randy Houghton)

By **Teri Figueroa**

JUNE 7, 2014, 11:00 AM | SAN MARCOS

Within the first two hours of the Cocos fire, with black smoke cresting the hill and winds whipping west, hundreds of San Elijo Hills residents decided it was time to get out.

But the main road out of town was clogged with neighbors also intent on leaving. Many said it took an hour or more to get through the gridlock.

"Trying to remain calm and not panic — that was probably the scariest part. (I had) that feeling of 'stuck,'" said resident Alicia Stephens, who hit the road with her three young children not long after the fire started.

That traffic tie-up is on the list of things San Marcos officials want to evaluate in the aftermath of the fire to determine what worked and what needs a fix.

"You learn from every event, and we will do that here," San Marcos Councilman Chris Orlando said last week.

The Cocos fire started around 3:30 p.m. May 14 in the hills behind Cal State San Marcos. Over the next few days, it burned nearly 2,000-acres in San Marcos and Harmony Grove, and destroyed three dozen homes. It came with a price tag upwards of $10 million, between firefighting efforts and recovery.

Within hours of the blaze erupting, thousands of people fled their homes including those in master-planned San Elijo Hills community on the south side of Double Peak Park, a San Marcos hilltop with panoramic views of North County.

There are essentially three ways out of San Elijo Hills, and all rely on the main route through the community — San Elijo Road. Nearly all the residents use that road to access their neighborhoods.

To the west, San Elijo Road hits Melrose Drive and Rancho Santa Fe Road. To the east, it becomes South Twin Oaks Valley Road. There is also Elfin Forest Road, a backcountry route into Escondido through brushy open space that burned in the 1996 Harmony Grove fire.

On the afternoon of May 14, people fleeing San Elijo Hills weren't heading onto South Twin Oaks — that's where the fire was coming from. Most headed to San Elijo Road with plans to go west.

But the number who wanted out and the time of day — rush hour — left traffic at a standstill.

Longtime resident Dustin Smith said he packed up his pets and headed off about 4:15 p.m., but couldn't leave his gated Promontory Ridge community. In front of him was a line of vehicles backed up even before the gate. Those drivers were waiting for their turn to squeeze onto another packed road, one that eventually led to an already-full San Elijo Road.

"It caused for a lot of anxiety," Smith said, adding that the drivers appeared to remain calm in the face of the gridlock. "But in the moment, you realize that if you start seeing flames up the hill, you gotta run out of there, because you would not make it out in a car."

He said he gave up, tried again an hour later but found the same situation. Tried again shortly after 6 p.m. and finally found roads clear enough to leave.

Resident Marla Trussell said she had packed up but stayed until midnight.

"I didn't want to get stuck in a huge crush and stampede of people leaving," Trussell said. "That situation looked more dangerous than the fire," which she said she surmised was still at a distance.

"At the end of the day, we need more ingress and egress out of this community — and I have no idea how they are going to do that," Trussell said.

Sheriff's Capt. Scott Ybarrondo, who runs the San Marcos station, said deputies were initially deployed to go door to door to evacuate neighborhoods facing the most immediate fire threat, including Coronado Hills, just east of San Elijo Hills.

From there, some deputies were moved to San Elijo to help with evacuations and to direct traffic.

Eventually, once there was enough manpower for road closures, traffic on all lanes of San Elijo Road was directed westbound toward Rancho Santa Fe.

Ybarrondo said his department will meet with other agencies — including the city, CalTrans, and the California Highway Patrol — to delve into what went well during fire evacuations and what improvements need to be made.

"My biggest message is that we had no serious injuries and no loss of life," he said. "No matter how successful we are, we always want to be better — and that is what we are going to do in this case."

Councilman Orlando, a San Elijo resident, said reviews of the incident can bring about improvements. He pointed to concerns residents raised in 2007 regarding lack of information from the city during wildfire evacuations at that time. That led directly to continual fire-related updates on the city's website during the Cocos fire, he said.

"You are obligated to learn what you can, and be better next time," he said.

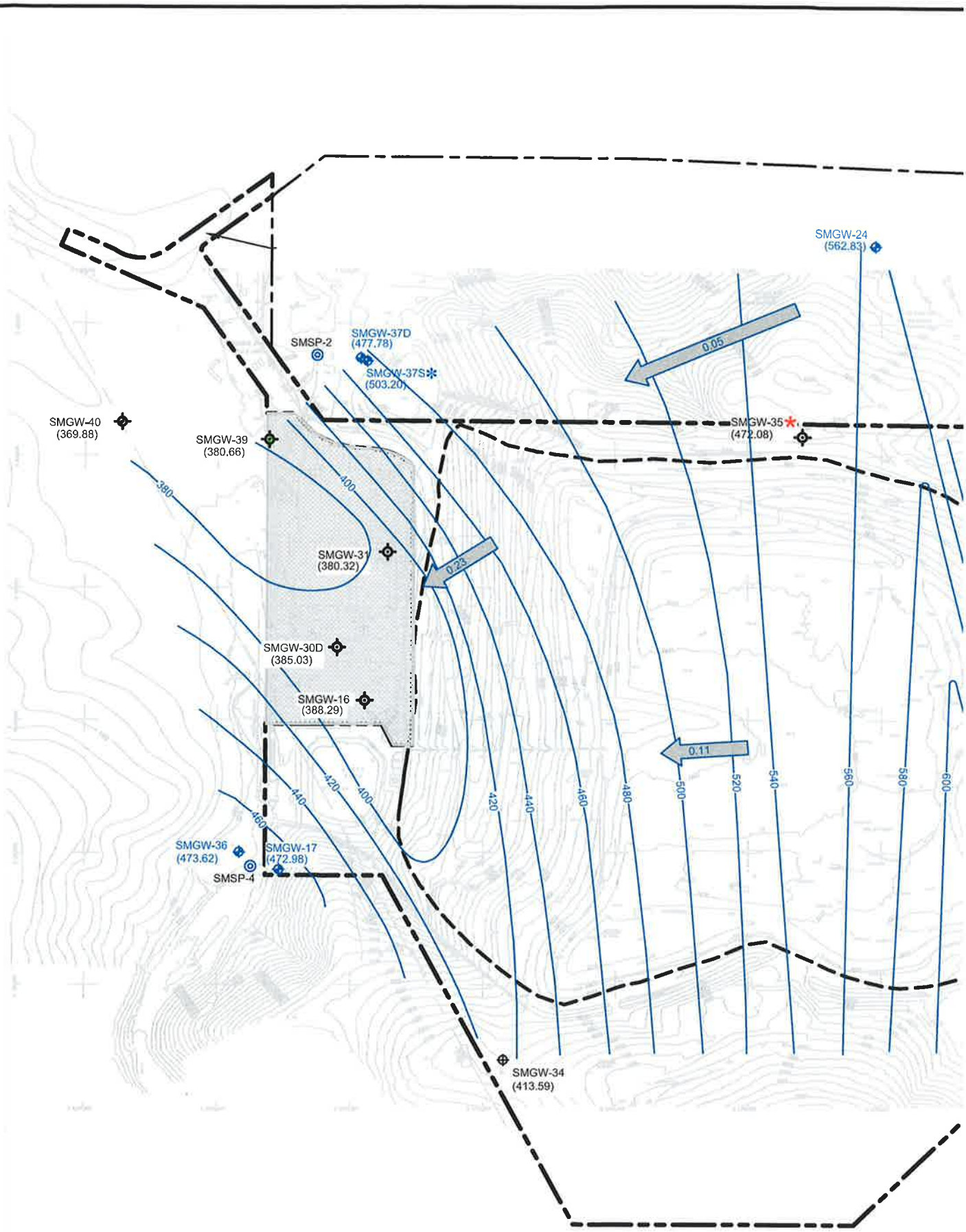
Orlando also said that what is most important is that everyone affected by the Cocos fire got out safely.

None of the property losses were in San Elijo. Residents said they were relieved that the fire never hit their community, and repeatedly expressed gratitude to the first responders and firefighting efforts. Stephens also noted her joy at seeing the community come together after the fire.

"That was wonderful to see good come from something so terrible," she said. "But being stuck and not being able to get away was terrifying."

This article is related to: Road Transportation, Transportation, Travel

Annex 2

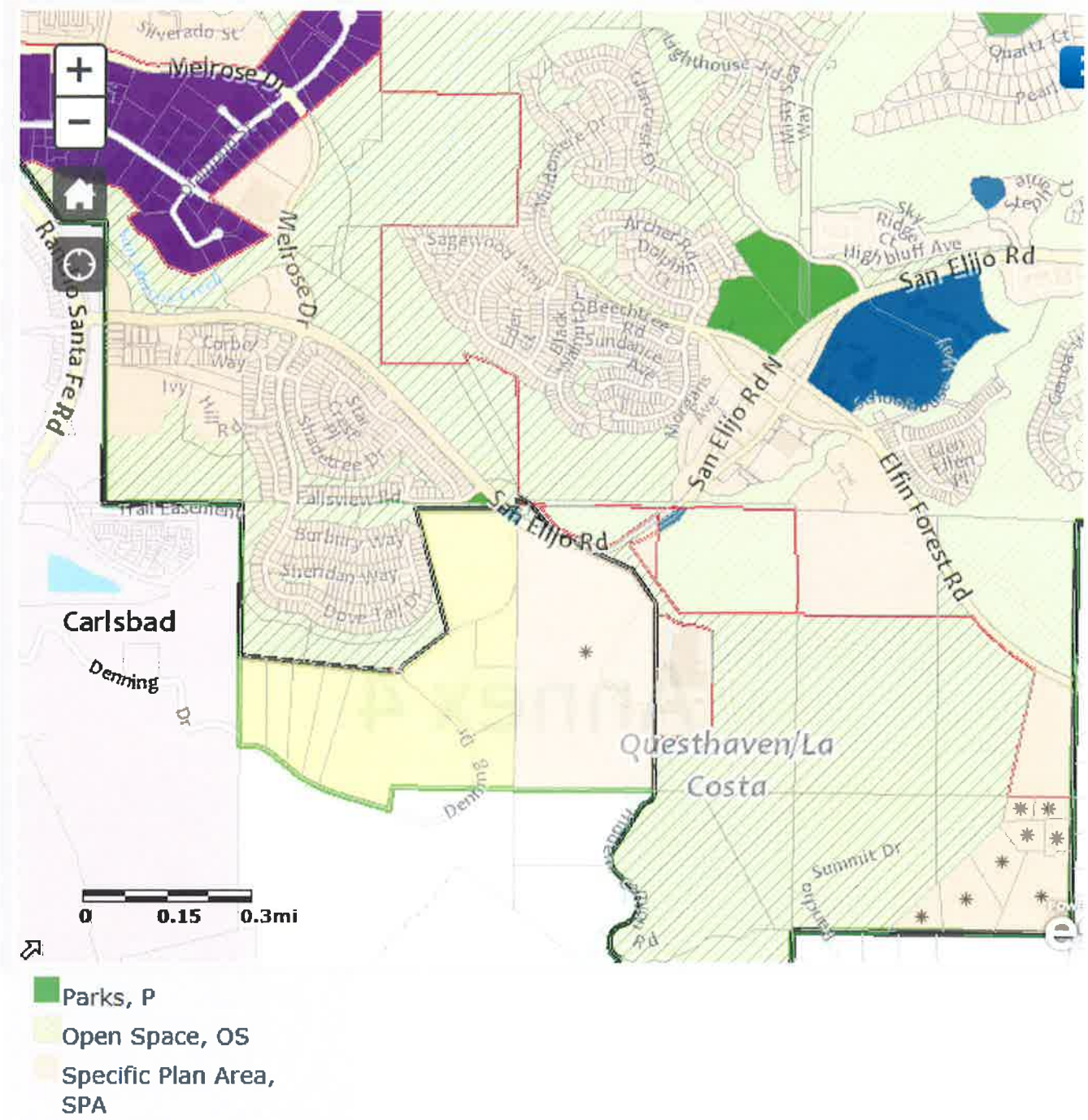


BASE MAP REFERENCE:
STEWART GEO TECHNOLOGIES JULY 2002.

P:\PRJ\SDCadd\CADD\SC0226\San Marcos II-03\Figures\2017\1st Qtr\SC0226_Figure 2_GW Elevations.dwg

Annex 3

Screenshot of San Marcos Open Space[1]



[1] Available at http://maps.san-marcos.net/mapgallery/map.html?webmap=5b762031658c493cb7dc604654b5d9ce.

Annex 4

COUNTYNEWSCENTER
DIRECT TO YOU FROM THE COUNTY OF SAN DIEGO

ENVIRONMENT

County Reclaims Landfill for Wildlife Habitat

By Yvette Urrea Moe, County of San Diego Communications Office
Apr. 22, 2012 | 8:00 AM

Looking at the San Marcos landfill now, it looks like any other natural hillside. You'd never know that it sits on top of 12.5 million cubic yards of trash. Instead, you would observe native plants and trees, the endangered California Gnatcatcher, deer, owls, bobcats, rattlesnakes and other native wildlife perhaps stopping along Copper Creek or making their way through the thick foliage.

"There's just a whole gambit of wildlife out there. They did a good job of putting native habitat out there," said Greg Weston, landfill maintenance supervisor with the County's Department of Public Works. "I saw a mountain lion out there once. I've seen a bobcat at night. It's when you see most of the nocturnal ones."

The now inactive San Marcos landfill is not an area open to the public, but it is visible to hundreds of homes in the San Elijo Hills area. The landfill operated from 1979 to 1997 when it was closed and capped.

Normally, when a landfill is capped, the County maintains it but cannot always spend the time and money to restore it to its natural beauty. In this case, the county reached an agreement with the city of San Marcos to restore the habitat.

Preteens

Save Big at County Vehicle Auction

Google Maps Gives Street View in County Parks

UPCOMING EVENTS

2/11 Julian
Agua Caliente Marsh Trail Hike

2/11 San Diego
4S Ranch Sports Park Adult Wheelchair Lacrosse

2/11 Lakeside
Oakoasis Sunday Stroll

"We feel it's a successful project," said Jason Forga, senior civil engineer with Public Works. "In the end, it turned out to be a positive because when we planted the native plants out there, it did bring back the native wildlife out there."

