TRAFFIC STUDY

For

Dai Dang Meditation Center (P04-016)

in the County of San Diego

Submitted By:

Darnell & Associates, Inc.

Revised: August 17, 2006
Revised: September 26, 2005
Revised: April 14, 2005
Original: March 2, 2005

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

August 17, 2006

Monica Kling
RBF Consulting, Inc
9755 Clairemont Mesa Blvd
San Diego, CA 92124

D&A Ref. No.: 041105

Subject: Revised Traffic Study for the Proposed Dai Dang Meditation Center (P04-016) Located on Camino Del Rey in the Bonsall Community of the County of San Diego.

Dear Ms. Kling:

In response to County of San Diego's comments dated December 12, 2005, Darnell & Associates, Inc. (D&A) has revised our September 26, 2005 traffic impact study for the proposed Dai Dang Meditation Center (P04-016). A copy of our written responses to each of the County's comments is provided in Appendix E.

PROJECT DESCRIPTION

The Dai Dang Meditation Center is located on an approximately 9.0 acre site along Camino Del Rey between Via Maria Elena and Via del Margarita in the Bonsall community of San Diego County. A regional vicinity map is provided on Figure 1 and a zoomed in project vicinity map is provided on Figure 2.

The project is processing a Major Use Permit to legalize the existing operation of the Buddhist meditation center and to allow for the construction of additional structures, totaling approximately 22,796 square feet, to support the meditation center. Table 1 provides a summary of the existing and proposed structures for the project. The proposed site plan is illustrated in Figure 3. As shown in Figure 2, access to the property will be provided via Camino Del Rey. An emergency only access point will be provided via Wrightwood Road (PRD 125).

Table 1 - Existing and Proposed Structures

Existing Structures

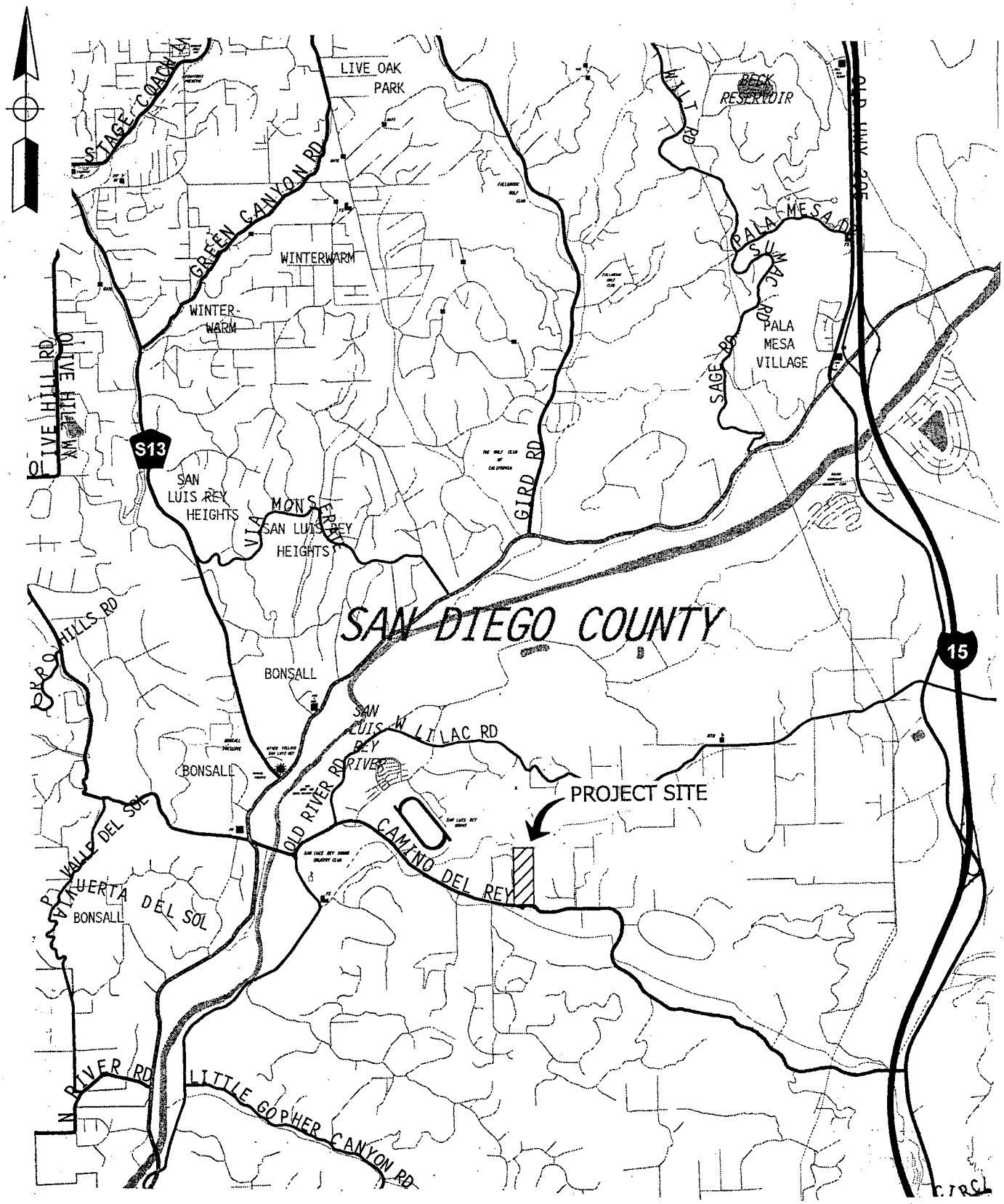
Building Description	Building Size	Existing Use	Proposed Use
Main House	2,589 SF 1-Story House	Headmaster's Quarters & Admin Operation	Library & Study Rooms for the Monks & 3 bedrooms for Headmaster and Special Guests
Converted Horse Stables	5,880 SF	Storage	Storage
Equipment Storage Building	2,126 SF	Equipment Storage/Workshop	Equipment Storage/Workshop
Trailer	2-Bedrooms (1,042 SF)	Caretakers' Residence	Caretakers' Residence

Proposed New Structures

Building Description	Building Size	Proposed Use
Meditation Center -Main Hall	6,196 SF (150 occupancy)	Used by monks and other visitors. Includes a large room for congregational assemblies, Offices, restroom
-Meditation Hall	7,664 SF (92 occupancy)	Congregation Assembly & Meditation. Building includes a multi-use room, storage, public restrooms, & offices.
-Residents' Quarters	8,936 SF (25 occupancy)	Dormitory Style bedrooms, baths, laundry, a library/reading room, discussion room, kitchen, storage, and lunchroom
Total Meditation Center:	**22,796 SF**	

SF = Square Feet

1446 FRONT STREET • SUITE 300 • SAN DIEGO, CA 92101
PHONE: 619-233-9373 • FAX: 619-233-4034
E-mail: office@darnell-assoc.com

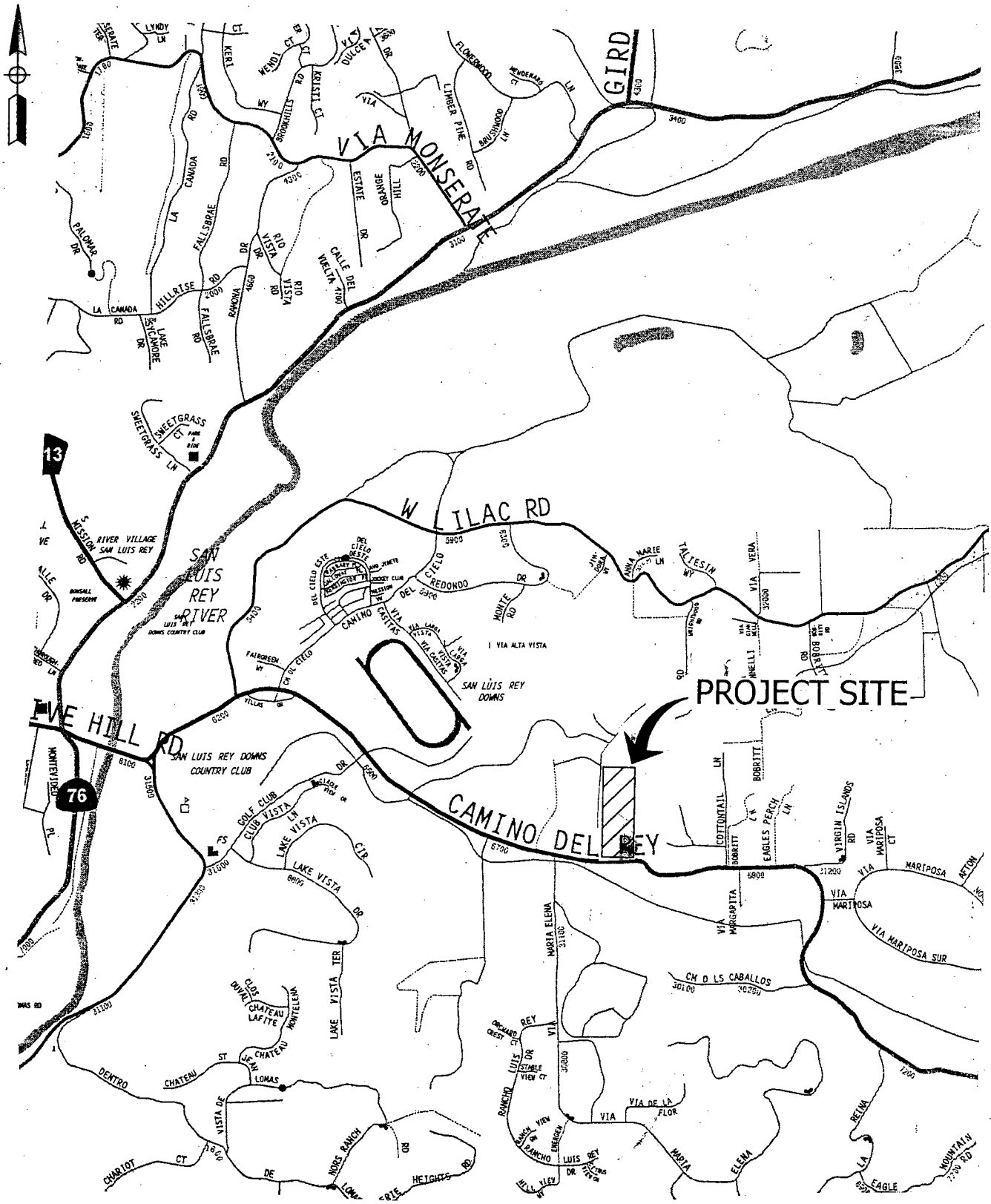


Darnell & ASSOCIATES, INC.