The County first installed an irrigation system to water the plants for the first few years until they became well established. They used a special vegetative soil mixture that allows native plants to take root, and then seeded 102 acres with seeds collected within a five mile radius of the landfill. By using those seeds, the County was assured that the coastal sage scrub and chaparral varieties would not only blend in but would also grow in that microclimate.

After it was seeded, the County also planted 26,000 container plants to vary the maturity and height of plants in the area. Oak trees were also planted around the outer areas. Forga said they no longer have to water the plants because the plants can survive with normal rainfall. In previous years, they have supplemented with water if it was very dry. They also try to weed out invasive plant species whenever possible.

ARCHIVE

Select Month

As they do with all closed landfills, County staff maintains the land as it settles. A camouflaged methane gas collection system is set up to ensure the gas doesn't vent into the atmosphere or migrate to surrounding properties. Most of the methane gas is directed to a flare where it is destroyed, a small percentage of the better quality methane gas is mined and turned into electricity by an independent gas and energy company.

A groundwater system is also installed that allows the County to test the water quality. Workers perform routine maintenance activities to make sure surface water drains off the landfill and doesn't pond. In addition to that, they mow the access roads and create a fire break around the site, Forga said.

Still, the truly unique and exciting result from the project has been the transformation of a barren landscape to one that is now teeming with native wildlife.

Weston said he provides water feeders for the animals and at a certain time of day, you can find gnatcatchers and quail and other birds getting a drink. The county has even put up owl boxes to attract Horned

owls and barn owls to help control the squirrel and gopher population.

The maintenance supervisor said he really enjoys observing the wildlife at the landfill. He has been able to observe two Great Horned Owls and their four owlets, which he called "cute as can be." And he even came upon a doe giving birth.

"Each year it just gets better (as the plants mature and more animals come through)," said Weston. "It makes work fun out there. When you have a buck chasing a doe, it makes if feel like you're not in the city anymore."

Yvette Urrea Moe is a communications specialist with the County of San Diego Communications Office. Contact

RELATED STORIES

Deer Mouse Tests Positive for Hantavirus

Planning Commission Recommends Approval of County Climate

Storm Prompts General Warning to Stay Out of the Water

Annex 5

County of San Diego

MARK WARDLAW
DIRECTOR

PLANNING & DEVELOPMENT SERVICES
5510 OVERLAND AVENUE, SUITE 310, SAN DIEGO, CA 92123
(858) 694-2962 • Fax (858) 694-2555
www.sdcounty.ca.gov/pds

March 14, 2017

Mr. Norm Pedersen
Associate Planner
City of San Marcos Planning Division
1 Civic Center Drive
San Marcos, CA 92069

Via email to: NPedersen@san-marcos.net

COMMENTS ON THE COPPER HILLS ROUTING SHEET AND TENTATIVE MAP

Dear Mr. Pedersen:

The County of San Diego (County) has reviewed the City of San Marcos' (City) routing slip dated 2/3/17 and the associated tentative map for the Copper Hills project (Project). The County offers the following comments for your consideration. Please note that none of these comments should be construed as County support for the proposed Project or the associated annexation. Please refer to Attachment A, which illustrates the municipal boundaries and various parcels referenced in this letter.

PLANNING & DEVELOPMENT SERVICES (PDS)

1. The subject property is entirely within the draft North County Multiple Species Conservation Program (NCMSCP) and associated Pre-Approved Mitigation Areas (PAMA).

   Proposed projects within PAMA designated areas must be evaluated to determine their impact on the County's ability to assemble and manage an ecologically functioning preserve system. This includes projects that propose annexation into an incorporated city. The County's NCMSCP Planning Agreement includes the following directive:

   > "In the event land within the County's jurisdiction is proposed to be annexed to another jurisdiction, the County shall request that LAFCO impose a requirement on the annexing jurisdiction that it shall enter into an agreement between the County, the annexing jurisdiction, USFWS and CDFW as part of the annexation

process to ensure that annexation would only occur when the annexation will not jeopardize the buildout of the preserve or the coverage of species within either of the Planning Areas, or compromise viable habitat linkages with the proposed preserve, and that any development of the annexed lands proceeds in accordance with the Planning Goals set out in section 3 of this Agreement and the Preliminary Conservation Goals set out in section 5 of this Agreement. The agreement shall also set forth the resulting responsibilities for ongoing maintenance and enforcement of the terms of this Agreement as they relate to the annexed land. Issuance of Take Authorizations to the annexing jurisdiction or amendment of the annexing jurisdiction's Take Authorizations, if any are already in place, may be required in order to authorize Take on the annexed land."

An evaluation of the impact of the proposed annexation on the viability of the NCMSCP's proposed preserve must be completed for this Project. Should the Project be approved and an annexation agreement required, the County will be a Responsible Agency under CEQA §15381 and would need to rely on the environmental documentation to enable the Board of Supervisors (Board) to consider entering into the annexation agreement.

2. Please note that aside from the proposed Project discussed in the City's 2/3/17 routing slip, the Project property is part of the Board initiated Property Specific Requests (PSR) General Plan Amendment and Rezone for analysis of potential changes to General Plan land use designations and zoning classifications. The PSR is a County-initiated project to analyze proposed changes to land use designations for properties and associated study areas as directed by the Board during public hearings in June 2012. The PSR does not analyze information provided by the City's 2/3/17 routing slip and is a separate County-initiated project.

   The PSR includes a full environmental analysis which is currently in process. It is premature to speculate on the final decision by the Board regarding any potential changes to the General Plan designations and/or zoning classifications. Additional background on the PSR is provided below:

   a. Staff has identified various constraints on the Project property as part of the ongoing PSR evaluation process. Multiple alternatives are being analyzed, including the highest density alternative, which would place the northern portion in a General Commercial designation (with mixed-use zoning at a maximum of 2 units per acre), the central portion in a Village Residential 10.9 designation (10.9 units per acre), and the southern portion in a Semi-Rural 0.5 designation (1 unit per 0.5, 1, or 2 acres, slope-dependent).

   b. Staff has prepared preliminary a policy analysis for the PSR for the Project property which is available here:

http://www.sandiegocounty.gov/content/dam/sdc/pds/advance/PSR/prelim-analysis-sd15.pdf.

c. Additional information on the PSR can be found here:

http://www.sandiegocounty.gov/content/sdc/pds/advance/PSR.html.

TRANSPORTATION

1. Based on the proposed Project's description, it would generate approximately 5,000 average daily trips (ADT) as calculated below:

351 multi-family units **(2,808 ADT)**
+ 138,710 square feet of commercial / light industrial **(2,210 ADT)**
= (5,018 ADT)

The proposed Project is currently within the County's jurisdiction and could have significant direct and/or cumulative impacts to County roadways (e.g., Elfin Forest Road, Harmony Grove Road, Via Rancho Parkway, etc.). A Traffic Impact Study should be conducted per the County's *Guidelines for Determining Significance, and Report Format and Content Requirements* to ensure the proposed Project's traffic impacts are reflective of the current traffic conditions in the area and its impacts are appropriately mitigated.

WATERSHED PROTECTION

1. The proposed Project could potentially generate stormwater impacts to adjacent private parcels located in the unincorporated county. Therefore, the Project must consider the following items:

   a. Compliance with the San Diego Municipal Storm Water Permit Order No. R9-2013-0001, (as amended by Order Nos. R9-2015-0001 and R9-2015-0100). The Project may consider implementing permanent site design, source control, pollutant control, and hydromodification management in accordance with the County's Best Management Practices (BMP) Design Manual.

   b. Construction BMPs and associated plans for conformance with the County's Grading Ordinance, Watershed Protection Ordinance and State of California's Construction General Permit.

LAND AND WATER QUALITY DIVISION

1. A water well is located in the northern portion of APN 223-070-08, a privately owned parcel in the unincorporated county. The well is located in the vicinity of the cul-de-sac for the proposed private road designated as street "C" (see Attachment B for approximate location). This well must be identified on the tentative map. If the well will

be destroyed to accommodate the proposed Project, the destruction must be done under permit and inspection by the Department of Environmental Health (DEH) prior to grading.

2. The County's Regional Water Quality Control Board (RWQCB) approved plan for permitting on-site wastewater treatment systems and the County's implementing ordinance, which apply County-wide, require a 5:1 (horizontal to vertical) setback from the top of a cut slope to any existing septic system leach field or designated reserve area. The grading proposed would intrude onto parcel APN 223-070-08 in an area previously tested and approved for a septic system leach field. DEH presumes that "off-site" grading would not be proposed unless the developer had made an arrangement with the owner of this parcel to accept this cut. However, the City and the parcel owners should be aware that the cut and resulting 5:1 setback would mean that much of the remaining area of this parcel would no longer be available for use as a leach field or reserve area. Other portions of this parcel may not be suitable for use as a leach field. The impacts of this cut could be substantial. The cut related impacts could be so great that DEH would be unable to approve any proposal for future development of parcel APN 223-070-08 that depended on the use of an on-site wastewater treatment system.

3. DEH staff are available on a cost-recovery basis to assist the City in determining whether the proposed Project would make APN 223-070-08 unbuildable, and are available to assist in the consideration of alternative grading plans that could avoid such a severe impact. We recommend that the City verify that an approvable means of sewage disposal (approved septic system layout or sewer) exists for a reasonable use of parcel APN 223-070-08 prior to approval of the grading plan for the proposed Project.

LANDFILL MANAGEMENT

1. As shown on Attachment A, the proposed Project (APN 223-080-46) is located adjacent and west of APN 223-080-41 (a privately owned parcel) and west of the closed San Marcos II Sanitary Landfill/ Solid Waste Information System # 37-AA-0008 (San Marcos Landfill). Operations at the Landfill began in 1979 and continued through 1997. In 1997, when the San Marcos Landfill stopped accepting waste, it was estimated that 12.5 million cubic yards of waste was buried there. Corrective action has been occurring at the San Marcos Landfill since 1993. Groundwater remediation, leachate collection and treatment, and methane gas recovery are all currently being performed at the San Marcos Landfill. Official closure of the San Marcos Landfill occurred in 2007 and it is now in the post-closure monitoring and maintenance phase, which is managed by County Department of Public Works, Landfill Management.

2. Section 21190 of Title 27 of the California Code of Regulations (CCR) discusses limitations of post-closure landfill land use. Specifically, paragraph (g) of that section identifies development requirements for any on-site construction proposed within 1,000 feet of a disposal area, including the San Marcos Landfill.

In the County's review of the Tentative Map, the proposed Project does not appear to adhere to the aforementioned requirements in Section 21190 of Title 27 of the CCR. The requirements set forth in paragraph (g) have been copied below for reference. As the future land use authority for the proposed Project, it is recommended the City require Tentative Map, and related documents, be revised citing whether (and if so, how) the Project will comply with these state requirements. Please refer to the Local Enforcement Agency (LEA) comments provided further below for additional guidance.

> "(g) All on site construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed in accordance with the following, or in accordance with an equivalent design which will prevent gas migration into the building, unless an exemption has been issued:
> (1) a geomembrane or equivalent system with low permeability to landfill gas shall be installed between the concrete floor slab of the building and subgrade;
> (2) a permeable layer of open graded material of clean aggregate with a minimum thickness of 12 inches shall be installed between the geomembrane and the subgrade or slab;
> (3) a geotextile filter shall be utilized to prevent the introduction of fines into the permeable layer;
> (4) perforated venting pipes shall be installed within the permeable layer, and shall be designed to operate without clogging;
> (5) the venting pipe shall be constructed with the ability to be connected to an induced draft exhaust system;
> (6) automatic methane gas sensors shall be installed within the permeable gas layer, and inside the building to trigger an audible alarm when methane gas concentrations are detected; and
> (7) periodic methane gas monitoring shall be conducted inside all buildings and underground utilities in accordance with Article 6, of Subchapter 4 of this chapter (section 20920 et seq.)."

3. Existing groundwater monitoring wells are located on the proposed Project site (APN 223-080-46) that are part of the San Marcos Landfill's approved monitoring program. Please refer to Attachment C illustrating the groundwater well locations. The Project site is currently privately-owned and located within the unincorporated county, but is anticipated to be annexed by the City. The proposed Project must guarantee access to all groundwater monitoring compliance wells, and sites must be adequately protected to ensure there is no damage to wells during construction and in perpetuity. To ensure that the County can comply with its regulatory obligations to monitor the groundwater for potential landfill-related contamination, access to these wells will need to be maintained indefinitely.

4. Because the proposed Project is located within 1,000 feet of a closed landfill, the County recommends the developer enter into DEH's Voluntary Assessment Program (VAP) for evaluation of the health risks associated with a project in such close proximity to a closed landfill. Information on the VAP can be found on the County's website:

www.sandiegocounty.gov/content/sdc/deh/lwqd/sam_voluntary_assistance_program.html.

SOLID WASTE LOCAL ENFORCEMENT AGENCY

1. The proposed Project is located less than 1,000 feet from the disposal area of the closed San Marcos Landfill. While the San Marcos Landfill has closed, it can be expected to remain biologically active and generate landfill gas and leachate for more than 30 - 50 years after closure. Landfill gas has been documented to travel in the subsurface 1,000 feet or more from the source. The underlying geology of the area is fractured rock, which adds another layer of complexity to potential gas migration.

2. Title 27 CCR, Section 21190, states:

   "(a) Proposed postclosure land uses shall be designed and maintained to:
   (1) protect public health and safety and prevent damage to structures, roads, utilities and gas monitoring and control systems;
   (2) prevent public contact with waste, landfill gas and leachate; and
   (3) prevent landfill gas explosions."

   Landfill gas represents a health and safety issue throughout the life of an active landfill and for many years after closure. For regulated closed landfills, the LEA and the landfill owner ensure that control measures contain landfill gas to the landfill property through the use of a landfill gas collection system. Even so, gas can still migrate off site. Landfill gas consists of approximately 50% methane and 50% carbon dioxide. Trace amounts of non-methane organics and air toxics are also found in landfill gas. These gases can pose an explosion and human health threat. The lower explosive limit for methane is 5% methane in air.