041105-AA.dwg 9-26-05 KRV

FIGURE 1

REGIONAL VICINITY MAP

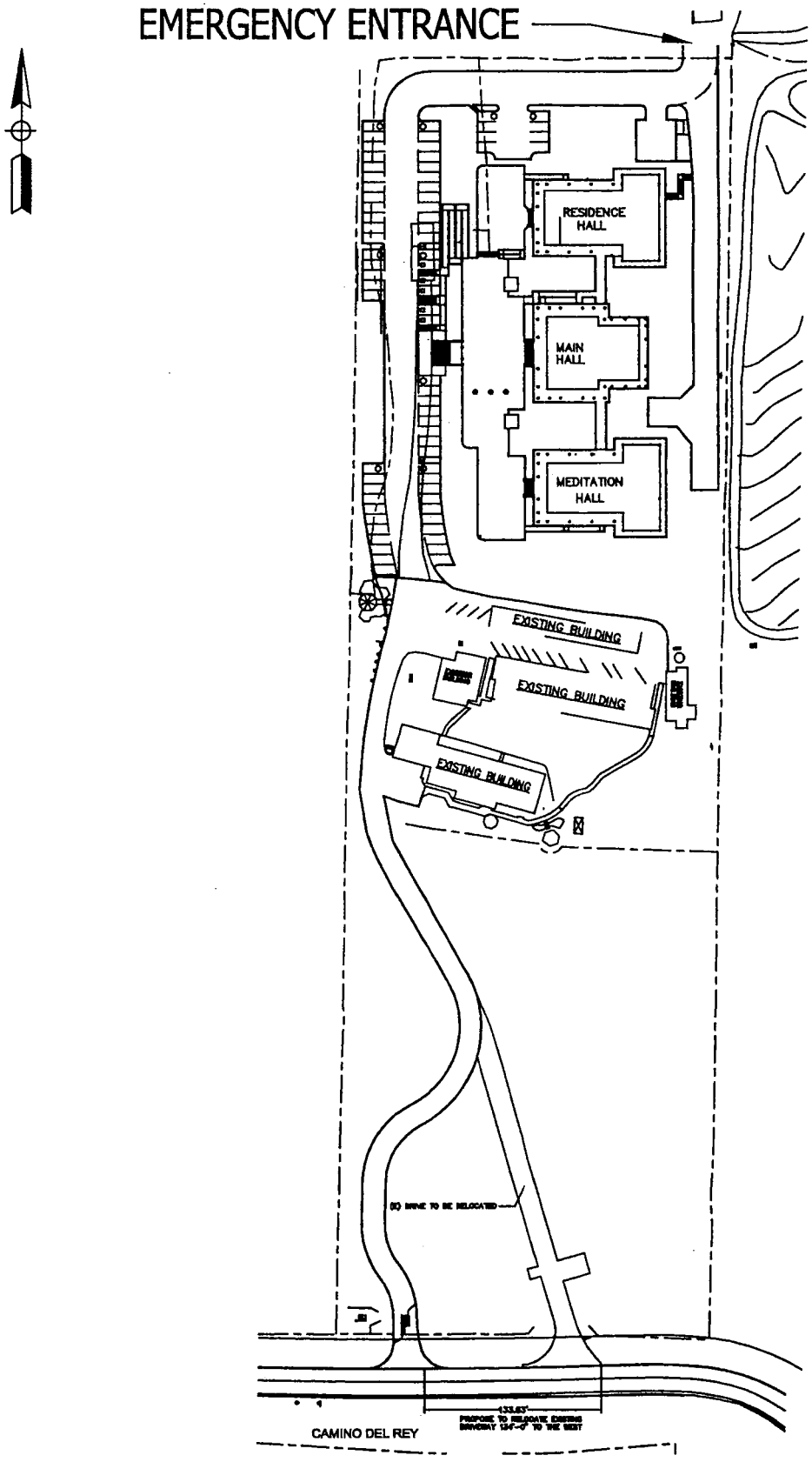


Darnell & ASSOCIATES, INC.

041105-AA.dwg 9-26-05 KRV

FIGURE 2

PROJECT VICINITY MAP



Darnell & ASSOCIATES, INC.

041105-AA.dwg 8-17-06 KRV

FIGURE 3

SITE PLAN

EXISTING TRAFFIC VOLUMES

Twenty-four hour traffic counts were collected on the roadways in the vicinity of the proposed project in September 2004, October, 2004, and January 2005. Figure 4 provides an illustration of the existing traffic volumes in the project vicinity. A copy of the traffic count sheets are provided in Appendix B.

PROJECT TRIP GENERATION

The trip generation potential for a project is estimated based its land use characteristics. In the San Diego area there are three sources that provide standard trip generation rates for various land use types: (1) The City of San Diego *Trip Generation Manual*, May 2003, (2) the San Diego Association of Governments' (SANDAG's) *(Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, and (3)* the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition*. None of these sources has published rates for a Buddhist meditation center. Therefore, the trip generation potential for the proposed project was estimated based on the past, current, and proposed operating characteristics of the Dai Dang Meditation Center.

Operating Characteristics

Past Activities

Activities that have historically taken place on the project site included religious assemblies that occurred between 9 AM and 3 PM on Sundays. The religious assembly involved a one-hour meditation, a silent communal lunch, and a question and answer period with the headmaster. The religious assemblies attracted up to 100 people to the site on a Sunday.

Special events that attracted up to 300 people were also previously held on the site. These events were typically coincided with Buddhist's religious holidays and cultural observances.

The Sunday religious assemblies and special events have currently been restricted during the processing of the Major Use Permit.

Current Activities

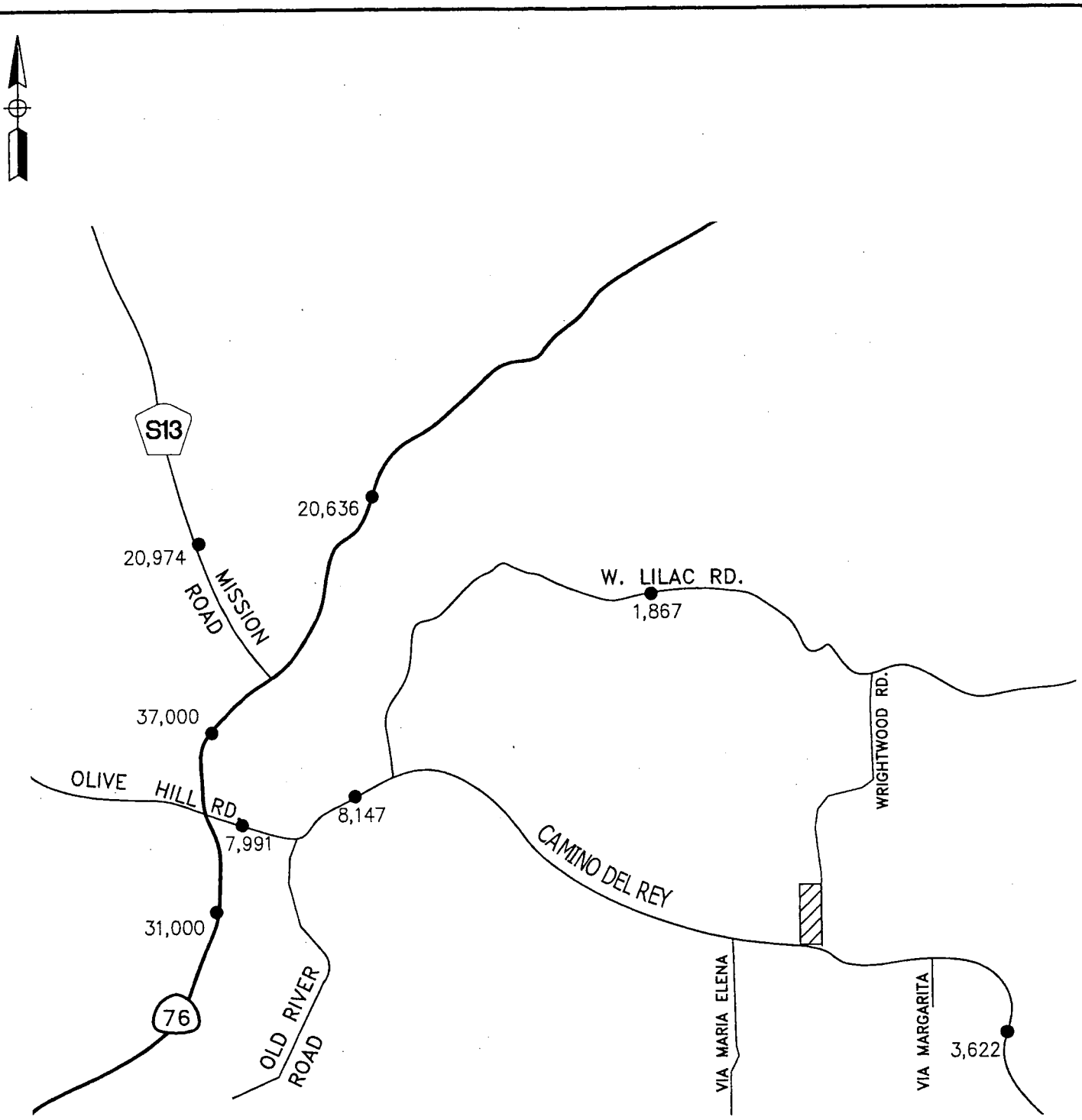
Activities that are still currently taking place on the project site include weekday quiet meditations. The quiet meditations involve the monks and whatever guests are staying at the center, no outside visitors attend the weekday quiet meditation. No public activities are scheduled during the week.

The existing one-story house serves as the residence quarters for the monks that currently live on-site. A caretaker also currently resides on the property.

During the week, the only people who come to the site are various delivery people and members of the congregation who come to the site to deliver groceries and other supplies.

Proposed Activities

If approved, the proposed Major Use Permit would allow the special events and Sunday religious assemblies that were previously held on site to resume. The special events will be held five (5) times a year; and they will generally coincide with Buddhist's religious holidays and cultural observances. Based on past operating characteristics, the special events are anticipated to attract 200 to 300 people each and



LEGEND

● Z,ZZZ – AVERAGE DAILY TRAFFIC

▨ – PROJECT SITE

Darnell & ASSOCIATES, INC.

041105–AA.dwg 9–26–05 KRV

FIGURE 4

EXISTING DAILY TRAFFIC VOLUMES

the Sunday religious assemblies are anticipated to attract up to 100 people. These activities will take place on the project site.

The purpose of the new 22,796 square foot meditation center is to create a non-stressful environment which will be open to all people, Buddhists and non-Buddhists, who are interested in learning about and practicing the religion. The new facilities will provide a larger space for the weekday quiet meditations, the Sunday religious assemblies, and the special events that have previously occurred and will resume on site. The new meditation center will also provide improved accommodations for the monks who live on-site. The existing monk's quarters will be converted into a library and study area for the monks and bedrooms for the Headmaster and special guests.

Existing Trip Generation

To determine the average trips being generated by the existing meditation center, D&A collected twenty-four (24) hour counts at the project's driveway off Camino Del Rey. The counts were collected on Thursday, January 20, 2005 through Sunday, January 23, 2005. It should be noted that Sunday assemblies in addition to the weekday quiet meditations were active operations at the time the counts were taken. (A copy of the driveway count sheets is provided in Appendix B.)

The count data found that an average of 24 daily vehicles entered/exited the site during the weekday (the average of the Thursday and Friday traffic count), 21 daily vehicles entered/exited the site on Saturday, and 50 daily vehicles entered/exited the site on Sunday. Since few of the monks drive, most of the traffic coming to/from the site is a result of the property's caretaker and deliveries.

Trip Generation Rates

Utilizing the average traffic being generated by the site (24 weekday trips and 50 Sunday trips) and the current square footage of the buildings on-site, D&A calculated the trip generation rate per square foot of the existing buildings. Since the caretaker's residence functions as a typical residence, it was not included in the square footage when calculating the weekday trip generation rate for the meditation center. Rather, per SANDAG's trip generation rate for mobile home parks, the caretaker's residence was assumed to generate 5 of the 24 weekday daily trips generated by the whole site. (A copy of SANDAG's Trip Generation Rates is provided in Appendix A.) The remaining 19 weekday trips were then assumed to be generated by the meditation center. The Sunday trip rate was calculated by taking the 50 Sunday daily trips divided by the total building square footage including the caretaker's residence. Table 2 provides a summary of the calculations for weekday and Sunday trip generation rates.

As shown in Table 2, the trip generation rate for the meditation center is 1.79 daily trips/1,000 square feet during the weekday and 4.30 daily trips/1,000 square feet on Sunday.

Estimated Trip Generation

Although the project is proposing to add a 22,796 square foot structure for the meditation center, the proposed expansion is not anticipated to increase the operations that are currently and were previously taking place on-site (i.e. the new construction is not expected to increase the number of attendees). Therefore, the proposed project should not generate any additional traffic over that which was counted entering/exiting the site in January 2005. However, for analysis purposes, the proposed project was assumed to generate an increase in traffic proportionately to the increase in the square footage of the building structures.

Table 2 - Trip Generation Rate Calculations

Existing Trips Generated (a)

Building	Building Size (ksf)	Weekday			Sunday
		ADT	AM Peak	PM Peak	ADT
Caretaker's Residence (b)	1.042	5	0	1	50
Meditation Center		19	1	3	
-Main House	2.589				
-Converted Horse Stables (Storage)	5.880				
-Equipment Storage Building	2.126				
Total w/Caretaker's Residence	11.637	24	1	4	50
Total w/o Caretaker's Residence	10.595	19	1	3	-

Trip Generation Per Unit

Building	Building Size (ksf)	Weekday			Sunday
		Daily	AM Peak % of Daily	PM Peak % of Daily	Daily
Caretaker's Residence (b)	1.042	5 Trips/DU	8%	11%	4.30
Meditation Center	10.595	1.79	5%	16%	

(a) Existing Trip Generation is based on the 24-hour machine counts collected from Thursday, January 20, 2005 - Sunday, January 23, 2005
(b) The Weekday Trip Generation and Trip Generation Rate for the Caretaker's Residence is based on SANDAG's trip generation rate for a Family Mobile Home Park
ksf = 1,000 Square Feet; DU = Dwelling Unit; N/A = Not Applicable

Utilizing the trip generation rates calculated from the previous operations on site, the additional trips that would be generated by the proposed 22,796 square foot building addition were estimated. The trip generation calculations are summarized in Table 3. As shown in Table 3, the proposed building addition to the meditation center is estimated to generate 41 new daily trips during the week and 98 new daily trips on a Sunday.

Table 3 - Trip Generation Calculations for New Facility

Trip Generation Rates (a)

Land Use	# Units	Weekday Trip Rate			Sunday Trip Rate
		Daily	AM Peak- % of Daily	PM Peak- % of Daily	Daily
New Meditation Center	22.796 ksf	1.79	5%	16%	4.30

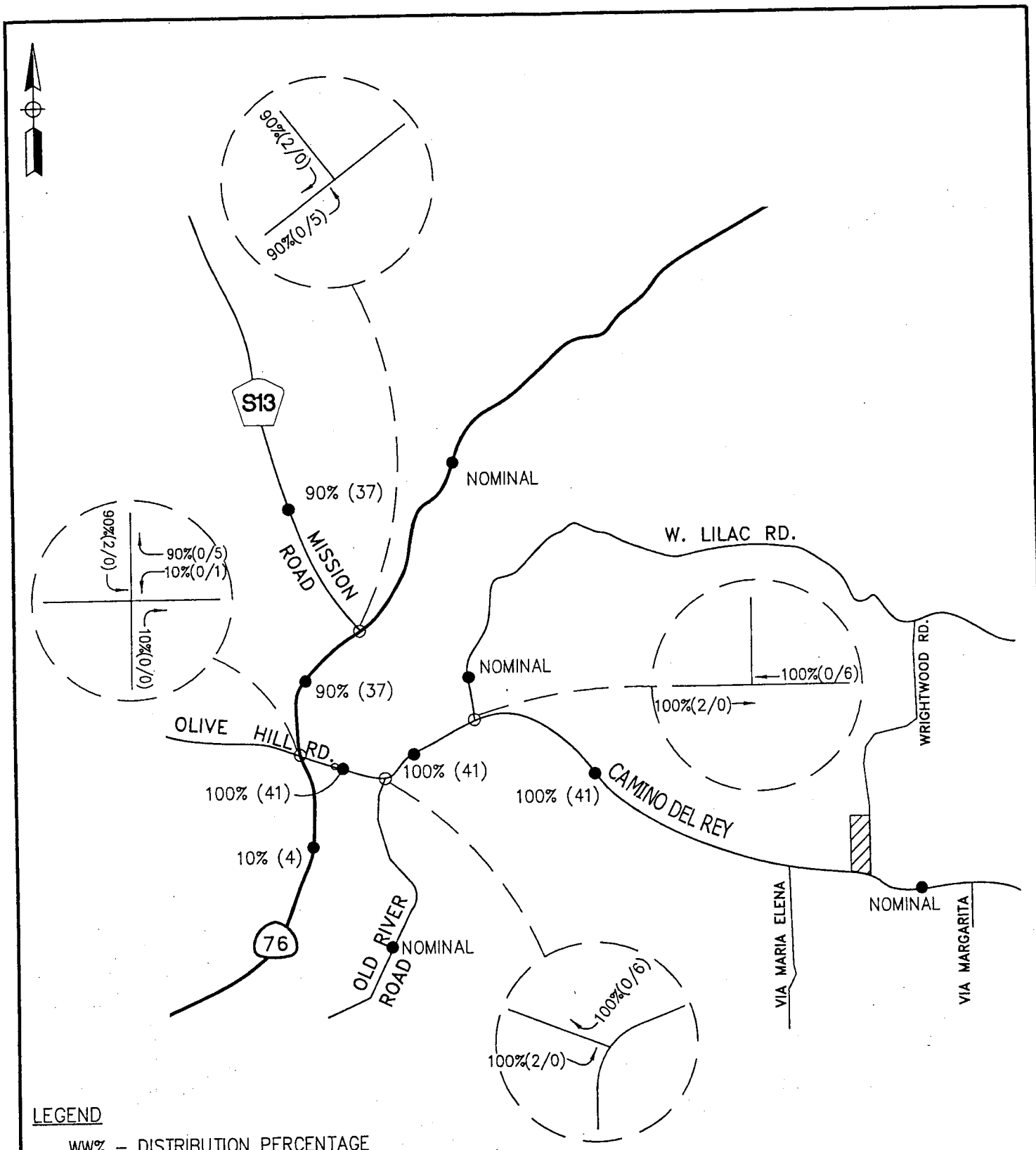
Trip Generation

Land Use	# Units	Weekday Trip Generation			Sunday Trip Generation
		Daily	AM Peak	PM Peak	Daily
New Meditation Center	22.796 ksf	41	2	6	98

(a) Trip Generation Rates are based on operating characteristics of the existing meditation center, see Table 2;
ksf = 1,000 Square Feet; DU = Dwelling Unit

TRIP DISTRIBUTION/TRIP ASSIGNMENT

The trip distribution percentages for the project were based on the existing travel patterns of the site. The project traffic was assigned to the roadway network using the existing trip distribution. Figure 5 illustrates the trip distribution percentages and the project related daily and peak hour traffic volumes.



Darnell & ASSOCIATES, INC.

041105-AA.dwg 9-26-05 KRV

FIGURE 5
PROJECT TRIP DISTRIBUTION & PROJECT RELATED TRAFFIC

CONGESTION MANAGEMENT PROGRAM

Based on the approval of Proposition 111 in 1990, regulations require the preparation, implementation, and annual updating of a Congestion Management Program (CMP) in each of California's urbanized counties. The original CMP for the San Diego region was adopted in 1991 and has been updated periodically as an element of the Regional Transportation Plan (RTP). One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report usually conducted as part of the CEQA project review process. Authority for local land use decisions including project approvals and any required mitigation remains the responsibility of local jurisdictions.

The criteria for which a project is subject to the regulations as set forth in the CMP are determined by the trip generation potential for the project. Currently, the threshold is 2,400 average daily trips (ADT) or 200 peak hour trips. The proposed project will generate 41 average daily trips, 2 AM peak hour trips, and 6 PM peak hour trips and is therefore, not subject to CMP guidelines for traffic impact studies.

PUBLIC FACILITIES ELEMENT IN COUNTY

According to page XII-4-18 of the *Public Facility Element* for San Diego County, a discretionary project which has a significant impact on roadways will be required, as a condition of approval, to make "improvements or other measures necessary to mitigate traffic impacts to avoid reduction in the existing Level of Service below 'D' on off-site and on-site abutting Circulation Element roads. New development that would significantly impact congestion on roads at LOS 'E' or 'F', either currently or as a result of the project, will be denied unless improvements are scheduled to increase the LOS to 'D' or better or appropriate mitigation is provided. Appropriate mitigation would include a fair share contribution in the form of road improvements or a fair share contribution to an established program or project. If impacts cannot be mitigated, the project will be denied unless a specific statement of overriding findings is made pursuant to Section 15091(b) and 15093 of the State CEQA Guidelines."

The *Public Facility Element* for the County of San Diego also requires that all on-site Circulation Element roads operate at Level of Service C or better. If the Level of Service at an on-site Circulation Element road is reduced below LOS C, the proposed project must provide appropriate mitigation measures. A copy of excerpts from the County's *Public Facility Element* can be found in Appendix A.

LEVELS OF SIGNIFICANCE STANDARDS

Although the *Public Facility Element* (PFE) sets standards as to which level of service roadways and intersections must operate within the County (i.e. requires operation of LOS D or better), it does not establish a threshold to evaluate whether a project is significant if it adds traffic to a roadway facility that is currently operating at an unacceptable LOS E or F. Thus, the County's *Draft Guidelines for Determining Significance* were developed to evaluate the significance of traffic impacts on roadways and intersections which are currently operating at LOS E or F. A summary of the County's Draft Guidelines is provided in Table 4. Excerpts from the County's Draft Guidelines is provided in Appendix A.

Roadway Segments

As shown in Table 4, per the County's Draft Guidelines, a project would be considered to have a significant direct traffic volume and/or level of service traffic impact on a road segment if:

- "The additional or redistributed ADT generated by the proposed project will cause an adjacent or nearby County Circulation Element Road to operate below LOS D and will significantly increase congestion as identified in Table [4], and/or
- The additional or redistributed ADT generated by the proposed project will cause a residential street to exceed its design capacity, and/or
- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a Circulation Element Road, State Highway, or intersection currently operating at LOS E or LOS F as identified in Table [4]."