3. Title 27 CCR § 21190(c) provides that all proposed postclosure land uses on sites implementing closure or on closed sites, other than non-irrigated open space, shall be submitted to the Enforcement Agency (EA), RWQCB, local air district and local land use agency. The EA shall review and approve proposed postclosure land uses if the Project involves structures within 1,000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste. However, this regulation does not extend beyond the permitted boundary.

   Because the proposed Project is not located on the San Marcos Landfill property, the LEA has no regulatory authority to require the Project to be constructed with measures to mitigate the effects of the landfill. However, based on staff experience, the LEA recommends the following measures be implemented to mitigate landfill gas migration on the proposed Project:

a. Explosion proof/intrinsically safe conduits and sealing of all conduit perforations into structures located within 1,000 feet or more of the San Marcos Landfill to preclude the migration of landfill gas into the structure;

b. Trench dams in utility trenches to prevent migration of gas along the trench lines;

c. Use of a gas migration barrier with passive venting or similar method of gas intrusion prevention underneath residential structures and those commercial structures closest to the San Marcos Landfill (within a minimum of 1,000 feet);

d. Installation of hard-wired methane detectors in appropriate locations in the residential structures, and the commercial structures located within a minimum of 1,000 feet of the San Marcos Landfill; and

e. Residents and purchasers should be notified of the proximity to the San Marcos Landfill prior to purchase, and this landfill should be disclosed in any leases.

PARKS AND RECREATION

1. The Project information submitted indicates that ten "tot lot" play areas totaling over 8,000 square feet, two recreational facilities totaling over 13,000 square feet, 3,560 linear feet of pedestrian paseos, nearly 40,000 square feet of common open space, and approximately 6.5 acres of recreational land use area would be included in the Project and would be located on-site.

2. If a 351 unit residential subdivision were proposed within the County's jurisdiction, approximately 2.98 acres of developed land would be required to be dedicated for local public park purposes as a condition of subdivision approval. This acreage requirement would not include passive recreational uses, trails, or group open space areas required for multifamily residential developments. Additionally, project approval would include a condition to establish a funding mechanism, such as a special tax district, to fully fund the on-going operation and maintenance of the public park.

3. The County Department of Parks and Recreation (DPR) recommends that an equivalent acreage of land (2.98 acres) be dedicated for public park purposes that does not include trails and group open space areas. DPR also recommends that the Project be conditioned to require adequate funding mechanisms to fund on-going operation and maintenance of the public park and any trails. Future project submittals should provide details as to the acreage of public parks provided and funding mechanisms for ongoing operations and maintenance.

The County looks forward to receiving future documents and/or notices related to this Project and providing additional assistance at your request. If you have any questions regarding these

comments, please contact Timothy Vertino, Land Use/Environmental Planner at (858) 495-5468, or via email at timothy.vertino@sdcounty.ca.gov.

Sincerely,

JOSEPH FARACE, Group Program Manager
Advance Planning Division
Planning & Development Services

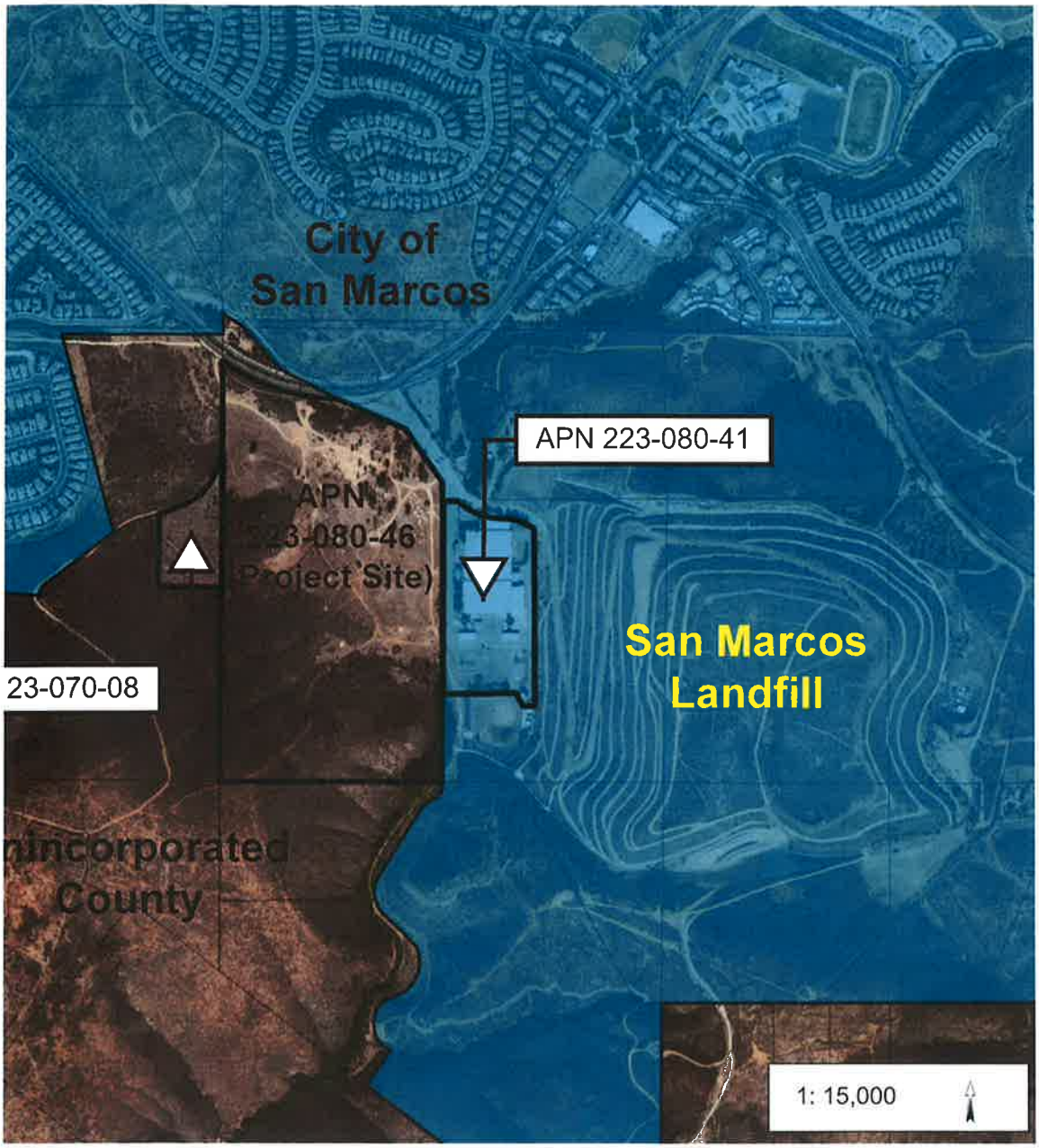
Enclosed:

Attachment A: Vicinity Map
Attachment B: Water Well - APN 223-070-08
Attachment C: Groundwater Well Locations

Email cc:

Melanie Wilson, Policy Advisor, Board of Supervisors, District 5
Vincent Kattoula, CAO Staff Officer, LUEG

Attachment A: Vicinity Map



Legend

☐ Parcels

Notes

Map prepared by County Department of Public Works

0.24 0.5 Miles

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

SCALE : 1" = 100'

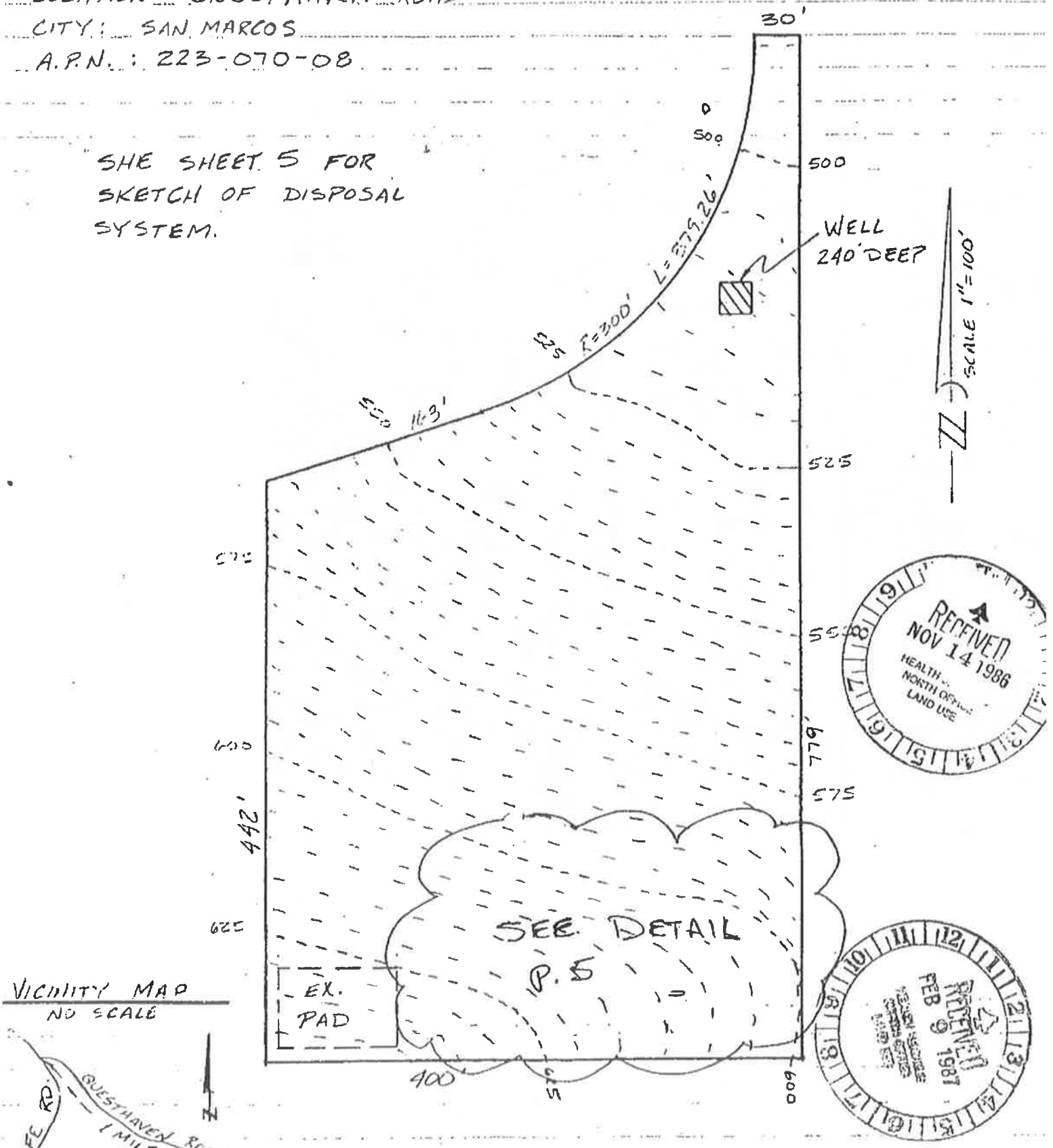
OWNER: ALEXANDER NEMETH

LOCATION: QUESTHAVEN ROAD

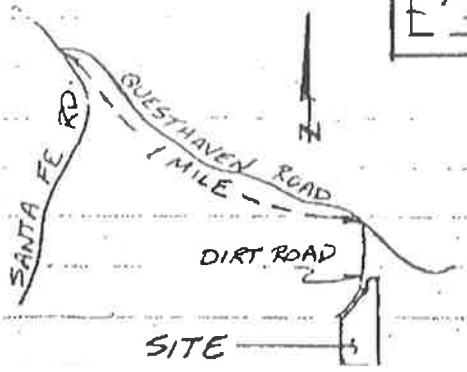
CITY: SAN MARCOS

A.P.N.: 223-070-08

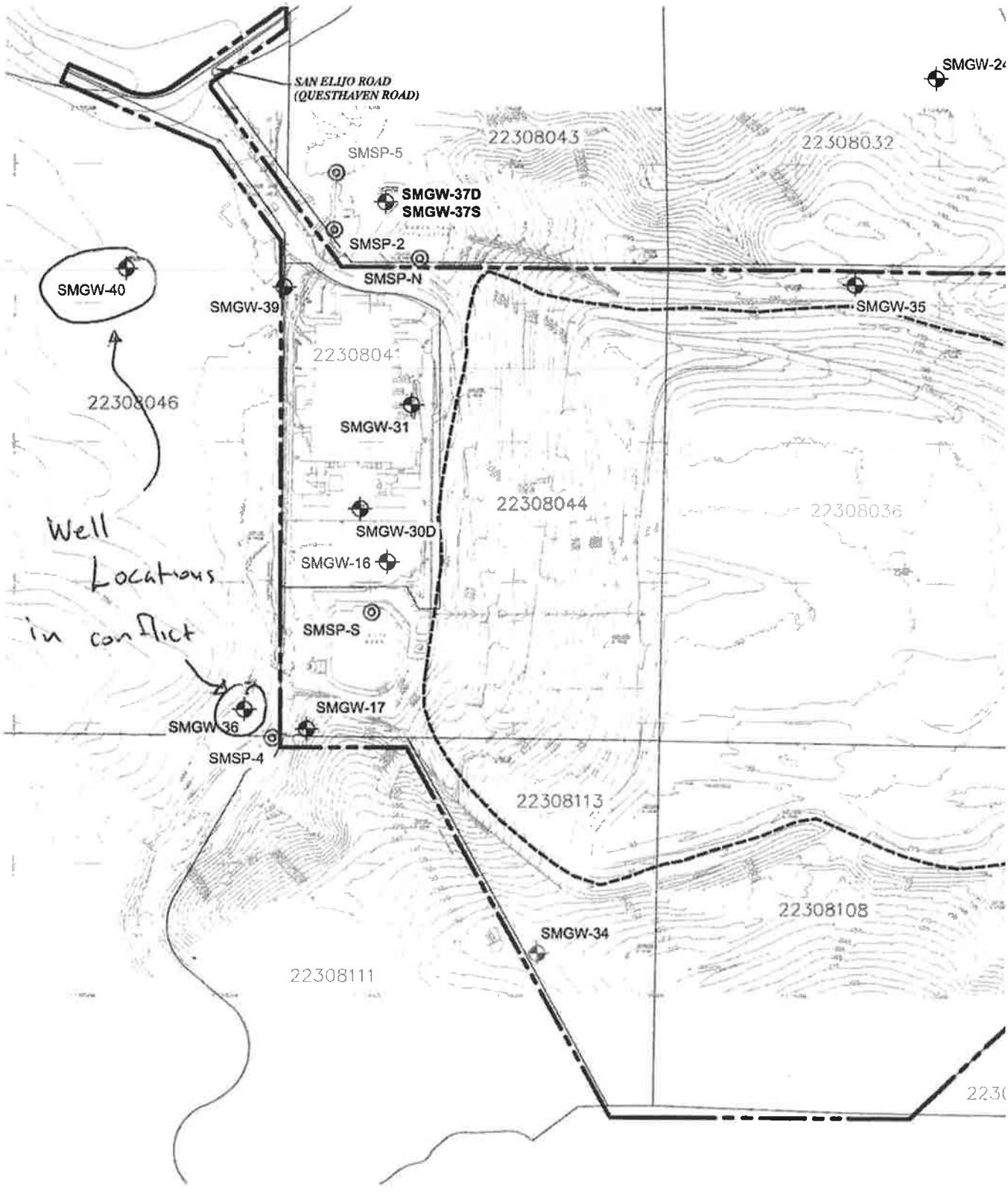
"SHE SHEET 5 FOR SKETCH OF DISPOSAL SYSTEM.