Table 4 - Measures of Significant Project Impacts

LOS	Allowable Increase on Congested Roads and Intersections				
	Intersections		Road Segments		
	Signalized	Unsignalized	2-Lane Road	4-Lane Road	6-Lane Road
LOS E	Delay of 2 Seconds	20 Peak hour trips on a critical movement	200 ADT	400 ADT	600 ADT
LOS F	Delay of 1 second or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement	100 ADT	200 ADT	300 ADT

Notes:
– A critical movement is one that is experiencing excessive queues.
– By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
– The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

ADT = Average Daily Traffic; LOS = Level of Service, sec = Seconds of Delay per Vehicle

Signalized Intersections

At signalized intersections, the project would be considered to have a significant direct volume and/or level of service traffic impact if:

- "The additional or redistributed ADT generated by the proposed project will cause a signalized intersection to operate below LOS D and will significantly increase congestion as identified in Table [4], and/or
- The additional or redistributed ADT generated by the proposed project will significantly increase congestion on a signalized intersection currently operating at LOS E or LOS F as identified in Table [4]."

Unsignalized Intersections

At unsignalized intersections, the project would be considered to have a significant direct volume and/or level of service traffic impact if:

- "The proposed project will generate 20 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate below LOS D, or
- The proposed project will generate 20 or more peak hour trips to a critical movement of an unsignalized intersection and the unsignalized intersection currently operates at LOS E, or
- The proposed project will generate 5 or more peak hour trips to a critical movement of an unsignalized intersection, and cause the unsignalized intersection to operate below LOS E, or
- The proposed project will generate 5 or more peak hour trips to a critical movement of an unsignalized intersection and the unsignalized intersection currently operates at LOS F, or
- Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance and/or other factors, it is found that the generation rate less than those specified above would significantly impact the operations of the intersection."

It should be noted that the significance thresholds summarized in Table 4 are currently only utilized by the County of San Diego to determine if a project has a significant direct and/or future impact. A project is considered to have a significant near term cumulative impact if it adds any traffic to a roadway segment and/or intersection that operates at LOS E or F under near term cumulative conditions.

The County guidelines also states that "For large projects, controversial projects and/or projects which are preparing Environmental Impact Reports, more detailed evaluations to verify the applicability of the significance thresholds for the individual project conditions may be necessary. Additional evaluations may include analysis of vehicle headways, speeds, average gaps, queues, delay, and/or other factors."

The guidelines for the roadway segments, signalized intersections, and stop-controlled intersections discussed above were used to determine direct (project only) impacts.

DIRECT IMPACTS

The project is estimated to generate 41 average daily weekday trips and a maximum of 5 peak hour trips on any critical movement, see Figure 5. Since the project generates less traffic than the County's thresholds, the project will not have any direct impacts.

CUMULATIVE IMPACTS

The County of San Diego has developed an overall programmatic solution that addresses existing and projected future road deficiencies in the unincorporated portions of San Diego County. This program includes the adoption of a Transportation Impact Fee (TIF) program to fund improvements to roadways necessary to mitigate potential cumulative impacts caused by traffic from future development. Based on SANDAG regional growth and land use forecasts, the SANDAG Regional Transportation Model was utilized to analyze projected build-out (year 2030) development conditions on the existing circulation

element roadway throughout the unincorporated area of the County. Based on the results of the traffic modeling, funding necessary to construct transportation facilities that will mitigate cumulative impacts from new development was identified. Existing roadway deficiencies will be corrected through improvement projects funded by other public funding sources, such as TransNet, gas tax and grants. Potential cumulative impacts to the region's freeways have been addressed in SANDAG's Regional Transportation Plan (RTP). This plan, which considers freeway buildout over the next 30 years, will use funds from TransNet, state and federal funding to improve freeways to projected level of service objectives in the RTP.

The proposed project is estimated to generate a maximum of 41 average daily trips. These trips will be distributed on circulation element roadways in the County that were analyzed by the TIF program, some of which currently or are projected to operate at inadequate levels of service. The potential growth represented by the proposed project was included in the growth projections upon which the TIF program is based. Therefore, payment of the TIF, which will be required at issuance of building permits, in combination with other components of the program described above, will mitigate potential cumulative traffic impacts to less than significant. Excerpts from the County's Title 7, Division 7 (new) related to Transportation Impact Fee Ordinance can be found in the Appendix A to this report.

Table 5 illustrates the calculation of the Traffic Impact Fee for the proposed development that will be required to pay to mitigate its potential cumulative impacts. The applicant has agreed to pay the required TIF to mitigate its cumulative impacts.

Table 5 - Transportation Impact Fee Calculation

TIF Area	Land use	No. of Units	Unit	Fee / Unit	Total Fee
Bonsall	Other	41	Trips	$894.30	$36,666.30

Note: Actual Fee is subject to change as the TIF Ordinance is updated annually and the fees are adjusted to reflect the engineering cost index
Fee is based on the fee for an equivalent single-family dwelling unit published on March 7, 2006

CAMINO DEL REY ROUTE LOCATION STUDY

The July 1968 route location study for the circulation element road Camino Del Rey (SA 100) shows that SA 100 will be aligned southerly of the existing alignment for Camino Del Rey along the Moosa Canyon Creek Floodway. Review of the route location study found that the proposed alignment of SA 100 is located south of the Dai Dang project site, and will thus not affect the proposed project. A copy of the July 1968 Route Location Study for SA 100 is provided in Appendix D.

SITE DISTANCE

The County of San Diego asked that an evaluation of the adequacy of sight distance at the proposed project driveway off Camino Del Rey be assessed. Per the County of San Diego's Public Road Standards, a minimum corner sight distance of 10 feet per every mile per hour of travel speed is required. Per the Public Road Standards, the speed used to determine the sight distance is the greater of the current prevailing speed or the minimum design speed of the road per its Circulation Element classification. Camino Del Rey is classified as a Rural Collector with bike lanes, which has a design speed of 40 miles per hour.

Speed surveys were conducted on Thursday, September 8, 2005 to determine the 85th percentile travel speeds on Camino Del Rey in front of the project access. The speed surveys found that eastbound traffic had an 85th percentile speed of 38 miles per hour and that westbound traffic had an 85th percentile speed of 33 miles per hour. (A copy of the speed surveys are provided in Appendix C.)

Since the design speed of Camino Del Rey (40 mph) is higher than the current prevailing speed (38 mph), the design speed was utilized to calculate the minimum corner sight distance. Based on the design speed of 40 mph, a minimum of 400 feet of corner sight distance is required east and west of the project driveway.

Field investigations of the existing driveway found that there was inadequate corner sight distance. As part of the proposed project, however, the existing driveway will be relocated approximately 134 feet to the west which will increase the available sight distance enough to meet minimum corner sight distance requirements. Upon grading of the site, the project's Civil Engineer will need to certify that a minimum of 400 feet of corner sight distance is provided west and east of the new driveway location.

MITIGATION

The County of San Diego Board of Supervisors adopted the Countywide Traffic Impact Fee Ordinance in April 2005. As mitigation for its potential cumulative impacts, the applicant has agreed to pay the Bonsall area traffic impact fee. Based on the Bonsall traffic fee rates published in March 2006, the project's traffic impact fee would be $894.30 per trip for a total of $36,666.30. It should be noted that the actual fee is subject to change as the TIF Ordinance is updated annually and the fees are adjusted to reflect the engineering cost index.

SUMMARY & CONCLUSIONS

- The Dai Dang Meditation Center is located on an approximately 9.0 acre site along Camino Del Rey between Via Maria Elena and Via del Margarita in the Bonsall community of San Diego County.

- The project is processing a Major Use Permit to legalize the existing operation of the Buddhist meditation center and to allow for the construction of additional structures, totaling approximately 22,796 square feet, to support the meditation center.

- During the weekday, the project is estimated to generate a maximum of 41 average daily trips, 2 AM peak hour trips, and 6 PM peak hour trips. On Sunday the project is estimated to generate a maximum of 98 average daily trips.

- The project does not have any direct impacts.

- As mitigation for its potential cumulative impacts, the applicant has agreed to pay the Bonsall area traffic impact fee. Based on the Bonsall traffic fee rates published in March 2006, the project's traffic impact fee would be $894.30 per trip for a total of $36,666.30. It should be noted that the actual fee is subject to change as the TIF Ordinance is updated annually and the fees are adjusted to reflect the engineering cost index.

- Upon grading of the site, the project's Civil Engineer will need to certify that a minimum of 400 feet of corner sight distance is provided west and east of the new driveway location.

If you have any questions, please feel free to contact the office.

Sincerely,

DARNELL & ASSOCIATES, INC.

Vicki S Haskell

Vicki S Haskell, P.E.
Senior Transportation Engineer
RCE 63754

Date Signed: 08-17-06

BED/vsh/rlp/st
041105 Dai Dang-Rpt 4 - Aug 2006/ 08-06

APPENDIX A

- SANDAG Trip Generation Rates
- Excerpts from the Public Facilities Element
- Excerpts from the County's Draft Guidelines for Determining Significance
- Excerpts from Title 7, Division 7 (new), Transportation Impact Fee Ordinance

SANDAG Trip Generation Rates

(NOT SO)

BRIEF GUIDE OF VEHICULAR TRAFFIC GENERATION RATES FOR THE SAN DIEGO REGION

APRIL 2002

SANDAG
401 B Street, Suite 800
San Diego, California 92101
(619) 699-1900 • Fax (619) 699-1950

NOTE: This listing only represents a *guide* of average, or estimated, traffic generation "driveway" rates and some very general trip data for land uses (emphasis on acreage and building square footage) in the San Diego region. These rates (both local and national) are subject to change as future documentation becomes available, or as regional sources are updated. For more specific information regarding traffic data and trip rates, please refer to the San Diego Traffic Generators manual. *Always check with local jurisdictions for their preferred or applicable rates.*

LAND USE	TRIP CATEGORIES [PRIMARY:DIVERTED:PASS-BY][3]	ESTIMATED WEEKDAY VEHICLE TRIP GENERATION RATE (DRIVEWAY)	HIGHEST PEAK HOUR % (plus IN:OUT ratio) Between 6:00-9:30 A.M.		Between 3:00-6:30 P.M.		TRIP LENGTH (Miles)[4]
AGRICULTURE (Open Space)	[80:18:2]	2/acre[*,**]					10.8
AIRPORT	[78:20:2]						12.5
Commercial		60/acre, 100/flight, 70/1000 sq. ft.[*,**]	8%	(6:4)	8%	(5:5)	
General Aviation		6/acre, 2/flight, 6/based aircraft[*,**]	9%	(7:3)	15%	(5:5)	
Heliports		100/acre[**]					
AUTOMOBILE[5]							
Car Wash							
Automatic		900/site, 600/acre[*,**]	4%	(5:5)	9%	(5:5)	
Self-serve		100/wash stall[*,**]	4%	(5:5)	8%	(5:5)	
Gasoline	[21:51:28]						2.8
with/Food Mart		160/vehicle fueling space[*,**]	7%	(5:5)	8%	(5:5)	
with/Food Mart & Car Wash		155/vehicle fueling space[*,**]	8%	(5:5)	9%	(5:5)	
Older Service Station Design		150/vehicle fueling space, 900/station[*,**]	7%	(5:5)	9%	(5:5)	
Sales (Dealer & Repair)		50/1000 sq. ft., 300/acre, 60/service stall[*,**]	5%	(7:3)	3%	(4:6)	
Auto Repair Center		20/1000 sq. ft., 400/acre, 20/service stall[*]	8%	(7:3)	11%	(4:6)	
Auto Parts Sales		60/1000 sq. ft.[*,**]	4%		10%		
Quick Lube		40/service stall[*,**]	7%	(6:4)	10%	(5:5)	
Tire Store		25/1000 sq. ft., 30/service stall[*,**]	7%	(6:4)	11%	(5:5)	
CEMETERY		5/acre[*]					
CHURCH (or Synagogue)	[64:25:11]	9/1000 sq. ft., 30/acre[*,**] (quadruple rates for Sunday, or days of assembly)	5%	(6:4)	8%	(5:5)	5.1
COMMERCIAL/RETAIL[5]							
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)		35/1000 sq. ft.,[6] 400/acre[*]	4%	(7:3)	10%	(5:5)	
Regional Shopping Center (40-80acres, 400,000-800,000 sq. ft., w/usually 2+ major stores)	[54:35:11]	50/1000 sq. ft.,[6] 500/acre[*]	4%	(7:3)	9%	(5:5)	5.2
Community Shopping Center (15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)	[47:31:22]	80/1000 sq. ft., 700/acre[*,**]	4%	(6:4)	10%	(5:5)	3.6
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)		120/1000 sq. ft., 1200/acre[*,**]	4%	(6:4)	10%	(5:5)	
Commercial Shops	[45:40:15]						
Specialty Retail/Strip Commercial		40/1000 sq. ft., 400/acre[*]	3%	(6:4)	9%	(5:5)	4.3
Electronics Superstore		50/1000 sq. ft.[*,**]			10%	(5:5)	
Factory Outlet		40/1000 sq. ft.[*,**]	3%	(7:3)	3%	(5:5)	
Supermarket		150/1000 sq. ft., 2000/acre[*,**]	4%	(7:3)	10%	(5:5)	
Drugstore		90/1000 sq. ft.[*,**]	4%	(6:4)	10%	(5:5)	
Convenience Market (15-16 hours)		500/1000 sq. ft.[*,**]	8%	(5:5)	8%	(5:5)	
Convenience Market (24 hours)		700/1000 sq. ft.[*,**]	9%	(5:5)	7%	(5:5)	
Convenience Market (w/gasoline pumps)		850/1000 sq. ft., 550/vehicle fueling space[*,**]	8%	(5:5)	7%	(5:5)	
Discount Club		60/1000 sq. ft., 600/acre[*,**]	7%	(7:3)	9%	(5:5)	
Discount Store		60/1000 sq. ft., 600/acre[*,**]	3%	(6:4)	8%	(5:5)	
Furniture Store		5/1000 sq. ft., 100/acre[*,**]	4%	(7:3)	3%	(5:5)	
Lumber Store		30/1000 sq. ft., 150/acre[*,**]	7%	(6:4)	9%	(5:5)	
Home Improvement Superstore		40/1000 sq. ft.[*,**]	5%	(6:4)	8%	(5:5)	
Hardware/Paint Store		60/1000 sq. ft., 600/acre[*,**]	3%	(6:4)	9%	(5:5)	
Garden Nursery		40/1000 sq. ft., 30/acre[*,**]	3%	(6:4)	10%	(5:5)	
Mixed Use: Commercial (w/supermarket)/Residential		110/1000 sq. ft., 2000/acre[*] (commercial only) 5/dwelling unit, 200/acre[*] (residential only)	3% 9%	(6:4) (3:7)	9% 13%	(5:5) (6:4)	
EDUCATION							
University (4 years)	[91:9:0]	2.4/student, 100 acre[*]	10%	(8:2)	9%	(3:7)	8.9
Junior College (2 years)	[92:7:1]	1.2/student, 24/1000 sq. ft., 120/acre[*,**]	12%	(8:2)	9%	(6:4)	9.0
High School	[75:19:6]	1.3/student, 15/1000 sq. ft., 60/acre[*,**]	20%	(7:3)	10%	(4:6)	4.8
Middle/Junior High	[63:25:12]	1.4/student, 12/1000 sq. ft. 50/acre[*,**]	30%	(6:4)	3%	(4:6)	5.0
Elementary	[57:25:10]	1.6/student, 14/1000 sq. ft., 90/acre[*,**]	32%	(6:4)	9%	(4:6)	3.4
Day Care	[28:58:14]	5/child, 30/1000 sq. ft.[*,**]	17%	(5:5)	18%	(5:5)	3.7
FINANCIAL[5]	[35:42:23]						3.4
Bank (Walk-in only)		150/1000 sq. ft., 1000/acre[*,**]	4%	(7:3)	3%	(4:6)	
with Drive-Through		200/1000 sq. ft., 1500/acre[*]	5%	(6:4)	10%	(5:5)	
Drive-Through only		250 (125 one-way)/lane[*]	3%	(5:5)	13%	(5:5)	
Savings & Loan		60/1000 sq. ft., 600/acre[*,**]	2%		9%		
Drive-Through only		100 (50 one-way)/lane[*,**]	4%		15%		
HOSPITAL	[73:25:2]						8.3
General		20/bed, 25/1000 sq. ft., 250/acre[*]	8%	(7:3)	10%	(4:6)	
Convalescent/Nursing		3/bed[*,**]	7%	(6:4)	7%	(4:6)	
INDUSTRIAL							
Industrial/Business Park (commercial included)	[79:19:2]	16/1000 sq. ft., 200/acre[*,**]	12%	(8:2)	12%	(2:9)	9.0
Industrial Park (no commercial)		8/1000 sq. ft., 90/acre[*,**]	11%	(9:1)	12%	(2:8)	
Industrial Plant (multiple shifts)	[92:5:3]	10/1000 sq. ft., 120/acre[*]	14%	(8:2)	15%	(3:7)	11.7
Manufacturing/Assembly		4/1000 sq. ft., 50/acre[*,**]	19%	(9:1)	20%	(2:8)	
Warehousing		5/1000 sq. ft., 60/acre[*,**]	13%	(7:3)	15%	(4:6)	
Storage		2/1000 sq. ft., 0.2/vault, 30/acre[*]	3%	(5:5)	9%	(5:5)	
Science Research & Development		8/1000 sq. ft., 80/acre[*]	16%	(9:1)	14%	(1:9)	
Landfill & Recycling Center		6/acre	11%	(5:5)	10%	(4:6)	

(OVER)

Excerpts from the Public Facilities Element

Part XII
Public Facility Element

San Diego County General Plan

Adopted
March 13, 1991
GPA 90-FE
Amended
June 10, 1992
GPA92-FE1

Section 1 - Introduction.....XII-1-1
Section 2 - Coordination Among Facility Planning, Financing Programs and Land Use Planning.....XII-2-1
Section 3 - Parks and Recreation.....XII-3-1
Section 4 - Transportation.....XII-4-1
Section 5 - Flood Control.....XII-5-1
Section 6 - Solid Waste.....XII-6-1
Section 7 - Law Enforcement.....XII-7-1
Section 8 - Animal Control.....XII-8-1
Section 9 - Libraries.....XII-9-1
Section 10 - Schools.....XII-10-1
Section 11 - Fire Protection and Emergency Services.....XII-11-1
Section 12 - Wastewater.....XII-12-1
Section 13 - Water Provision Systems.....XII-13-1
Section 14 - Child Care.....XII-14-1
Section 15 - Courts and Jails.....XII-15-1
Section 16 - Social Services.....XII-16-1
Section 17 - Health.....XII-17-1
Section 18 - Senior Services.....XII-18-1
Section 19 - County Administration.....XII-19-1
Section 20 - Facilities Located in City Spheres.....XII-20-1

This Element was partially funded through the Community Development Block Grant program

ISSUES

1. Increases in the amount of automobile use have resulted in increased congestion on the region's roadways.

   Discussion: The dramatic rise in automobile use has far surpassed the ability of the County and other jurisdictions to upgrade and maintain the highway and road system. As the number of vehicles on the roadways has increased, the expansion of existing roadways and the construction of new roadways has not kept pace. Between 1978 and 1988, automobile registrations increased by 64% while increases in local street and road mileage only rose by 16%. As a result, certain roadways are functioning at a Level of Service "E" or "F" on a routine basis.

   A LOS "C", which allows for stable traffic flow with room to maneuver, is a generally accepted level to strive for in new development. At this level, traffic generally flows smoothly, although freedom to maneuver within the roadway is somewhat restricted and lane changes require additional care.

   However, there are some cases where development cannot achieve a LOS "C" on off-site roadways. For instance, there are areas where the existing development pattern precludes the addition of lanes or other mitigation or when the community is opposed to certain improvements to maintain a LOS "C". Additionally, there are existing roadways in the County that are currently operating below a LOS "C". Such cases are currently exceptions and generally occur when there is insufficient right-of-way to expand or modify a roadway or when the existing development in the area has generated more traffic than anticipated. In these cases a Level of Service "D" is acceptable on off-site roadways. At this level, small increases in flow cause substantial deterioration in service. Freedom to maneuver is limited and minor incidents can cause substantial interruption in the traffic flow.

   When the roadway system reaches a LOS "E" or "F", or new development would push it to LOS "E" or "F", new development should not be approved unless the project can mitigate the LOS "E" or contribute a fair share to a program to mitigate the project's impacts, unless a statement of overriding findings can be made.

   In order to control the amount of traffic on the roadways, and subsequently the amount of congestion, it is necessary to apply the LOS measurement to all roads that are impacted by a proposed project. The effect of a project on the road system varies from project to project. Due to the size and type of project, the type and capacity of roads serving the project, the amount of traffic generated by the development and the existing development pattern, the impact will vary from one project to another. To apply a LOS standard to only major or larger capacity roads or to within a specified geographic distance of a project could result in an inadequate review of the impacts of a project and create the potential for increased congestion. Therefore, project impacts should be assessed on a case-by-case basis.

Excerpts from the County's Draft Guidelines for Determining Significance

DRAFT

Part XV-A

Transportation/Traffic

Traffic

County of San Diego

Draft Guidelines for Determining Significance

Adopted,
_____ 2004

INTRODUCTION

This document provides guidance for evaluating adverse environmental effects that a proposed project may have on traffic. Specifically, this document addresses the following questions listed in the California Environmental Quality Act (CEQA) Guidelines, Appendix G, XV, Transportation/Traffic:

Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? Or individually or cumulatively worsen a road already exceeding the level of standard?

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Traffic and traffic-related impacts are major concerns for the San Diego Region. As population in the San Diego Region grows, traffic, as measured by average daily trips (ADT), also grows. Land development within the San Diego region contributes to growth in population and growth in traffic. The rate of land development, population and traffic growth has often outpaced the provision of needed transportation infrastructure to adequately accommodate the increased growth. As a result, traffic congestion is a common occurrence on many freeways, highways and arterials in the San Diego region.

1.0 GENERAL PRINCIPLES AND EXISTING CONDITIONS

The population of the San Diego Region is projected to increase from approximately 2.9 million people today to about 3.9 million in the year 2020. As a result, the number of forecasted vehicle trips is projected to increase by 34 percent from current levels. Road improvements will be needed to accommodate the anticipated growth in traffic; otherwise, traffic congestion will increase significantly.