VICINITY MAP
NO SCALE



Attachment C - Gr



BASE MAP REFERENCE:
COUNTY OF SAN DIEGO TOPOGRAPHIC SURVEY
IT CORP., 1999.

P:\PRJ\SDCoadt\CADD\SC0394_Landfill_Book\LandfillBook2008\Landfills\San Marcos II\2008\San Marcos II_Figure 4_Groundwater Wells_08.dwg

Annex 6

EXCLUSIVE: Seven former North County landfills leaking contaminants

By **DEBORAH SULLIVAN BRENNAN - dbrennan@nctimes.com**

MARCH 5, 2011, 7:20 PM

Seven former North County dumps are leaking contaminants into surrounding groundwater as the decomposing remains of decades' worth of waste seep out of the unlined soil beds, water officials said in a series of recent interviews.

However, water quality officials said they know of no drinking water supplies in North County that have been contaminated by landfills.

Because most residents receive piped water through the San Diego County Water Authority, "the risk to most county residents is very small or negligible, while local water supplies located in more rural areas may be at a somewhat elevated but unquantified level of risk," said John R. Odermatt, a senior engineering geologist for the California Regional Water Quality Control Board's San Diego region.

Since the seven landfills ---- in Bonsall, Valley Center, Poway, San Marcos, Oceanside and Carlsbad ---- closed more than a decade ago, an airport, parks, schools and homes have been built on or near the sites.

Officials said that while the former landfills are leaching chemicals known to cause cancer, reproductive harm and other health problems, all seven sites are tested regularly and the regional water board has ordered corrective measures to stop the seepage. Measures to extract hazardous gas and liquid from the sites have kept the contamination from spreading, they said.

However, as county Supervisor Bill Horn and other officials push for more reliance on groundwater sources as a hedge against limited water supplies, safe groundwater has become a pressing concern. And plans to build the Gregory Canyon Landfill on county land near the Pala Indian Reservation outside Fallbrook have focused attention on the long-term storage of trash, officials said.

A toxic mix

The landfills, built between the late 1940s and 1970s, preceded environmental rules that govern waste disposal today, and served as catch-all basins for a mix of routine trash and toxic chemicals.

"The hazardous-waste checks didn't start until the 1990s," said Michele Stress, a unit manager for the county Department of Public Works, which monitors and maintains the seven sites.

Residents and businesses are now required to discard hazardous materials at special sites, but landfills built before the '90s took in everything from yard clippings and food scraps to paint thinner, batteries, solvents, motor oil and dry-cleaning chemicals.

"Probably Jimmy Hoffa is buried in one of those things,producing methane," said Henry Cole, a Maryland-based environmentalconsultant, referring to the powerful Teamsters Union leader whodisappeared under mysterious circumstances July 30, 1975.

Landfills that opened before the '90s also lacked bottom liners that modern landfills employ to keep pollution from seeping off-site.

"A lot of companies and businesses, big and small, in the post-World War II era up into the 1970s and 1980s routinely threw away really nasty stuff in landfills," said Jonathan Scott, a spokesman for Clean Water Action, a national environmental organization. "All landfills eventually leak over time, even modern ones with state-of-the-art liners and collection systems.

"But the older ones are really problematic because they don't have (liners), and because the stuff that went into them can be presumed to be really bad."

Stress said, however, that North County had little heavy industry during that period, so landfill contents likely contain more agricultural scraps than industrial waste.

Nonetheless, the brew of chemicals in the seven landfills is releasing methane gas from decomposing biological waste, along with volatile organic compounds ---- synthetic chemicals that evaporate easily and can pollute air and water supplies.

Recent monitoring tests at the former landfill sites in Poway and Bonsall and at McClellan-Palomar Airport in Carlsbad and Bradley Park in San Marcos showed that some pollutant levels exceeded state health limits.

Pollutants that registered levels above state limits includedvinyl chloride, tetrachloroethylene, trichloroethylene and benzene.Those volatile organic compounds can cause liver, brain or lung cancer, anemia, skin allergies, bone and blood problems, liver andkidney damage and reproductive problems, according to the federalAgency for Toxic Substances and Disease Registry.

All seven landfills have registered some leaks of contaminants, however, and officials said that because those chemicals don't occur naturally, any leak exceeds standards set for those sites.

"Any volatile (organic compound) that's detected in groundwater is an indication of release from the landfills, which is a violation of their current discharge requirements," said Cheryl Prowell, a water resource control engineer for the regional water quality board.

Dealing with the dumps

As the dumps filled up from the late 1960s through the 1980s, the county covered them and found other uses for the sites.

Jefferson High School, Clair Bergener School and Mission Elementary School surround the former Mission Avenue landfill in Oceanside, water board documents show.

Bradley Park sits over a former county landfill in San Marcos, the Aerie Park equestrian facility operates on the site of the former Valley Center landfill, and Palomar Airport sits atop the former landfill in Carlsbad.

Rural homes and orchards have sprung up near the former Bonsall landfill, the San Elijo Hills neighborhood abuts the former San Marcos landfill, and homes surround the former Poway landfill, near the section of Poway Road between Espola Road and Highway 67 known as the Poway Grade.

In some instances, contaminated materials have risen to the surface.

A water board report on the Mission Avenue landfill in Oceanside noted that in 1978, the year the dump closed, there was not enough soil cover to prevent water from percolating through the waste. The report also noted that the closed landfill lacked erosion control and was polluting the San Luis Rey River.

"Bad smelling, dark leachate was flowing from several points in the landfill and mixing with the storm run-off flowing down the gully to the river," the report stated. "Paper, tires, tin cans and other debris were visible at least 2,000 feet beyond the base of the landfill."

In another document, the water board cited the county's concerns in 1996 about a fireworks display at Bradley Park in San Marcos, stating that the presence of methane gas at the site posed a risk of fire and explosion hazards. That particular site has little or no gas emissions today, said Jason Forga, a senior civil engineer for the county.

A 2004 cleanup and abatement order for the Valley Center landfill stated that pollution from the site was seeping into the lower San Luis Rey River and surrounding areas.

To correct those problems, county officials have installed systems to remove contaminated water and built gas-extraction wells that suck methane and other harmful vapors from the landfills before burning them, Stress said.

At the former San Marcos landfill near San Elijo Hills, bright yellow wildflowers and other native brush grow atop a 5-foot layer of clay soil that contains the trash. A county contractor, SCS Engineers, manages gas emissions, operating a 24-hour flare that burns methane and volatile organic compounds before they reach the air or groundwater. Another company, Fortistar Methane Group, uses gas flares to generate power, which it sells to SDG&E.

Officials also inspect the topography above the landfills for places where contaminated water might be pooling, adding dirt as needed to prevent runoff, Forga said.

The county orders monthly gas checks and conducts semiannual tests for groundwater pollution, officials said, and spends $5 million a year on monitoring and maintenance of closed landfills and burn sites countywide.

Odermatt, the water board's senior engineering geologist, said it's unclear how long that will be the case, adding that the board does "not speculate on how long monitoring and maintenance may continue."

Leaky bathtubs

The corrective measures, including covering the top of the landfills, help control but don't actually contain the contamination, county officials said.

"You have to think of the landfill as kind of a leaky bathtub, particularly where the liner's on top," said Cole, the Maryland-based environmental consultant. "Usually, they're not well constructed. They tend to crack, they develop fissures, they get eroded. Water infiltrates constantly and picks up contamination."

Cole said the water pressure in landfills is usually higher than surrounding areas, and can force contaminated water into untainted wells. He also said that volatile chemicals can pose a problem known as "vapor intrusion," when chemicals evaporate from groundwater and contaminate the air in nearby homes.

In Bonsall, monitoring wells along the perimeter of the sites have shown elevated levels of three chemicals, including tetrachloroethylene, according to the water board's cleanup and abatement order for the site.

The chemical, which can cause kidney and liver damage, and may lead to cancer or reproductive harm, has also shown up in a private agricultural well in the area, Prowell said.

It could affect 34 other nearby wells, including seven domestic wells and a number of agriculture wells, she said.

The county has proposed improving drainage on the site to reduce moisture in the buried debris and prevent runoff.

Although officials said the threat to drinking water is low, that risk could rise if more communities tap into groundwater, as Supervisor Horn has suggested they do. In January, Horn convened a panel of water experts to talk about how the county should explore groundwater use in order to stretch the region's water supply in backcountry areas.

Local water district officials said their groundwater is limited or isolated from the former landfills. But Daniel Tartakovsky, a UC San Diego engineering professor who sat on Horn's water panel last month, said the county has been overly conservative in its groundwater estimate. Without studying areas site by site, Tartakovsky said, the county may have underestimated water sources.

The long-term safety of landfills also weighs heavily on the permitting process for the proposed Gregory Canyon Landfill outside Fallbrook. The landfill is proposed for 308 acres of undeveloped land near Pala, alongside the

San Luis Rey River. The county Department of Environmental Health must decide whether to issue the permit by April 1.

At a meeting last month, speakers including Pala Band of Mission Indians Chairman Robert Smith, county Supervisor Pam Slater-Price and other officials said the project threatens habitat, water and air quality. No landfill liner is fail-safe, they argued.

Gregory Canyon Ltd. consultant Richard Felago argued otherwise, saying the 8-foot-thick liner, composed of layers of gravel and synthetic material, would not leak.

In addition to the five-layer composite liner, the company's website stated, landfill plans would include a system to collect and contain landfill liquids, and a groundwater treatment plant to protect water quality.

Odermatt said groundwater hazards posed by aging landfills have led to greater scrutiny of new landfill design.

"That's one reason we've been very critical, and are taking a very hard look at the proposed Gregory Canyon design," he said. "Because the people out there don't get piped-in water. They get water from wells, so we're really looking at that hard."

Stress, with the county Public Works Department, said the slow decay of past trash requires ongoing attention. She said the county expects to manage older landfills in perpetuity.

"This monitoring is long-term," Stress said. "It's going to be going on for years ---- we think forever. We're going to be doing this until the landfill is a dry tomb."

Call staff writer Deborah Sullivan Brennan at 760-740-5420.

Annex 7

Prepared for

County of San Diego
5510 Overland Avenue, Suite 410
San Diego, California 92123

OCTOBER 2016 – MARCH 2017 SEMI-ANNUAL AND 2016 ANNUAL MONITORING REPORT SAN MARCOS II LANDFILL SAN MARCOS, CALIFORNIA SWIS # 37-AA-0008

LD:06-0278.02:ccheng

Prepared by

Geosyntec consultants

engineers | scientists | innovators

10875 West Bernardo Drive, Suite 301
San Diego, California 92127
858.674.6559

Project Number: SC0226E

April 2017

Geosyntec
consultants

OCTOBER 2016 – MARCH 2017 SEMI-ANNUAL
AND 2016 ANNUAL MONITORING REPORT
SAN MARCOS II LANDFILL
SAN MARCOS, CALIFORNIA

I certify that this document and attachments presented in this report are accurate and complete. This report was prepared by the staff of Geosyntec Consultants under my supervision to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who are directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. No attempt has been made to verify the accuracy of the Site Inspection Reports provided by Landfill Management.

Veryl Wittig
California Professional Geologist No. 7115

4/17/2017
Date

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TABLE OF CONTENTS (continued)

TABLES

FIGURES

APPENDICES

1. INTRODUCTION

1.1 Terms of Reference

This report documents the results of the October 2016 through March 2017 semi-annual and 2016 annual monitoring period at the San Marcos II Landfill (site) (Figure 1). This document was prepared by Geosyntec Consultants (Geosyntec) for the County of San Diego, Department of Public Works, Landfill Management (County) to comply with California Regional Water Quality Control Board (RWQCB) Order No. R9-2003-0003 [RWQCB, 2003], and Technical Change Order No. T-1 [RWQCB, 2005]. Order No. R9-2003-0003, adopted by the RWQCB on 10 December 2003, supersedes Order No. 92-02 and Monitoring and Reporting Program (MRP) 95-112, and deletes San Marcos II Landfill from Order 93-86. This report was prepared by Ms. Sherry Watts and was reviewed by Mr. Veryl Wittig, PG, CHG, in accordance with Geosyntec's internal peer review policy.

The following table contains a list of the components in this report required by the corresponding sections from Monitoring and Reporting Program (MRP) No. R9-2003-0003:

Required Submittal		Required Frequency	Location in this Report
H.1.a	Requirement violations	Semi-annually	Transmittal Letter
H.1.b	Certification	Semi-annually	Page i, Transmittal Letter
H.2.a	Monitoring parameters	Semi-annually	Section 2.1
H.2.b	Detection limit of monitoring parameters	Semi-annually	Appendix C
H.2.c	Measured concentration of monitoring parameters	Semi-annually	Tables 2 through 7, Appendix C
H.2.d	Map of monitoring points and groundwater flow direction	Quarterly	Figures 2 and 3
H.2.e	Monitor well information, time of groundwater level measurements and sampling methods	Semi-annually	Table 1, Appendix B
H.2.f	Sampling information and QA/QC	Semi-annually	Appendices B and C
H.2.g	Leachate and run/off control	Semi-annually	Section 3
H.2.h	Site inspection reports	Quarterly	Appendix A
H.2.i	Inspection of temporary stockpiles	Semi-annually	Transmittal Letter
H.2.j	Evaluation of corrective action measures	Semi-annually	Section 5.3
H.3.a	Graphical presentation of data	Annually	Figures 5 to 12 and Appendix E
H.3.b	Analytical data - tabular and electronic format	Annually	Tables 2 to 7, Appendix C
H.3.c	Compliance record	Annually	Section 6.4
H.3.d	Discussion of monitoring results	Annually	Section 2 and 6

Required Submittal		Required Frequency	Location in this Report
H.3.f	Written summary of monitoring results	Annually	Section 6
H3.g	Leachate control	Annually	Section 3
H3.h	Status of Storm Water Pollution Prevention Plan	Annually	Transmittal letter
H4	Leachate Report	Annually	Section 3 and Table 5

In accordance with Section H.5 of MRP No. R9-2003-0003, five-year Constituent of Concern (COC) sampling is performed at the site every five years, alternating between the first and third quarter monitoring periods. The last COC sampling was performed during the third quarter 2012 therefore, COC sampling was performed during the first quarter 2017 monitoring period.

1.2 Site Maintenance

Appendix A presents the results of inspections conducted by County personnel at the San Marcos II Landfill and information on site conditions and maintenance activities during the current monitoring period.

2. GROUNDWATER AND SURFACE WATER MONITORING

Groundwater, surface water, and corrective action monitoring and sampling were performed by Confluence Environmental, Inc., a subcontractor to Geosyntec, in accordance with the current County of San Diego, Department of Environmental Health, Site Assessment and Mitigation (SAM) Manual guidance as detailed on field sample collection logs (Appendix B). Analyses were performed at Eurofins/Calscience Laboratory, Inc. (Eurofins) of Garden Grove, California. Analytical results were compared to Water Quality Objectives (WQOs) for the San Elijo Hydrologic Subarea, which by reference include current California maximum contaminant levels (MCLs) for volatile organic compounds (VOCs) and primary and secondary drinking water standards [RWQCB, 2011].

2.1 Monitoring Parameters

Groundwater and surface water samples collected during the current monitoring period were analyzed according to Section C2 of MRP No. R9-2003-0003 as follows:

Parameter	Method
pH	Field Method
Total Dissolved Solids (TDS)	SM 2540C
Chloride	EPA 300.0
Sulfate	EPA 300.0
Nitrate	EPA 300.0
Mercury	EPA 7470A
Volatile Organic Compounds (VOCs)	EPA Method 8260 B
Bicarbonate, carbonate[1]	SM 2320B
Biochemical Oxygen Demand (BOD)[1]	SM 5210B
Chemical Oxygen Demand (COD)[1]	EPA 410.4
Dissolved Metals (Sb, Ar, Ba, Be, Ca, Cd, Co, Cu, Pb, Mg, Ni, Se, Tl, VA, Zn)[1]	EPA 6010B
Total Phenols[1]	EPA 420.1

[1] – Constituent was analyzed as part of the 5-Year Constituent of Concern sampling event.

Groundwater sampling locations are shown on Figures 2 and 3.

2.2 Groundwater Elevation and Flow Direction

The depth to groundwater in each monitor well was measured on 6 October during the fourth quarter 2016 and 14 February during the first quarter 2017 (Table 1). No floating immiscible layers were detected in the site monitor wells.

A groundwater divide exists in the eastern portion of the site (Figures 2 and 3). Groundwater

flow west of the divide is generally to the west and groundwater flow east of the divide is generally to the northeast. In the western portion of the site, groundwater flow was previously being influenced by daily pumping in corrective action wells SMGW-16 and -30D, creating a localized depression intended to capture potentially impacted groundwater from beneath the landfill. With RWQCB approval, these corrective action wells were turned off on 11 June 2011 as part of the transition from active pumping to passive monitored natural attenuation (MNA) for corrective action. Groundwater elevations in SMGW-16, -30D, -31, -39 and -40 rebounded by late 2011 and similar to the monitor wells at the site, have exhibited a slight declining trend since that time. Hydraulic gradients across the site during the fourth quarter 2016 and first quarter 2017 monitoring periods are consistent with historical gradients and range from approximately 0.05 to 0.39 foot per foot (ft/ft) (Figures 2 and 3).

2.3 Data Validation

The analytical data packages were received from Eurofins and reviewed for basic analytical quality assurance/quality control (QA/QC) adherence based on quality control (QC) guidance in the USEPA Contract Laboratory Program National Functional Guidelines [USEPA, 2014a and 2014b], as well as pertinent methods referenced in the data packages, and professional judgment. Data packages were reviewed for chain of custody discrepancies; sample holding times; evaluation of matrix spike/matrix spike duplicates (MS/MSD) and laboratory control samples/laboratory control sample duplicates (LCS/LCSD); and assessment of trip and method blanks. A summary of the groundwater data validation information is provided in Appendix C.

Following validation of the data presented in the analytical data packages provided in Appendix C, the data as qualified are considered usable and acceptable for meeting project objectives.

2.4 Groundwater Analytical Results

Analytical results for groundwater samples collected during the January 2017 sampling event from the background, compliance, and corrective action monitor wells, including data for the trip blanks (QCTB), are summarized in Tables 2 and 3. Groundwater sample collection logs are included in Appendix B. Analytical certificates for the current monitoring period are included in Appendix C.

2.4.1 Assessment Monitoring Program

In groundwater samples collected from the background and compliance monitor wells, concentrations of VOCs and general chemistry constituents were consistent with historical concentrations and trends (Table 2). The following VOCs, metals, and general chemistry constituents exceeded or were outside WQO limits during the first quarter 2017 sampling event:

- pH: SMGW-17 (6.22), SMGW-24 (5.76), and SMGW-39 (6.41);

- Nickel: SMGW-33 (0.444 mg/L); and
- Sulfate: SMGW-24 (750 mg/L).

VOCs were detected above the method detection limit in the groundwater samples collected from monitor wells SMGW-39 and SMGW-40, as follows:

- SMGW-39: 1,1-Dichloroethane (4.0 µg/L), Benzene (0.36 µg/L), Diethyl Ether (3.7 µg/L), Methyl-Tert-Butyl Ether (MTBE) (0.38 µg/L); and
- SMGW-40: 1,1-Dichloroethane (0.87 µg/L).

No VOCs detected in the groundwater samples collected from monitor wells SMGW-39 and SMGW-40 exceeded WQOs during the current monitoring period. Geosyntec is assessing potential causes of trace VOC detections in groundwater samples collected from monitor wells SMGW-39 and SMGW-40 and is coordinating with the County's LFG subcontractor to maximize the efficiency of the landfill gas extraction system in an effort to improve water quality.

2.4.2 Corrective Action Monitoring Program

During the current monitoring period, concentrations of VOCs, general chemistry, and metals constituents in groundwater samples collected from the corrective action wells (SMGW-16, SMGW-30D, SMGW-31, and SMGW-35), were generally consistent with historical concentrations and trends (Table 3 and Figures 5 - 12). Concentrations of monitoring parameters did not exceed the WQOs or WQO ranges, with following exceptions in the groundwater samples collected from monitor well SMGW-35:

- Chloride: (1200 mg/L);
- Mercury: (0.00421 mg/L); and
- pH: (6.28 pH Units).

Various VOCs, including 1,1-dichloroethane, 1,1-dichloroethene, 1,4-dichlorobenzene, dichlorodifluoromethane, diethyl ether, methyl-tert-butyl ether, and tetrahydrofuran were detected above the laboratory MDLs in one or more corrective action wells. However, none of the detected VOCs exceeded their respective WQOs (where established).

2.5 Surface Water Analytical Results

Analytical results for surface water samples collected on 14 February 2017 are summarized in Table 4. Metals and general chemistry parameters were consistent with historical concentrations and trends. No VOCs were detected in surface water samples collected at the upstream (SMSP-2) or the downstream (SMSP-4) sampling locations. The following general chemistry constituents exceeded WQOs during the first quarter 2017 sampling event:

- Chloride: SMSP-2 (310 mg/L) and SMSP-4 (310 mg/L);
- Sulfate: SMSP-2 (340 mg/L) and SMSP-4 (330 mg/L); and
- TDS: SMSP-2 (1,220 mg/L) and SMSP-4 (1,240 mg/L).

General chemistry constituents that exceeded WQOs were elevated in the both upstream and downstream sampling locations. This indicates that these concentrations are naturally occurring or attributable to a potential off-site source upstream of the site.

2.6 GeoTracker

The groundwater and surface water monitoring data[1], laboratory data[2], and a copy of the final report for this monitoring period for the San Marcos II Landfill site were electronically submitted to and confirmed by the State Water Board's internet-accessible database system, GeoTracker. This information was submitted to the GeoTracker database in accordance with Chapter 30, Division 3, Titles 23 & 27 of the California Code of Regulations on the date that this report was finalized.

[1] Confirmation numbers for upload of groundwater monitoring (elevation) data into GeoTracker are 6846918463 and 1395423591 submitted on 28 March 2017.
[2] Confirmation numbers for upload of analytical data into GeoTracker are 5424179315, 5861228644, 4061323702, 9609979450, and 1485475540 submitted 28 March 2017.

3. CONSTITUENT OF CONCERN SAMPLING

In accordance with MRP R9-2003-003, the 5-year constituent of concern (COC) sampling was conducted in conjunction with the semi-annual monitoring. During the first quarter 2017, groundwater and surface water samples were analyzed for the COCs based upon those constituents that have been tested and verified in samples collected from the leachate (listed in the table below). The 5-year COC sampling results are used to amend the list of semi-annual monitoring parameters for the site based upon COCs that are detected in groundwater samples. The current 5-year COC list for the site is shown below.

General Chemistry	Metals	Volatile Organic Compounds	
Bicarbonate	Antimony	Acetone	Diethyl Ether
Biochemical Oxygen Demand	Arsenic	Benzene	Ethylbenzene
Carbonate	Barium	2-Butanone	Methyl Tertiary Butyl Ether
Chemical Oxygen Demand	Beryllium	Chlorobenzene	Methylene Chloride
Chloride	Calcium	Chloroethane	Naphthalene
Nitrate (as Nitrogen)	Cadmium	Chloroform	Tetrachloroethene
Phenols (Total)	Cobalt	Chloromethane	Tetrahydrofuran
pH	Copper	1,2-Dichlorobenzene	Trichloroethene
Specific Conductance	Lead	1,4-Dichlorobenzene	1,1,1-Trichloroethane
Sulfate	Magnesium	1,1-Dichloroethane	Toluene
Total Dissolved Solids	Mercury	1,2-Dichloroethane	Trichlorofluoromethane
	Nickel	trans-1,2-Dichloroethene	1,2,4-Trimethylbenzene
	Selenium	1,2-Dichloropropane	Vinyl Chloride
	Thallium	1,1-Dichloroethene	o-Xylene
	Vanadium	cis-1,2-Dichloroethene	p/m-Xylene
	Zinc	Dichlorodifluoromethane	

Concentrations of the 5-year COC constituents detected in groundwater samples collected from the corrective action, compliance, and downgradient monitor wells during the first quarter of 2017 were comparable to concentrations from groundwater samples in upgradient monitor wells and/or were below established WQOs; therefore, no changes will be made to the semi-annual monitoring parameters.

4. LEACHATE AND UNDERDRAIN/RUNOFF MONITORING

Leachate and underdrain sampling were performed by Confluence on 15 February 2017. The underdrain sample collected by Confluence on 15 February 2017 was analyzed voluntarily by the County for constituents listed in Section C2 of the MRP No. R9-2003-0003. Leachate samples are collected semi-annually for leachate disposal purposes. Analytical results for the leachate, and underdrain sampling are summarized in Tables 5 and 6, respectively. No runoff samples were collected during the current semi-annual monitoring period because no stormwater was flowing from the stormwater retention ponds during the current semi-annual monitoring period.

4.1 Leachate Monitoring Results

The leachate sample collected during the semi-annual monitoring period did not contain detectable concentrations of VOCs, semi-volatile organic compounds (SVOCs), organochlorine pesticides, polychlorinated biphenyls, or cyanide (Table 5). Constituents in leachate samples collected during the first quarter 2017 were below WQOs, with exception of the following:

- Arsenic (0.0678) exceeded its WQO (0.05 mg/L); and
- pH (6.40) was below the WQO lower pH range (6.5).

4.2 Underdrain Monitoring Results

With the exception of 1,4-dichlorobenzene (17 µg/L), VOCs were not detected in the underdrain sample at concentrations above WQOs in the first quarter 2017 (Table 6). General chemistry parameters were detected at concentrations below WQOs. The underdrain sample analytical results were generally consistent with historical results.

5. INTRAWELL STATISTICAL ANALYSIS

This section presents the results of intrawell statistical analysis performed by Sanitas Technologies for groundwater samples collected from downgradient compliance wells SMGW-33, SMGW-39 and SMGW-40 (Appendix D).