As a means of measuring and evaluating traffic congestion, the concept of level of service was created. Level of service (LOS) is a quality of service measure that describes operational conditions on a transportation facility, such as a roadway or intersection. Levels of service are established based upon the driver's perspective. This service measure is a general overall measurement of several conditions such as speed

- Alternative transportation modes; including pedestrians, bicyclists and transit

In order to evaluate potential traffic impacts that may result from a specific project, traffic impact studies are often prepared. Traffic impact studies include estimates of the amount of traffic generated by the project, distributions of project traffic and/or redistributions of traffic caused by the project, assessments of potential traffic impacts, and when applicable the identification of mitigation measures to alleviate project-related traffic impacts.

The responsible agency for final approval of a project's traffic study is the agency that has discretionary approval of the project. For most projects located in the unincorporated area of San Diego, the responsible agency is the County of San Diego; however, coordination with other affected agencies is often necessary in the preparation of traffic impact studies. SANDAG is the agency responsible for the oversight of regional transportation planning. The California Department of Transportation (Caltrans) is the State agency responsible for planning, constructing and maintaining the State highway network. In addition to the County of San Diego, eighteen other municipalities within the San Diego Region are responsible for planning, constructing and maintaining local transportation networks within their respective areas of jurisdiction.

2.0 EXISTING REGULATIONS AND GUIDELINES

The following list details the most significant regulations that address traffic impacts in California and the County of San Diego.

2.1 State Regulations and Standards

California Environmental Quality Act (CEQA) [Public Resources Code 21000-21178; California Code of Regulations, Guidelines for Implementation of CEQA, Appendix G, Title 14, Chapter 3, §15000-15387. http://ceres.ca.gov/topic/env_law/ceqa/guidelines/]
Under the California Environmental Quality Act (CEQA) lead agencies are required to consider traffic impacts when assessing the environmental impacts of proposed projects. CEQA requires discretionary projects to evaluate the effect projects may have of traffic circulation.

2.2 Local Regulations and Standards

SANDAG Standards - Congestion Management Program [Congestion Management Program Update, January 2003, San Diego Regional Planning Agency, http://www.sandag.org/uploads/publicationid/publicationid_736_1278.pdf]
State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP), which is a part of SANDAG's Regional Transportation Plan (RTP). The purpose of the CMP is to monitor the performance of the region's transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG, as the designated Congestion Management Agency for San Diego region, must develop, adopt and update the CMP in

(5) Manchester Avenue/El Camino Real: I-5 to SR 76/Mission Avenue
(6) Nimitz Blvd./North Harbor Dr./Grape & Hawthorne Streets/Pacific Highway/Harbor Drive: I-8 to I-5
(7) Olivenhain Road/Rancho Santa Fe Road: El Camino Real to SR 78
(8) Otay Mesa Road-Interim SR 905: SR 905 (West) to SR 905 (East)2
(9) Palomar Airport Road/San Marcos Boulevard: I-5 to SR 78
(10) Sea World Drive/Friars Road/Mission Gorge Road/Woodside Avenue: I-5 to SR 67
(11) Scripps Poway Parkway: I-15 to SR 67
(12) SR 54 & Sweetwater Road-Interim SR 125: I-805 to Broadway[3]

Public Facilities Element (Part XII) of the San Diego County General Plan [http://ceres.ca.gov/planning/counties/San_Diego/plans.html]
The County of San Diego General Plan Public Facilities Element establishes policies and implementation measures regarding the assessment and mitigation of traffic impacts of new development. One of the goals of the Public Facilities Element (PFE) is to provide "A safe, convenient, and economical integrated transportation system including a wide range of transportation modes (PFE, page XII-4-18)." The PFE also identifies an objective in the Transportation Section to provide a "Level of Service C or better on County Circulation Element roads. (PFE, page XII-4-18)." The PFE, however, establishes LOS D as an off-site mitigation threshold for discretionary projects. When an existing Level of Service is already D, "a LOS of D may be allowed (PFE, page XII-4-18)." According to the PFE, projects that significantly increase congestion on roads operating at LOS E or LOS F must provide mitigation. According to the PFE, this mitigation can consist of a fair share contribution to a program to mitigate the project's impacts. If adequate mitigation cannot be provided, then a statement of overriding findings would need to be made by the decision-makers pursuant to Sections 15091 and 15093 of the State CEQA Guidelines to approve the project as proposed.

San Diego County Private Road Standards [http://www.sdcounty.ca.gov/dpw/land/rtelocs.htm]
These standards provide minimum design and construction requirements for private roads. Levels of service are not established for private roads. Minimum design and construction requirements, however, are established based upon the project average daily traffic (ADT) volume on the road.

San Diego County Public Road Standards [http://www.sdcounty.ca.gov/dpw/land/rtelocs.htm]
These standards provide minimum design and construction requirements for private roads. Levels of service are established for Circulation Element roads. Levels of service are not applied with the non-Circulation Element residential roads. Target design capacities, however, have been identified for these roads.

[3] These CMP Arterials are designated as interim facilities on the CMP network and will be replaced by a state highway following their construction.

congestion. SANDAG's 2020 RTP details some of the regional improvements that are projected to occur within a twenty-year time frame. Impacts associated with traffic, pedestrian and bicycle safety are most often addressed at the project level.

4.0 GUIDELINES FOR DETERMINING SIGNIFICANCE

This section provides guidance for evaluating adverse environmental effects a project may have on traffic. The guidelines for determining significance are organized into six subject areas: direct vs. cumulative, road segments, intersections, ramps, hazards due to a design feature, and hazards to pedestrians and/or bicyclists.

4.1 Direct vs. Cumulative Impacts

The California Environmental Quality Act (CEQA) Guidelines states that environmental assessments must take in account the "whole of the action" involved, including on-site, off-site, construction, and operational impacts. Also, the environmental assessment must evaluate project-level and cumulative impacts, including direct and indirect impacts.

4.1.1 Direct

Direct impacts are impacts that would result solely from the implementation of the project. Since CEQA requires a plan to ground assessment, direct impacts are typically evaluated based upon a comparison of the existing plus project scenario to the existing scenario. When opening day and/or a phased scenario is planned, additional comparisons may also be made to determine significance. Where it can be demonstrated that other projects will reasonably come on-line prior to development of the proposed project, an opening day assessment scenario may be used in lieu of the existing plus project approach. Coordination with County staff is recommended to ensure that proper assumptions are used in the preparation of this assessment scenario. Direct impacts would occur when the significance criteria outlined herein is exceeded.

4.1.2 Cumulative

CEQA section 15130 provides guidance for assessment of cumulative impacts. Per this section, CEQA states that cumulative impact assessments should be based upon 1) a list of past, present and probable future projects producing related or cumulative impacts, (includes all projects and if necessary, those projects outside the control of the agency), or 2) a summary of projects contained in an adopted general plan or related planning document, or in a prior certified/adopted environmental document which described or evaluated regional or area wide conditions contributing to the cumulative impact. For most projects, the list of past, present and probable projects approach is used for the assessment of cumulative impacts.

Table 1 - Measures of Significant Project Impacts to Congestion
Allowable Increases on Congested Roads and Intersections

Road Segments

	2-LANE ROAD	4-LANE ROAD	6-LANE ROAD
LOS E	200 ADT	400 ADT	600 ADT
LOS F	100 ADT	200 ADT	300 ADT

Intersections

	SIGNALIZED	UNSIGNALIZED
LOS E	Delay of 2 seconds	20 peak hour trips on a critical movement
LOS F	Delay of 1 second, or 5 peak hour trips on a critical movement	5 peak hour trips on a critical movement

Note: A critical movement is one that is experiencing excessive queues.
Note: By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes any trips must mitigate a share of the cumulative impacts.
Note: The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

The County of San Diego Public Road Standards include a table which establishes levels of service for County Circulation Element roads based upon average daily trips. This table shall be used in determining the level of service for County Circulation Element roads. The Highway Capacity Manual (HCM) includes analysis criteria for the assessment of the level of service for two-lane highways. The Director of Public Works may, based upon a review of the operational characteristics of the roadway, designate that a HCM analysis be used to determine the level of service for a two-lane County arterial in lieu of the level of service table provided in the County of San Diego Public Road Standards.

In determining the level of service for road segments and intersections outside of the County of San Diego's jurisdiction, the level of service standards for the jurisdiction or agency (Caltrans) shall be used. Early coordination with the affected jurisdiction and/or agency (Caltrans) should be conducted during the preparation of the traffic impact study.

Capacity is related to level of service. The capacity of a facility is the maximum number of persons or vehicles that can be expected to traverse a point or uniform section of road within a specified time frame under prevailing roadway, traffic and control conditions. The LOS E/LOS F threshold is identified as the capacity of the facility (roadway or intersection). Volume to capacity ratios are calculated based upon this capacity (LOS E/LOS F) threshold.

Table 2 - Measure of Significant Project Traffic Impacts for Circulation Element Roads, Signalized Intersections, and Ramps

Level of Service With Project	Allowable Change due to Project Impact						
	Freeways		Roadway Segments*		Intersections**	Ramps***	Ramps with >15 min. delay
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)	Delay (min.)
E & F	0.01	1	0.02	1	2	-	2

* For County arterials which are not identified in SANDAG's Regional Transportation Plan and Congestion Management Plan as regionally significant arterials, then significance may be measured based upon an increase in average daily traffic. The allowable change (ADT) due to project impacts in this instance would be identified in Table 1.

** Signalized intersections

*** See Attachment E for ramp metering analysis.

KEY
V/C = Volume to Capacity ratio
Speed = Speed measured in miles per hour
Delay = Average stopped delay per vehicle measured in seconds, or minutes
LOS = Level of Service
ADT = Average Daily Trips

4.3 Intersections

This section provides guidance for evaluating adverse environmental effects a project may have on signalized and unsignalized intersections.

4.3.1 Signalized

Exceedance of the following significance guidelines will be considered substantial evidence that private development and public improvement projects will have a significant volume and/or level of service traffic impact on a signalized intersection if:

- ***The additional or redistributed ADT generated by the proposed project will cause a signalized intersection to operate below LOS D and will significantly increase congestion as identified in Table 1, and/or***

- ***The proposed project will generate 5 or more peak hour trips to a critical movement of an unsignalized intersection and the unsignalized intersection currently operates at LOS F, or***

- ***Based upon an evaluation of existing accident rates, the signal priority list, intersection geometrics, proximity of adjacent driveways, sight distance and/or other factors, it is found that the generation rate less than those specified above would significantly impact the operations of the intersection.***

The significance guidelines for unsignalized intersections set a minimum overall number of trips added to a critical movement at an unsignalized intersection and are supported by significance criteria for unsignalized intersections that are also identified in Table 1. Since the operations of unsignalized intersections under congested conditions are heavily influenced by traffic volume increases on critical moves, the significance guidelines for unsignalized intersections were based upon the number of trips added to a critical move. As stated above, this guideline directly relates to the number of vehicles that can be added to an existing queue that forms at the intersection. A significance guideline of twenty trips (peak hour) per critical movement was used for LOS E conditions. Although delays drivers experience under LOS E condition may be extreme, they are not yet considered unacceptable. The twenty trips spread out over the peak hour would not likely cause the intersection delay and/or existing queue lengths to become unacceptable. The twenty trips (peak hour) would not be noticeable to the average driver. A significance guideline of five trips (peak hour) per critical movement was used for LOS F conditions. The five trips spread out over the peak hour would not significantly increase the length of an existing queue and would not be noticeable to the average driver

A peak hour increase of twenty peak hour trips to the critical movement of an unsignalized intersection would be, on average, one additional car every 3.0 minutes. Assuming the average wait time for a vehicle in the critical movement queue is less than 3.0 minutes, this would not be noticeable to the average driver.