The first quarter 2017 groundwater sample results for compliance monitor wells SMGW-33, SMGW-39, and SMGW-40 were compared with their respective intrawell prediction limit for each parameter tested. Concentrations of chloride, nitrate, pH, sulfate, and TDS from groundwater samples collected from each well were found to be within their respective prediction limits with the exception pH in monitor well SMGW-40 which exceeded the lower pH limit and shows a statistically significant decreasing trend. In addition, a statistically significant increasing trend for sulfate was noted in compliance monitor well SMGW-40, the reported sulfate concentration was within historical ranges and below the WQO.

6. CORRECTIVE ACTION PROGRAM

This section presents the current status of the corrective action program (CAP), the results of groundwater treatment, and an evaluation of effectiveness of corrective action measures.

6.1 Status of the Corrective Action Program

The corrective action system consists of wells SMGW-16, SMGW-30D, SMGW-31 and SMGW-35. Corrective action well SMGW-31 became non-operational in October 2006 due to failure of the electrical system. An evaluation performed by Geosyntec between November 2006 and February 2007 demonstrated hydraulic connectivity between SMGW-31 and SMGW-30D, and that hydraulic control was maintained by pumping in SMGW-16 and SMGW-30D. The evaluation also concluded that the benefits of direct pumping from SMGW-31 are negligible in comparison to the effect of pumping SMGW-30D. In a Technical Memorandum dated 15 February 2007, Geosyntec recommended converting SMGW-31 to a corrective action monitoring well [Geosyntec, 2007]. The County submitted a "Workplan for Modification of Corrective Action Program" [Geosyntec, 2008] to the RWQCB in August 2008, and met with the RWQCB in September 2009 to discuss the proposed modifications.

A "Revised Workplan for Modification of Corrective Action Program San Marcos II Landfill, San Marcos, California" [Geosyntec, 2010] was submitted to the RWQCB in May 2010 for review and comment. On 28 January 2011, the RWQCB provided comments on the May 2010 Revised Work Plan, agreeing to the County's proposal to replace active groundwater extraction with MNA, but requesting additional clarification on other items proposed in the May 2010 Work Plan. On behalf of the County, Geosyntec provided responses/clarifications to the RWQCB's comments [Geosyntec, 2011]. On 10 June 2011 the RWQCB approved implementation of the Revised Corrective Action Plan as amended, and active pumping in wells SMGW-16 and SMGW-30D was ceased on 11 June 2011.

In October 2012 the SMGW-35 system pump became non-operational. A "Proposed Modification of Corrective Action Program" [Geosyntec, 2012] was submitted to the RWQCB on 12 December 2012, requesting replacement of active groundwater extraction at SMGW-35 with MNA. In October 2013 the RWQCB declined the proposed modification to the CAP due to concentrations of 1,1-dichloroethane above the WQO. The pump in SMGW-35 was then replaced and pumping of the well resumed in November 2013.

VOC concentrations in groundwater samples collected from well SMGW-35 are below the MCLs, and continue to exhibit long-term declining trends. Geosyntec believes that continued pumping of cross-gradient corrective action well SMGW-35 is providing negligible benefit to groundwater quality beneath the site, and that MNA is the most appropriate corrective action

for the residual VOC concentrations detected in groundwater samples collected from this well. On 8 December 2015 the County submitted a request to the RWQCB to cease active pumping in SMGW-35, and convert to MNA for future corrective action to address residual VOCs in groundwater [Geosyntec, 2015].

6.2 Groundwater Treatment

Extracted groundwater from well SMGW-35 is treated for VOCs using a granular activated carbon (GAC) treatment system. Periodic sampling is performed to evaluate the efficacy of the GAC in the treatment system in removing VOCs, and to determine when replacement of the absorbent medium is necessary. During the current monitoring period, the GAC system for corrective action well SMGW-35 was sampled 17 February 2017. Analytical results from the pre- and post-treatment samples are presented in Table 7. With the exception of 1,1-dichloroethane (2.5 µg/L) and dichlorofluoromethane (0.83 µg/L), VOCs were not detected in the secondary effluent sample collected from the treatment system. Analytical results for SMGW-35 corrective action effluent samples suggest that replacement of the GAC is not necessary at this time.

6.3 Effectiveness of the Corrective Action Program

Concentrations of VOCs detected during the first quarter 2017 monitoring event were consistent with historical concentrations and continued to indicate long-term decreasing trends since 1991 (Figures 5 – 12). As noted in Section 5.1, VOC concentrations detected in groundwater samples collected from SMGW-35 are below MCLs and exhibit long-term declining trends with the exception of recent 1,1-dichloroethene concentrations which exhibit a slight increasing trend, but remain below the established WQO. Continued pumping of cross-gradient well SMGW-35 is providing negligible benefit to groundwater quality beneath the site, and Geosyntec submitted a request to the RWQCB in 2015 to cease active pumping and allow MNA to address relatively low residual VOCs concentrations.

7. ANNUAL SUMMARY

This section summarizes the results of the annual 2016 groundwater monitoring at the San Marcos II Landfill, which includes the third quarter 2016 and first quarter 2017 sampling events. This section also discusses any trends in the data and changes noted during the monitoring period with respect to the monitoring results and network.

7.1 Groundwater Elevations

Groundwater elevations were within historical ranges during the annual 2016 monitoring period (Figure 4). A groundwater divide exists in the eastern portion of the site (Figures 2 and 3). Groundwater flow west of the divide is generally westerly. Groundwater flow east of the divide is generally easterly. Groundwater flow in the western portion of the site was being influenced by daily pumping in corrective action wells SMGW-16 and -30D creating a localized depression intended to capture potentially impacted groundwater from the landfill. Since daily pumping has ceased in these two wells, the localized depression dissipated and the groundwater gradient has returned to the natural gradient and flow. Hydraulic gradients across the site range from approximately 0.05 to 0.39 ft/ft (Figures 2 and 3).

7.2 Assessment Monitoring Program

Consistent with historical results, concentrations of chloride, pH, and sulfate exceeded the respective WQOs for groundwater samples collected from monitor well SMGW-24 during the annual monitoring period. Concentrations of pH in groundwater samples collected from monitor wells SMGW-17, -24, and -39 during the annual monitoring period were outside the WQO range. There were no exceedances of prediction limits for chloride, nitrate, pH, sulfate, and TDS in compliance wells during the 2016 annual monitoring period with the exception of pH in the groundwater sample collected from monitor well SMGW-40, which was slightly below the lower prediction limit range and showed a statistically significant decreasing trend. In addition, a statistically significant increasing trend for sulfate was noted in compliance monitor well SMGW-40, but the reported sulfate concentration was within historical ranges and below the WQO.

VOCs were not detected in groundwater samples from the background or compliance monitor wells during the 2016 annual monitoring period, with the exception of detections of low concentrations (below WQOs) of 1,1-dichloroethane, benzene, diethyl ether, methyl-tert- butyl ether, and toluene. These results are consistent with sporadic VOC detections in groundwater samples historically collected from these monitor wells.

7.3 Corrective Action Monitoring Program

Consistent with historical results, concentrations of chloride, pH, and mercury in the groundwater samples collected from monitor well SMGW-35 during the annual monitoring period exceeded the respective WQOs. Concentrations of the remaining general chemistry and metals parameters were within historical ranges during the 2016 annual monitoring period. Concentrations of VOCs detected during the annual 2016 monitoring event are generally consistent with historical concentrations, and show stable and/or overall decreasing trends since the wells were installed (Figures 5 through 12).

Based on routine groundwater monitoring performed at the site since 1993, modification of the CAP for the transition of groundwater monitoring/extraction wells from active "pump and treat" methods to passive MNA methods was warranted. Following receipt of RWQCB approval, active pumping in SMGW-16 and SMGW-30D ceased on 11 June 2011. Following three consecutive quarterly sampling events for corrective action wells SMGW-16, SMGW-30D and SMGW-31, and compliance wells SMGW-39 and SMGW-40, concentrations trends in these wells were stable (Figures 5 through 10) indicating MNA is an appropriate corrective action alternative for residual VOCs in groundwater beneath and downgradient of the landfill.

On 8 December 2015 the County of San Diego submitted a "Request to Modify Post-Closure Monitoring Program" to the RWQCB. The request included cessation of active pumping of monitor well SMGW-35 since VOC concentrations had been below WQOs for at least 2 years, however, in July 2016 the 1,1-dichloroethane concentration (5.3 µg/L) was slightly above the MCL, but in February 2017 the sample concentration had decreased to 2.9 µg/L, and 1,1-dichloroethane concentrations in wells downgradient of SMGW-35 remain below the MCL. The County is awaiting a response from the RWQCB.

7.4 Compliance Record

Routine monthly maintenance inspections were performed by County personnel (Appendix A). The groundwater and surface water monitoring described herein were performed in compliance with Order No. R9-2003-0003. There were no violations issued during the current monitoring period. Based on groundwater monitoring performed during the 2016 annual monitoring period and historical monitoring of the site, the groundwater conditions at the site have been adequately characterized. Evaluation of current groundwater conditions indicates that additional action by the County, beyond existing source control measures source control measures (landfill gas control system operation, cover maintenance, and active groundwater pumping in monitor well SMGW-35) and MNA, is not warranted at this time.

7.5 Response to Comments

During the current monitoring period no formal correspondence from the RWQCB related to routine monitoring report submittals has occurred.

8. REFERENCES

Geosyntec Consultants, 2015. *Request to Modify Post-Closure Monitoring Program, San Marcos II Landfill, San Marcos California*, submitted to the Regional Water Quality Control Board on behalf the County of San Diego, Department of Public Works, Landfill Management. December 8.

Geosyntec Consultants, 2012. *Proposed Modification to Corrective Action Program, San Marcos II Landfill, San Marcos, California,* prepared for the County of San Diego, Department of Public Works, Landfill Management. December.

Geosyntec Consultants, 2011. *Letter Response to RWQCB Comments on Revised Workplan for Modification to Corrective Action Program, San Marcos II Landfill, San Marcos, California,* prepared for the County of San Diego, Department of Public Works, Landfill Management. April

Geosyntec Consultants, 2010. *Revised Workplan for Modification to Corrective Action Program, San Marcos II Landfill, San Marcos, California,* prepared for the County of San Diego, Department of Public Works, Landfill Management. May.

Geosyntec Consultants, 2008. *Workplan for Modification to Corrective Action Program, San Marcos II Landfill, San Marcos, California,* prepared for the County of San Diego, Department of Public Works, Landfill Management. August.

Geosyntec Consultants, 2007. *Technical Memorandum: Conversion of Corrective Action Extraction Well SMGW-31 to a Monitoring Well, San Marcos II Landfill, San Marcos, California,* prepared for the County of San Diego, Department of Public Works, Landfill Management. 15 February.

RWQCB, 2011. *Water Quality Control Plan for the San Diego Basin (9).* Adopted on 8 September 1994, with amendments adopted through 4 April 2011.

RWQCB, 2005 San Diego Region. 2005. *Technical Change Order No. T-1 to Monitoring and Reporting Program No. R-9-2003-0003: San Marcos Landfill, San Diego County.* 22 April 2005

RWQCB, 2003. *Order No. R9-2003-0003 for the County of San Diego, San Marcos Landfill, San Diego County.* 10 December.

USEPA, 2014a. *Contract Laboratory Program, National Functional Guidelines for Inorganic Data Review.* August.

USEPA, 2014b. *Contract Laboratory Program, National Functional Guidelines for Superfund Organic Methods Data Review.* August.

Annex 8

The Daily Transcript®

San Diego's Business Daily

NEWS | SAN DIEGO

San Elijo Hills Ready For 2000

Monday, July 26, 1999

San Elijo Hills, a 3,398-home development that was long stalled because of litigation, a difficult economy and its proximity to the now-closed San Marcos Landfill, plans to offer its first homes for sale in early 2000.

Five home builders will be building in the project: **ColRich Communities, Richmond American Homes, Shea Homes, Western Pacific Housing** and **K. Hovnanian Communities.** The first lots will be delivered to the builders in the fall of 1999. Model home grand openings are planned for the beginning of 2000 with initial move-ins in late spring of 2000.

Curt Noland, San Elijo Hills general manager, said the home builders initially will build 737 single-family homes in the first phase of the development off Questhaven Road. San Elijo Hills is a project of **Leucadia National Corp.** and **HomeFed Corp.**, the remaining entity acquired by Leucadia National after the collapse of HomeFed Bank.

"Leucadia recapitalized it," Noland explained.

Noland said the homes will range from a three-bedroom floor plan of about 1,500 square feet, to a five- to six-bedroom floor plan of about 4,000 square feet. Prices are expected to range from the $260,000s to the $600,000s. He added that the buyers will have a range of customizing options.

Along with the homes and open space, San Elijo Hills will feature a pedestrian-oriented 135,000-square-foot town center featuring shopping and dining opportunities.

The development will have a middle school and an elementary school. The developer also will wire all the homes, schools and businesses in the masterplan with state-of-the-art telecommunications technology and a community-wide intranet, providing residents with easy access to information and services.

Noland explained the community has been considered for development for some 45 years, but never got going until now.

In the 1980s and and the beginning of the 1990s, it looked like Walter Wolf, who had been very active in Rancho Bernardo, would develop San Elijo Hills as well, but he never was able to make the project fly. Wolf later sold the property to Leucadia National.

The project would not only be delayed due to a recession, but was delayed by its proximity to the now-closed San Marcos Landfill, which was shut in March 1997.

There were numerous concerns even after the landfill closed.

Leucadia National wanted to make sure there was adequate groundwater monitoring. There also were concerns about methane and whether there was sufficient money in a closure fund to monitor the landfill. Depending on which part of the property you stand on, the landfill is either as little as 1,000 feet, or as much as about 1.5 miles away from the San Elijo development site. The county and San Elijo agreed on a $3.4 million settlement for the acquisition by condemnation of 80 acres of the property being used as a buffer against the landfill. San Elijo once had contended the parcel was worth $20 million. Negotiations are ongoing between the county, the city of San Marcos and Leucadia to resolve outstanding concerns such as the ground-water-monitoring issue. Noland said he is confident that a solution will be reached to everyone's satisfaction.