For smaller discretionary projects, without controversy, use of these guidelines is likely to be sufficient. For large projects, controversial projects, and/or projects which are preparing Environmental Impact Reports, more detailed evaluations to verify the applicability of the significance guidelines for the individual project conditions may be necessary. Additional evaluations may include analysis of vehicle headways, speeds, average gaps, queues, delay, and/or other factors.

- ***The project may result in the preclusion or substantial hindrance of the provision of a planned bike lane or pedestrian facility on a roadway adjacent to the project site.***

- ***The percentage and/or magnitude of increased traffic on the road due to the proposed project may adversely affect pedestrian and bicycle safety.***

- ***The physical conditions of the project site and surrounding area, such as curves, slopes, walls, landscaping or other barriers could result in vehicle/pedestrian, vehicle/bicycle conflicts.***

- ***The project does not conform to the requirements of the private or public road standards, as applicable.***

- ***The project may result in a substantial increase in pedestrian or bicycle activity without the presence of adequate facilities.***

5.0 GUIDELINES FOR PREPARING A TRAFFIC IMPACT STUDY (TIS)

A thorough traffic analysis will consider all aspects of a project (including all on- and off-site improvements). The analysis should identify whether these impacts are direct, indirect and/or cumulative in nature and determine whether the impacts are significant.

5.1 Overview of a Traffic Impact Study and General Contents

The purpose of a traffic impact study is to evaluate potential individual and cumulative traffic impacts that may result from a proposed project. Substantial increases in traffic volumes on and/or changes to the road network may cause congestion at existing and /or future roads and intersections. A detailed analysis of the traffic generated and/or redirected by a proposed project, assessment of potential impacts, and identification of mitigation measures for significant traffic impacts are the main focus of a traffic impact study.

The analysis of traffic issues, evaluation of traffic impacts, and development of mitigation measures for traffic impacts are complex tasks. The type and scope of a traffic impact study will vary based upon the size of a project, its location and other factors. Typically, a traffic impact study will include several components as outlined in Attachment B and summarized below:

~~2~~5.1.1 Existing Conditions

Documentation of the existing traffic volumes, levels of service, and geometrics for roads and intersections that may be potentially impacted by the proposed project must be provided. This assessment is typically based upon traffic counts that are less than two years old, unless it has been demonstrated that traffic volumes have not significantly changed since the prior counts were taken.

Excerpts from Title 7, Division 7 (new), Transportation Impact Fee Ordinance

ORDINANCE NO. 9712 (N.S.)

AN ORDINANCE REPEALING EXISTING TITLE 7, DIVISION 7 OF THE SAN DIEGO COUNTY REGULATORY CODE AND ADOPTING NEW TITLE 7, DIVISION 7 RELATED TO TRANSPORTATION IMPACT FEES – ALTERNATIVE APPORTIONMENT

The Board of Supervisors of the County of San Diego ordains as follows:

Section 1. The Board of Supervisors finds and determines that it is necessary to repeal the existing ordinance titled Bridge Crossings and Major Thoroughfares and replace it with a new ordinance titled Transportation Impact Fees. This new ordinance will enable implementation of the County's Transportation Impact Fee programs for the purpose of assessing and collecting fees from future development to offset the costs of constructing planned transportation facilities necessary to accommodate increased traffic generated by future development consistent with §§ 66000 et seq. of the California Government Code (Mitigation Fee Act). This ordinance will apply to development for residential, commercial and industrial land uses, and any others associated with the generation of traffic. The existing ordinance shall be repealed, as it will be rendered obsolete by this new replacement ordinance.

County of San Diego TIF Program

BONSALL FEE SCHEDULE

LAND USE CATEGORY	APPLICABLE FEE		
	Regional	Local	Total
AGRICULTURE (OPEN SPACE)	$880 / acre	$927 / acre	$1,807 / acre
AIRPORT			
Commercial	$30,801 / ksf	$32,448 / ksf	$63,249 / ksf
General Aviation	$2,640 / acre	$2,781 / acre	$5,421 / acre
Heliports	$44,002 / acre	$46,354 / acre	$90,356 / acre
AUTOMOBILE			
Car Wash			
Automatic	$269,400 / acre	$283,800 / acre	$553,200 / acre
Self-serve	$44,900 / wash stall	$47,300 / wash stall	$92,200 / wash stall
Gasoline			
with/Food Mart	$51,725 / fueling space	$54,490 / fueling space	$106,214 / fueling space
with/Food Mart & Car Wash	$50,108 / fueling space	$52,787 / fueling space	$102,895 / fueling space
Older Service Station Design	$48,492 / fueling space	$51,084 / fueling space	$99,576 / fueling space
Sales (Dealer & Repair)	$16,164 / ksf	$17,028 / ksf	$33,192 / ksf
Auto Repair Center	$6,466 / ksf	$6,811 / ksf	$13,277 / ksf
Auto Parts Sales	$19,397 / ksf	$20,434 / ksf	$39,830 / ksf
Quick Lube	$12,931 /	$13,622 /	$26,554 /
Tire Store	$8,082 / ksf	$8,514 / ksf	$16,596 / ksf
CEMETERY	$2,245 / acre	$2,365 / acre	$4,610 / acre
CHURCH (OR SYNAGOGUE)	$3,596 / ksf	$3,789 / ksf	$7,385 / ksf
COMMERCIAL/RETAIL			
Super Regional Shopping Center (More than 80 acres, more than 800,000 sq. ft., w/usually 3+ major stores)	$15,715 / ksf	$16,555 / ksf	$32,270 / ksf
Regional Shopping Center (40-80 acres, 400,000-800,000 sq. ft. w/usually 2+ major stores)	$19,981 / ksf	$21,049 / ksf	$41,029 / ksf
Community Shopping Center (15-40 acres, 125,000-400,000 sq. ft., w/usually 1 major store, detached restaurant(s), grocery and drugstore)	$28,018 / ksf	$29,515 / ksf	$57,533 / ksf
Neighborhood Shopping Center (Less than 15 acres, less than 125,000 sq. ft., w/usually grocery & drugstore, cleaners, beauty & barber shop, & fast food services)	$42,026 / ksf	$44,273 / ksf	$86,299 / ksf
Commercial Shops			
Specialty Retail/Strip Commercial	$15,266 / ksf	$16,082 / ksf	$31,348 / ksf
Electronics Superstore	$19,083 / ksf	$20,103 / ksf	$39,185 / ksf
Factory Outlet	$15,266 / ksf	$16,082 / ksf	$31,348 / ksf
Supermarket	$57,248 / ksf	$60,308 / ksf	$117,555 / ksf
Drugstore	$34,349 / ksf	$36,185 / ksf	$70,533 / ksf

County of San Diego TIF Program

BONSALL FEE SCHEDULE

LAND USE CATEGORY	APPLICABLE FEE		
	Regional	Local	Total
Hotel (w/convention facilities/restaurant)	$4,310 / room	$4,541 / room	$8,851 / room
Motel	$3,879 / room	$4,087 / room	$7,966 / room
Resort Hotel	$3,448 / room	$3,633 / room	$7,081 / room
Business Hotel	$3,017 / room	$3,179 / room	$6,196 / room
MILITARY	$1,100 / person	$1,159 / person	$2,259 / person
OFFICE			
Standard Commercial Office (less than 100,000 sq. ft.)	$8,621 / ksf	$9,082 / ksf	$17,702 / ksf
Large (High-Rise) Commercial Office (more than 100,000 sq. ft., 6+ stories)	$7,404 / ksf	$7,800 / ksf	$15,204 / ksf
Office Park (400,000+ sq. ft.)	$5,226 / ksf	$5,506 / ksf	$10,732 / ksf
Single Tenant Office	$6,097 / ksf	$6,423 / ksf	$12,521 / ksf
Corporate Headquarters	$3,049 / ksf	$3,212 / ksf	$6,260 / ksf
Government (Civic Center)	$11,315 / ksf	$11,920 / ksf	$23,234 / ksf
Post Office			
Central/Walk-In Only	$33,944 / ksf	$35,759 / ksf	$69,703 / ksf
Community (not including mail drop lane)	$75,432 / ksf	$79,464 / ksf	$154,896 / ksf
Community (w/mail drop lane)	$113,148 / ksf	$119,196 / ksf	$232,344 / ksf
Mail Drop Lane only	$565,740 / lane	$595,980 / lane	$1,161,720 / lane
Mail Drop Lane only (one-way)	$282,870 / lane	$297,990 / lane	$580,860 / lane
Department of Motor Vehicles	$67,889 / ksf	$71,518 / ksf	$139,406 / ksf
Medical-Dental	$20,205 / ksf	$21,285 / ksf	$41,490 / ksf
PARKS			
City (developed w/meeting rooms and sports facilities)	$21,103 / acre	$22,231 / acre	$43,334 / acre
Regional (developed)	$8,441 / acre	$8,892 / acre	$17,334 / acre
Neighborhood/County (undeveloped)	$2,110 / acre	$2,223 / acre	$4,333 / acre
State (average 1000 acres)	$422 / acre	$445 / acre	$867 / acre
Amusement (Theme)	$33,765 / acre	$35,570 / acre	$69,334 / acre
San Diego Zoo	$48,537 / acre	$51,131 / acre	$99,668 / acre
Sea World	$33,765 / acre	$35,570 / acre	$69,334 / acre
RECREATION			
Beach, Ocean or Bay	$245,154 / klf shore	$258,258 / klf shore	$503,412 / klf shore
Beach, Lake (fresh water)	$20,430 / klf shore	$21,522 / klf shore	$41,951 / klf shore
Bowling Center	$12,258 / ksf	$12,913 / ksf	$25,171 / ksf
Campground	$1,634 / campsite	$1,722 / campsite	$3,356 / campsite
Golf Course	$2,860 / acre	$3,013 / acre	$5,873 / acre
Driving Range only	$28,601 / acre	$30,130 / acre	$58,731 / acre
Marinas	$1,634 / berth	$1,722 / berth	$3,356 / berth
Multi-purpose (miniature golf, video arcade, batting cage, etc.)	$36,773 / acre	$38,739 / acre	$75,512 / acre
Racquetball/Health Club	$12,258 / ksf	$12,913 / ksf	$25,171 / ksf

APPENDIX B

- 24-Count Worksheets

District	Route	Rte Suf	County	PM Prefix	Postmile	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
11	76		SD	R	9.9	MILEPOST EQUATION =9.93						
11	76		SD		12	BONSALL, OLIVE HILL ROAD	2550	32500	31000	3050	38500	37000
11	76		SD		12.47	MISSION ROAD	3050	38500	37000	1400	17600	16900
11	76		SD		14.7	GIRD ROAD	1400	17600	16900	1500	19300	18500
11	76		SD	R	17.01	OLD HIGHWAY 15	1500	19300	18500	2100	29000	27000
11	76		SD	R	17.3	JCT. RTE. 15	2100	29000	27000	1250	14000	13600
11	76		SD		23.01	PALA MISSION ROAD	1250	14000	13600	720	7900	7700