If the landfill hadn't been problem enough for Leucadia, a group calling itself Citizens Against Rural Exploitation filed a lawsuit in Superior Court in the mid-1990s charging that insufficient environmental work had been done to mitigate the expected impacts of the development.

Following extensive negotiations, CARE and San Elijo Hills LLC jointly announced a settlement that will allow a the 3,398-unit development in San Elijo Ranch to go forward.

CARE had filed a lawsuit in San Diego Superior Court to block the project on the grounds that certain portions of the county's Environmental Impact Report were flawed. Although the trial judge initially threw out the case, in December the 4th District Court of Appeal partially agreed with CARE, thus reviving the organization's lawsuit.

Now, in return for CARE's blessing, the developer has agreed to numerous conditions, including studies to improve traffic flow through the Elfin Forest to Rancho Santa Fe Road. A retail component that would be more pedestrian friendly also was agreed upon.

These haven't been the only changes. When Wolf had the property, it was being conceived as a golf course resort community. Now, Leucadia National feels that it makes sense to leave more than half the property in open space and to delete the golf course and resort from the earlier plan.

Noland said the owner has set aside more than half of the 1,920 acres permanently as natural open space, parks and community landscaping -- a total of 1,115 acres -- and the community has its own network of trails Two-thirds of these trails will be tucked away from roadways to enhance the experience of the natural surroundings.

Noland said research found that open space areas with accessible trails are enormously important to residents and are a tremendous selling point to new home buyers.

Responses to Letter I13, Perkins Ranch at Copper Creek Hills

I13-1 This comment states that Perkins Ranch opposes the proposed rezoning of PSR Analysis Area SD15 and states that the commenters do not believe the Draft SEIR provides a complete or accurate picture of the property's context or impacts of the project.

The County acknowledges the commenter's opposition regarding the SD15 Analysis Area. The comment provides a general opinion regarding the accuracy and completeness of the Draft SEIR but does not point to any specific deficiencies in the Draft SEIR analyses.

I13-2 This comment provides background information regarding details about the SD15 property such as area and zoning and provides a brief summary of the Proposed Project for SD15.

The County would like to clarify that the current General Plan land use designation is SR-1. The Project proposes land use designations of C-1 (General Commercial), SR-0.5, and VR-10.9. The comment is correct in that the proposed designation changes would be estimated to result in an additional 301 potential dwelling units on the property. No further response is required.

I13-3 This comment provides additional background regarding the historic land use designations of the other properties in the County "island" in which SD15 is located, and that nearly all non-open space/conservation parcels within this "island" were downzoned to 1 dwelling unit/10 acres (SR-10).

The County notes there is one large property in the southwest corner of the "island" that has a current Land Use Designation of SR-2 and historically was Estate Residential (1 dwelling unit per 2 or 4 acres). County records indicate that the staff recommendation for the SD15 site during the General Plan Update process was for SR-1 (the current designation) and not RL-20 as the commenter suggests. RL-20 was the "Environmentally Superior Map" option for the SD15 site during the General Plan Update process. No further response is required.

I13-4 This comment suggests that properties in the "island" were downzoned because the County applied different standards to neighboring properties than those that have been applied to PSR Analysis Area SD15 in this Draft SEIR.

This comment provides the commenter's opinions regarding the planning process surrounding PSR Analysis Area SD15 and its surrounding parcels. This comment does not pertain specifically to the analyses in the Draft SEIR, and no further response is required.

I13-5 This comment suggests that the description of the property surrounding the "island" was assessed differently in the 2011 General Plan 2020 EIR than PSR Analysis Area SD15 was in the current PSR GPA Draft SEIR. It provides citations from both EIRs.

As shown in the comment, the citation from the current Draft SEIR provides greater detail than that provided in the EIR prepared for the General Plan 2020. This would be due to the Draft SEIR having a much narrower list of properties for which to evaluate land use desgination changes than the EIR prepared for the General Plan 2020. It does not mean, as

indicated in the comment, that the two different analyses were applying different standards for impact evaluation. If anything, this Draft SEIR provided more details about the potential impacts of changes occurring at PSR Analysis Area SD15 than would have been feasible in the General Plan 2020 EIR given its narrower focus.

In addition, without the context (specific environmental analysis purpose) of the sections that are referenced from the 2011 General Plan Update EIR in comparison to the current Draft SEIR, the County would note there is limited value to this comparison.

I13-6 This comment states that during the General Plan 2020 Update process, the County failed to consider and give deference to the city sphere of influence zoning and neighboring subdivisions to County island properties.

This comment does not specifically address the analyses of this Draft SEIR, but relates more to the planning process conducted during the General Plan Update process. Therefore, no further response is required.

I13-7 This comment states that the primary reason for the downzoning of the parcels specified in comment I13-6 was due to "Fire Service Deficiency" because the County refused to consider service from the nearby City of Encinitas and calculated fire response from Rancho Santa Fe. The comment suggests that, in contrast, this Draft SEIR gives PSR Analysis Area SD15 "credit" for city services.

This comment relates to the planning process conducted during the General Plan Update process regarding decisions made concerning parcels that are not subjects of this Draft SEIR. Furthermore, despite the assertions made in the comment, consistent with the General Plan Update EIR, the Draft SEIR assumes that the Rancho Santa Fe Fire Protection District would provide fire protection service to PSR Analysis Area SD15 (see Section 2.13.3.1 of the Draft SEIR). In fact, the Draft SEIR never mentions that fire protection services from the City of Encinitas would be available for any of the PSR Analysis Areas analyzed.

I13-8 The comment states that factors applicable to County island properties are also applicable to PSR Analysis Area SD15 (e.g., designation as part of the MSCP Pre-Approved Mitigation Area/MHCP County Core). Under General Plan 2020, County staff recommended downzoning to 1 dwelling unit per 20 acres for County island properties, yet PSR Analysis Area SD15 proposes approximately 5.25 dwelling units per acre plus 2,000 square feet of commercial space per acre.

This comment is correct in that the Proposed Project for SD15 would result in an overall residential density of approximately 5.25 dwelling units per acre (362 dwellings on the 69-acre site). The County does not know how the figure of 2000 square feet of commercial space per acre (in the comment) was calculated. There is no proposed square footage of commercial associated with any of the SD15 proposals analyzed in the SEIR because there are no development proposals associated with this PSRs GPA/Rezone. For clarification the Draft PAMA designation (MSCP) on the SD15 is only draft at this time, as noted in the Draft SEIR. As noted in response I13-3, County records indicate the commenter is not correct in noting that

the staff recommendation was RL-20 for the SD15 site during the General Plan Update process. No further response is necessary.

I13-9 This comment states that parcels adjacent to the west side of PSR Analysis Area SD15, APN 223-070-08 and 223-070-07, were downzoned under the General Plan and that the latter parcel is adjacent to the San Elijo Hills development, unlike PSR Analysis Area SD15.

This comment discusses the planning process regarding various parcels within the County and is not specific to the analyses in the Draft SEIR. The comment is incorrect in noting that the referenced parcels are adjacent to San Elijo Hills.; No further response is necessary.

I13-10 This comment appears to claim that General Plan principles and surrounding area context and property facts are being applied differently to the SD15 property in the Proposed Project, versus as those factors were applied to neighboring properties during the General Plan Update processing.

This comment is not specific to the analyses in the Draft SEIR. The County acknowledges that the current Land Use Designation of SR-1 allows for significantly more density than other properties in the County "island." The County does not agree that the General Plan principles have been applied differently. The Draft SEIR provides analysis of the proposals and not staff recommendations. In addition, a suggestion that each of these properties within the County island has the same characteristics in relation to the General Plan principles would not be accurate. Of particular note is the fact that the SD15 site is within a sewer service area and fronts a built-out 4-lane major road with sidewalks and bike lanes, unlike the other non-open space properties referenced.

I13-11 This comment asserts that while the Draft SEIR considers nearby City developments, the Draft SEIR does not give equal attention to City of San Marcos biological resources or adjacent preserves.

All of the PSR Analysis Areas are located within the County of San Diego's jurisdictional area. PSR Analysis Areas NC22, NC38, NC41, NC48, and SD15 are located within the City of San Marco's Sphere of Influence. Per comment I13-1, this comment is in regards to PSR Analysis Area SD15. The City of San Marcos' General Plan Land Use Map and Conservation and Open Space Element were reviewed during the preparation of the Draft SEIR. According to the City of San Marcos' Conservation and Open Space Element, PSR Analysis Area SD15 is located outside of but adjacent to land designated by the City of San Marcos as General Plan Open Space and Open Space Preserve areas. Furthermore, PSR Analysis Area SD15 was reviewed for consistency with the County of San Diego's Draft North County Multiple Species Conservation Plan (see Section 2.4.3 of the Draft SEIR). As discussed in Section 1.11 of the Draft SEIR, several projects located in San Marcos were considered within the cumulative context for impacts related to biological resources, which are discussed in Section 2.4. In addition, the part of the surrounding open space discussed in many Draft SEIR references to SD15 is in the City of San Marcos jurisdiction. As such, the Draft SEIR adequately analyzes impacts related to biological resources, including cumulative impacts, and is consistent with the requirements of CEQA.

I13-12 This comment states PSR Analysis Area SD15 is more isolated from nearby development than other downzoned properties in the County "island," and that by allowing greater density than neighboring development (52.5 times), this would be out of character with the area.

The County does not agree that the SD15 PSR is more isolated than the other downzoned "island" properties. The County acknowledges the commenters opinions on community character. The comment does not raise issues regarding the analysis of the Draft SEIR; therefore, no further response is necessary.

I13-13 This comment notes that due to the downzoning of adjacent parcels that occurred during the General Plan Update process, PSR Analysis Area SD15 already has the highest zoning in the 550-acre County "island." The comment continues to state that under the current proposal, PSR Analysis Area SD15 would result in a density of approximately 52.5 times the density of the neighboring properties.

The County acknowledges the comment. The comment is correct in that SD15 currently has a density 10 times that of some other "island" properties (SR-1 vs SR-10). The comment is correct in that the Proposed Project for SD15 would result in a total of potentially 362 dwelling units. Averaged over the 69-acre site, that amounts to approximately 5.25 dwelling units per acre. This would equate to 52.5 times the density of nearby "island" properties with a SR-10 Land Use Designation. There is no proposed square footage of commercial associated with any of the SD15 proposals analyzed in the SEIR because there are no development proposals associated with this PSRs GPA/Rezone. Continued references to proposed square footage of commercial are not accurate representations of the project description. No further response is required.

I13-14 This comment asserts that the County cannot justify the selective interpretation of facts and General Plan principles in the two County-prepared General Plan EIRs, and that density should be kept at one dwelling unit per one to two acres.

This comment provides the commenter's opinion that the County applied different standards to one property during preparation of the EIRs for the General Plan Update and for the PSR GPA. The commenter does not provide specific examples of deficiencies related to the Draft SEIR analysis; therefore, no further response is required.

I13-15 This comment suggests that development of SD15 would be isolated and because it is surrounded by hills, would be difficult to defend from fire and would cause a significant diversion of fire defense resources from the surrounding communities.

As noted in Section 2.13.3.1 of the Draft SEIR the increased density that would be allowed at PSR Analysis Area SD15 (and other PSR Analysis Areas) would reduce allowed emergency response travel times such that additional fire protection facilities and access roadways would be required of future development projects. As stated in that analysis, future development proposals would be assessed for fire safety, would be required to follow the County of San Diego Consolidated Fire Code, would be assessed for compliance with a comprehensive Fire Protection Plan on a development project-specific level. There is no evidence that fire departments responding to fire emergencies in the project area would prioritize PSR Analysis

Area SD15 over other development in the area and the County disagrees with the commenter's opinion on that aspect.

I13-16 The commenter states that the existing roads and connectors are already inadequate to provide safe exit from the San Elijo Hills/Elfin Forest Community in fires, and approval of this project would exacerbate already dangerous conditions. The comment references an article attached to the comment letter (entitled, "Cocos Fire Traffic Jams to be Reviewed," published in the *San Diego Union-Tribune*, June 7 2014) and reasserts their opinion that the increased zoning is inappropriate.

Impacts related to evacuation plans are discussed Section 2.7.3.7 of the Draft SEIR. As discussed in that section, a potentially significant impact was identified (HZ-1) for several PSR Analysis Areas (including SD15) from possible impairment of existing emergency response plans and policies. However, Section 2.7.5.7 describes the General Plan Policies and mitigation measures (Haz-3.1 through Haz-3.3) that would reduce the impact to less than significant. These mitigation measures include coordination between County and the Office of Emergency services, project-specific evaluations of future project specific development proposals, and preparation of fire access road network plans.

I13-17 This comment notes that the Draft SEIR estimates that vehicular trips would increase by 16,231 average daily trips and references Table 2.15-4 of the Draft SEIR. The comment notes that this is an approximately 27 times increase over the existing zoning, and would negatively affect the quality of life in the community.

The comment correctly states the average daily trips that could be generated by development of PSR Analysis Area SD15 which is approximately a 27 times increase over what is anticipated under the existing SR-1 Land Use Designation. As discussed in Sections 2.15.3.1 and 2.15.5.1 of the Draft SEIR, traffic generated by the proposed project could result in significant and unavoidable impacts related to unacceptable levels of service (TR-1 and TR-5).

I13-18 This comment states that the proposed project would harm Copper Creek/Escondido Creek, which apparently is located on the southeast portion of PSR Analysis Area SD15. The comment provides an attachment to the letter landfill maps that described the surface water monitoring taken from PSR Analysis Area SD15.

The comment is consistent with the findings of the Draft SEIR that the proposed project has the potential to affect surface water resources (see Section 2.8). As noted in that section, Escondido Creek, which is within the Carlsbad Watershed Management Area, has been placed on the Clean Water Act (CWA) 303(d) list for water quality impairment (Table 2.8-1), and implementation of the proposed project would result in potentially significant impacts on water quality (Impacts HY-1 and HY-10). Copper Creek is not specifically discussed in Section 2.8 because it is not listed on the CWA 303(d) list. Future development proposals resulting from implementation of the proposed project would require subsequent development project-specific and site-specific environmental review, and potential impacts for additional surface water bodies within any given project site would be analyzed at that level.

I13-19 This comment states that Copper Creek, which leads to Escondido Creek and the San Elijo Lagoon, is already suffering from siltation, sedimentation, scouring, and flooding from previous projects that did not adequately mitigate water quality impacts and that development at PSR Analysis Area SD15 would increase the harm to the Creek and property downstream.

Analysis of potential impacts related to erosion and siltation (Impact HY-3), and flooding (Impact HY-4) were discussed in Sections 2.8.3.3 and 2.8.3.4 of the Draft SEIR. Potentially significant impacts were identified, but were determined to be less than significant with implementation of General Plan Policies and mitigation measures (see Sections 2.8.5.3 and 2.8.5.4 of the Draft SEIR). Please also see response to comment I13-18 above.

I13-20 This comment states that the project is harmful to habitat, including nearby preserved lands and there is a selective consideration of impact.

This comment is consistent with the findings of the Draft SEIR (Sections 2.4.3.1 and 2.4.3.4), which disclose that the overall Proposed Project could result in significant impacts on special-status plant and wildlife species and wildlife corridors and linkages, including within PSR Analysis Area SD15. The County does not agree that there has been a selective consideration of impacts.

I13-21 This comment states that the property (PSR Analysis Area SD15) serves as an important connector/corridor from the County Core to the San Marcos habitat areas. The comment states that these preserved areas in San Marcos were not considered in the Draft SEIR and that development of PSR Analysis Area SD15 would fragment the habitat and decrease habitat connectivity between the County and San Marcos. In addition, the comment states that edge effects as well as light and glare would also affect neighboring preserves.

As discussed in Section 2.4.3.1, the Draft SEIR discusses the potential for development within PSR Analysis Area SD15 to result in substantial direct impacts on habitat. Potential edge effects and the impact of lighting on biological resources are also disclosed in the indirect impacts discussion of that section. In addition, impacts on open space/preservation areas within the City of San Marcos were considered in the cumulative impacts analysis (see Section 2.4.4, which discusses cumulative impacts on biological resources and Section 1.11, for a list of cumulative projects). Therefore, the comment is consistent with the findings of the Draft SEIR. Please also see response to comment I13-20 above.

I13-22 This comment states that the Draft SEIR only considers County-owned open-space preserves within 2 miles and does not include consideration of habitat impacts on the adjacent Center for Natural Land Management (CNLM) preserves or to the San Marcos landfill. The comment also provides additional information about the County's view of the ecological importance of the revegetated landfill.

It is assumed the commenter is referring to the analysis on recreational resources provided in Section 2.14 (See Section 2.14.1.1 of the Draft SEIR). Impacts on recreational resources were limited to a 2-mile radius because that is the average distance residents generally travel to get to recreational resources in their area.

The Draft SEIR does not state that impact analyses related to biological resources were limited to a 2-mile radius. Direct and indirect impacts on biological resources were considered for the areas within and immediately adjacent to the PSR Analysis Areas, except when the issue being analyzed required a broader area of study. For example, impact analyses related to regional linkages/wildlife corridors would have considered the potential for any PSR Analysis Area falling within a regional linkage to disrupt wildlife movement within the larger linkage area. As shown on Figure 2.4-1, PSR Analysis Area SD15 does not fall within a regional linkage as identified by the MSCP. In addition, as discussed in response to comment I13-23 below, edge effects and spillover light were analyzed for areas adjacent to the PSR Analysis Areas. Cumulative impacts would have taken into consideration a broader area that included project sites for specific development projects.

I13-23 This comment states that the area within the County Core is subject to enormous daily public use and that the commenter states that they have witnessed vandalism, trail blazing, and habitat destruction on adjacent preserved land caused by users from surrounding communities including Carlsbad and San Marcos. The comment concludes that more users results in more problems, and the trails at the CNLM property are already over capacity.

This comment discusses existing use of and enforcement issues within existing open space resources, which are not the subject of the Draft SEIR. That part of the comment implying more recreational users would result in more problems for recreational facilities is consistent with the findings of the Draft SEIR, which concludes in Section 2.14.3 that significant impacts related to deterioration of parks and recreational facilities could occur as a result of project implementation. However, implementation of mitigation measures and General Plan policies would mitigate these impacts to less-than-significant levels.

I13-24 This comment states that changing the zoning of PSR Analysis Area SD15 would introduce additional resident, worker, and visitor populations that would cause further environmental degradation that spills far beyond the boundaries of this project.

This comment makes a general statement about the environmental impacts associated with the proposed changes in Land Use Designations for PSR Analysis Area SD15. As discussed throughout the responses to comments for this letter, and as identified in the analyses of the Draft SEIR, the proposed project would result in potentially significant impacts on various resources. Therefore, this comment is consistent with the findings of the Draft SEIR.

I13-25 This comment appears to provide a brief summary of previous comments already made in this letter.

Please see the response to comment I13-24 above.

I13-26 This comment states SD15 appears to have landfill gas (or leachate) intrusion and should not receive additional density. The comment also states that the Draft SEIR's statement that none of the PSR Analysis Areas have been identified as contaminated is not consistent with County landfill monitoring documents.

Department of Public Works Landfill Management has reported that the two groundwater monitoring wells (SMGW-36 and SMGW-40) on the SD15 site have never contained

Contaminants of Concern (COC) that exceeded their respective Maximum Concentration Limits (MCL). Although elevated concentrations of COCs have been periodically measured under the landfill and in other monitoring wells, there is no evidence that contaminants have significantly impacted adjacent properties. The potential beneficial uses of the groundwater underlying the area of the SD15 site have not been unreasonably affected, therefore, the underlying groundwater does not meet the regulatory definition of being polluted or contaminated.

I13-27 This comment states County reports show groundwater from the SD15 groundwater monitoring wells testing positive for COCs and that they are derived from landfill gas or landfill leachate.

Please see the response to comment I13-26 above. No further response is necessary.

I13-28 This comment provides a background of the San Marcos Landfill from sources cited by the commenter.

The County does not dispute the statements made regarding the history of the San Marcos Landfill. The comment does not raise any issues regarding the adequacy of the Draft SEIR; therefore, no further response is necessary.

I13-29 This comment implies that low level radioactive waste could have been disposed at San Marcos Landfill as there were no laws preventing that material from being disposed during the landfill's operation. The comment cites Regional Water Quality Control Board Order No. R9-2002-330.

The County agrees that low level radioactive waste or decommissioned materials could have been disposed at the San Marcos Landfill during its operation. Finding No. 9 of Order No. R9-2002-330 states "Decommissioned materials are residual radioactive materials that can be disposed of in waste management units." The comment does not raise an issue regarding the adequacy of the Draft SEIR; therefore, no further response is necessary. Please also see response to comment I13-26 above.

I13-30 This comment states groundwater under the landfill and SD15 site are testing positive for chemical COCs and that the likely sources are landfill leachate and landfill gases.

Please see the response to comment I13-26 above. No further response is necessary.

I13-31 This comment cites a statement made in a County letter dated March 14, 2017 to Mr. Norm Pederson of the City of San Marcos regarding a development proposal named Copper Hills.

The County agrees that the statement which was a comment from the Local Enforcement Agency was contained in the cited letter. The comment does not raise an issue regarding the adequacy of the Draft SEIR; therefore, no further response is necessary.

I13-32 This comment states that according a map that was included in the second attachment to the comment letter shows that most groundwater from the landfill flows west towards the SD15 site.

The County agrees that the map (from 16 years ago) does apparently show a groundwater gradient trending towards the west. The County notes that Section 2.2 of the 2016 Monitoring Report (Attachment 8 to the comment letter) states a groundwater divide exists in the eastern portion of the landfill site and groundwater flow west of the divide is generally to the west. The

comment does not raise an issue regarding the adequacy of the Draft SEIR; therefore, no further response is necessary.

I13-33 This comment states that according the County, nothing more can be done to minimize groundwater COCs caused by landfill gases and cites two County references.

The County acknowledges the comment and the two County references. The County Department of Public Works Landfill Management and Local Enforcement Agency are anticipated to continue to manage and monitor the landfill for many years to come and will coordinate with other agencies as required, such as the Regional Water Quality Control Board. Monitoring since the landfill closed more than 20 years ago has shown that migration of leachate and landfill gas is not a significant issue. Please also see response to comments I13-26 above. The comment does not raise an issue regarding the adequacy of the Draft SEIR; therefore, no further response is necessary

I13-34 This comment cites monitoring reports prepared for the County that describe various COCs that have been detected in monitoring wells on the landfill site and SD15 site.

The County acknowledges the comment and the references cited. Please refer to responses to comments I13-26 and I13-33 above.

I13-35 This comment references an attached news article and quotes statements from the article regarding chemicals detected in groundwater samples beneath the landfill.

The County acknowledges the comment and the references cited. Please refer to responses to comments I13-26 and I13-33 above. The referenced new article also states that no drinking water supplies in North County have been contaminated by landfills; the risk to most County residents is very small or negligible; and that measures to extract hazardous gas and liquid from the sites have kept the contamination from spreading.

I13-36 This comment states that pursuant to monitoring studies County contractors are assessing potential causes of VOC detections in groundwater samples from monitoring wells on the SD15 site and is coordinating with the County to maximize efficiency of the landfill gas extraction system. The comment also provides a quote from a report that states there is currently no landfill gas extraction technology that would be effective to eliminate landfill gas migration potential contact with groundwater.

The County acknowledges the comment and the references cited. On page 5 of the 2016 Monitoring Report (Attachment 8 of the comment letter) and immediately preceding the first quote provided in the comment, is the following sentence: “No VOCs detected in the groundwater samples collected from monitor wells SMGW-39 and SMGW-40 exceeded WQOs during the current monitoring period. Please also refer to responses to comments I13-26 and I13-33 above.

I13-37 This comment states that based on the references cited in previous comments and because onsite adjacent groundwater monitoring wells are testing positive for COCs, the SD15 site is likely to have landfill gas intrusion.

The County acknowledges the comment and references cited. Please see responses to comments I13-26 and I13-33 above.

I13-38 This comment provides the following quote from the Draft SEIR and states it doesn't appear to be correct based on other documentation references in the comment letter: "Any potential existing hazardous materials site impact resulting from the Proposed Project would be reduced to a level below significant due to the existing regulations, policies, plans, and guidelines addressing contaminated sites."

The County acknowledges the comment. Analysis regarding active, abandoned or closed landfills was also presented in this section on page 2.7-14 of the Draft SEIR. That analysis states "PSR Analysis Area SD15 is located within 1,000 feet of the former San Marcos Landfill that closed in 1997; therefore, implementation of the Proposed Project may result in land uses that expose the public or environment to hazards associated with active, abandoned or closed landfills." However; the quote in the comment is from the second to last paragraph in Section 2.7.3.4 of the Draft SEIR, where it was determined any impact would be less than significant with compliance with existing regulations, policies, plans, and guidelines that address contaminated sites. The County does not agree the quote from the Draft SEIR is incorrect. The SD15 site is not considered polluted or contaminated, or poses a risk to County residents. The landfill is being actively managed and monitored pursuant to existing regulatory requirements. Please see responses to comments I13-26, I13-33, and I13-35 above.

I13-39 This comment provides quotes from quotes and excerpts from the County letter dated March 14, 2017 to Mr. Norm Pederson of the City of San Marcos regarding a development proposal named Copper Hills (Attachment 5 of the comment letter), and states that since on-site structures will not be thoroughly monitored per the statements from the County letter, the Draft SEIR is not accurate as drafted.

The County acknowledges the comment and the statements taken from the County letter. The County does not agree that the Draft SEIR is not accurate as drafted. The County is not processing a project that proposes structures on the SD15 site. Copper Hills is a project that was proposed to the City of San Marcos and includes proposed annexation of the site to the City. The County is conducting a programmatic level of evaluation for the proposed changes to the land use designations on SD15 that would increase potential density on the property. No specific project that would result in construction of residential or commercial structures has been proposed to the County. The additional assessments and design features included in the comment (from the County letter to the City of San Marcos) were to have been transmitted to the Copper Hills developer by the City of San Marcos. These assessments and design features would be requested during a subsequent project-level review of a proposed development project, such as the Copper Hills proposal.

I13-40 This comment states it is absolutely inappropriate to increase the zoning (density) on the site given the potential contamination issues from the landfill, and that maintaining the existing density would result in fewer affected residences, workplaces, and people.

The County acknowledges the commenters preference to maintain the existing density of the SD15 site. Please see responses to comments I13-26, I13-33, I13-35, and I13-38 above.

I13-41 This comment states that the County condemned 80 acres further away from the landfill than the SD15 site for $3.4 million for landfill buffer, and that it would be a very inappropriate risk for taxpayers to increase the density of SD15, which could result in an increased value if SD15 also needed to be condemned.

Department of Public Works Landfill Management staff has confirmed that several properties adjacent to the landfill were acquired through condemnation in the past, to allow for installation of monitoring systems and for precautionary measures. Monitoring since the landfill closed more than 20 years ago has shown that migration of leachate and landfill gas is not a significant issue. Staff has also stated that condemnation or acquisition of additional properties is very unlikely. Please also see responses to comments I13-26, I13-33, I13-35, and I13-38 above

I13-42 This comment concludes the letter by stating the Draft SEIR does not fully address the impacts of the project, is terrible for the community, future residents, and taxpayers, and that the developer should not receive a GP2020 windfall from the neighbors' loss of density and risk possible health impacts to future residents. The commenter also states their preference to maintain the current density of the SD15 site (SR-1).

The County acknowledges the comment, but does not agree that the Draft SEIR has not fully addressed the potential impacts of the project, which includes the proposed density increase for SD15. The County is conducting a programmatic level of evaluation for the proposed changes to the land use designations on SD15 that would increase potential density on the property. No specific project that would result in construction of residential or commercial structures has been proposed to the County. Please also see responses to comments I13-26, I13-33, I13-35, I13-36, I13-38, and I13-39 above.