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Wednesday, October 06, 2004 City: La Jolla Project #: 04-4338-006

Location: S. Mission Rd Btwn S. Stage Coach Ln & Pala Rd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	22		10					12:00	125		137				
00:15	21		5					12:15	148		130				
00:30	13		7					12:30	118		138				
00:45	23	79	10	32			111	12:45	119	510	144	549			1059
01:00	5		2					13:00	105		134				
01:15	9		4					13:15	118		126				
01:30	4		4					13:30	128		131				
01:45	10	28	2	12			40	13:45	140	491	134	525			1016
02:00	9		6					14:00	136		117				
02:15	7		6					14:15	138		124				
02:30	5		4					14:30	162		148				
02:45	7	28	5	21			49	14:45	173	609	129	518			1127
03:00	3		5					15:00	158		171				
03:15	6		6					15:15	194		176				
03:30	7		13					15:30	176		170				
03:45	5	21	11	35			56	15:45	181	709	190	707			1416
04:00	2		13					16:00	285		249				
04:15	5		13					16:15	310		244				
04:30	5		20					16:30	358		240				
04:45	9	21	35	81			102	16:45	314	1267	224	957			2224
05:00	9		48					17:00	308		270				
05:15	14		66					17:15	302		219				
05:30	18		115					17:30	291		258				
05:45	26	67	143	372			439	17:45	300	1201	252	999			2200
06:00	45		169					18:00	207		134				
06:15	41		159					18:15	196		143				
06:30	52		179					18:30	183		105				
06:45	78	216	172	679			895	18:45	180	766	98	480			1246
07:00	163		243					19:00	154		96				
07:15	222		228					19:15	145		80				
07:30	277		260					19:30	134		75				
07:45	253	915	278	1009			1924	19:45	112	545	62	313			858
08:00	222		203					20:00	98		63				
08:15	212		223					20:15	102		54				
08:30	177		225					20:30	96		63				
08:45	175	786	218	869			1655	20:45	83	379	54	234			613
09:00	123		157					21:00	93		52				
09:15	118		128					21:15	90		60				
09:30	96		155					21:30	70		59				
09:45	113	450	137	577			1027	21:45	77	330	32	203			533
10:00	114		125					22:00	55		34				
10:15	89		127					22:15	51		37				
10:30	85		152					22:30	44		21				
10:45	104	392	149	553			945	22:45	39	189	20	112			301
11:00	126		129					23:00	22		14				
11:15	111		101					23:15	29		12				
11:30	127		134					23:30	21		9				
11:45	145	509	130	494			1003	23:45	21	93	7	42			135
Total Vol.		3512		4734			**8246**			7089		5639			**12728**

	Daily Totals				
	NB	SB	EB	WB	Combined
	10601	10373			**20974**

	AM			PM		
Split %	42.6%	57.4%	**39.3%**	55.7%	44.3%	**60.7%**
Peak Hour	07:15	07:00	**07:15**	16:15	17:00	**16:15**
Volume	974	1009	**1943**	1290	999	**2268**
P.H.F.	0.88	0.91	**0.90**	0.91	0.93	**0.95**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, January 06, 2005 City: Bonsall Project #: 04-4444-001

Location: Camino del Ray btwn Mission Rd (SR76) and Old River Rd

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			8	8		12:00			51	39	
00:15			2	6		12:15			45	37	
00:30			4	3		12:30			40	40	
00:45			4	0		12:45			70	42	
		18		17	35			206		158	364
01:00			3	2		13:00			70	42	
01:15			2	4		13:15			67	60	
01:30			2	4		13:30			60	51	
01:45			1	1		13:45			55	50	
		8		11	19			252		203	455
02:00			5	4		14:00			60	60	
02:15			5	1		14:15			52	52	
02:30			1	2		14:30			70	65	
02:45			1	0		14:45			72	103	
		12		7	19			254		280	534
03:00			0	1		15:00			92	83	
03:15			2	3		15:15			82	94	
03:30			0	1		15:30			91	122	
03:45			1	1		15:45			77	123	
		3		6	9			342		422	764
04:00			1	2		16:00			78	107	
04:15			3	4		16:15			66	97	
04:30			2	3		16:30			61	107	
04:45			4	5		16:45			75	121	
		10		14	24			280		432	712
05:00			9	5		17:00			70	103	
05:15			17	5		17:15			63	105	
05:30			27	13		17:30			65	117	
05:45			23	14		17:45			53	112	
		76		37	113			251		437	688
06:00			35	20		18:00			60	80	
06:15			51	16		18:15			55	96	
06:30			37	24		18:30			46	73	
06:45			42	23		18:45			42	64	
		165		83	248			203		313	516
07:00			57	37		19:00			44	67	
07:15			84	48		19:15			39	43	
07:30			75	76		19:30			34	41	
07:45			44	90		19:45			32	35	
		260		251	511			149		186	335
08:00			77	69		20:00			35	29	
08:15			76	65		20:15			22	18	
08:30			62	55		20:30			26	24	
08:45			108	54		20:45			29	24	
		323		243	566			112		95	207
09:00			134	104		21:00			30	24	
09:15			102	144		21:15			28	11	
09:30			51	65		21:30			32	25	
09:45			44	60		21:45			17	19	
		331		373	704			107		79	186
10:00			45	45		22:00			26	18	
10:15			50	50		22:15			14	10	
10:30			61	54		22:30			14	16	
10:45			58	56		22:45			11	13	
		214		205	419			65		57	122
11:00			54	60		23:00			16	4	
11:15			40	50		23:15			13	9	
11:30			42	52		23:30			8	10	
11:45			39	41		23:45			1	2	
		175		203	378			38		25	63
Totai Voi.			1595	1450	**3045**				2259	2687	**4946**

	AM			PM		
Split %	52.4%	47.6%	**38.1%**	45.7%	54.3%	**61.9%**
Peak Hour	08:30	09:00	**08:30**	15:00	15:30	**15:15**
Volume	406	373	**763**	342	449	**774**
P.H.F.	0.76	0.65	**0.78**	0.93	0.91	**0.91**

Daily Totals

NB	SB	EB	WB	Combined
		3854	4137	**7991**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Thursday, January 06, 2005 City: Bonsall Project #: 04-4444-003

Location: Camino del Ray W/o Old Hwy 395

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		5			12:00			20		22		
00:15			0		4			12:15			22		26		
00:30			0		2			12:30			29		30		
00:45			0	2	1	12	14	12:45			30	101	31	109	210
01:00			0		2			13:00			31		30		
01:15			0		1			13:15			18		40		
01:30			1		2			13:30			20		20		
01:45			2	3	2	7	10	13:45			26	95	26	116	211
02:00			0		2			14:00			20		36		
02:15			1		1			14:15			17		35		
02:30			2		3			14:30			18		31		
02:45			0	3	2	8	11	14:45			20	75	30	132	207
03:00			0		2			15:00			22		42		
03:15			0		0			15:15			33		41		
03:30			0		0			15:30			25		49		
03:45			0	0	1	3	3	15:45			26	106	51	183	289
04:00			0		2			16:00			43		37		
04:15			1		2			16:15			46		43		
04:30			0		1			16:30			32		45		
04:45			2	3	8	13	16	16:45			36	157	51	176	333
05:00			2		7			17:00			37		44		
05:15			11		4			17:15			29		36		
05:30			8		6			17:30			28		68		
05:45			15	36	12	29	65	17:45			28	122	52	200	322
06:00			16		9			18:00			22		41		
06:15			22		8			18:15			40		42		
06:30			16		16			18:30			17		33		
06:45			25	79	19	52	131	18:45			17	96	40	156	252
07:00			27		29			19:00			5		35		
07:15			30		27			19:15			15		30		
07:30			43		34			19:30			13		35		
07:45			44	144	42	132	276	19:45			4	37	19	119	156
08:00			42		35			20:00			7		14		
08:15			43		28			20:15			3		12		
08:30			30		35			20:30			5		12		
08:45			26	141	29	127	268	20:45			2	17	20	58	75
09:00			27		29			21:00			6		15		
09:15			34		30			21:15			6		15		
09:30			40		17			21:30			3		18		
09:45			26	127	31	107	234	21:45			3	18	21	69	87
10:00			26		30			22:00			1		20		
10:15			22		20			22:15			4		11		
10:30			20		21			22:30			2		10		
10:45			29	97	18	89	186	22:45			6	13	13	54	67
11:00			18		15			23:00			0		6		
11:15			20		20			23:15			7		11		
11:30			21		21			23:30			2		8		
11:45			19	78	26	82	160	23:45			0	9	5	30	39
Total Vol.				713		661	**1374**					846		1402	**2248**

Daily Totals

NB	SB	EB	WB	Combined
		1559	2063	**3622**

	AM			PM		
Split %	51.9%	48.1%	**37.9%**	37.6%	62.4%	**62.1%**
Peak Hour	07:30	07:45	**07:30**	16:00	17:30	**16:15**
Volume	172	140	**311**	157	203	**334**
P.H.F.	0.98	0.83	**0.90**	0.85	0.75	**0.94**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Friday, January 21, 2005 City: Bonsall Project #: 05-4015-001

Location: Dai Dang Meditation Driveway @ Camino Del Rey

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	0		0				12:00	0		0				
00:15	0		0				12:15	0		0				
00:30	0		0				12:30	0		0				
00:45	0	0	0	0			12:45	0	0	0	0			
01:00	0		0				13:00	1		0				
01:15	0		0				13:15	0		0				
01:30	0		0				13:30	0		0				
01:45	0	0	0	0			13:45	0	1	0	0			1
02:00	0		0				14:00	0		0				
02:15	0		0				14:15	0		0				
02:30	0		0				14:30	0		0				
02:45	0	0	0	0			14:45	0	0	0	0			
03:00	0		0				15:00	0		0				
03:15	0		0				15:15	0		0				
03:30	0		0				15:30	0		1				
03:45	0	0	0	0			15:45	0	0	0	1			1
04:00	0		0				16:00	0		0				
04:15	0		0				16:15	0		0				
04:30	0		0				16:30	0		0				
04:45	0	0	0	0			16:45	0	0	1	1			1
05:00	0		0				17:00	0		0				
05:15	0		0				17:15	0		0				
05:30	0		0				17:30	0		1				
05:45	0	0	0	0			17:45	1	1	0	1			2
06:00	0		0				18:00	0		0				
06:15	0		0				18:15	0		0				
06:30	0		0				18:30	0		0				
06:45	0	0	0	0			18:45	0	0	1	1			1
07:00	0		0				19:00	0		0				
07:15	0		0				19:15	0		0				
07:30	0		0				19:30	0		0				
07:45	0	0	0	0			19:45	0	0	0	0			
08:00	0		0				20:00	0		0				
08:15	0		0				20:15	0		0				
08:30	0		0				20:30	0		0				
08:45	0	0	0	0			20:45	0	0	0	0			
09:00	2		0				21:00	0		0				
09:15	1		1				21:15	0		0				
09:30	0		0				21:30	0		1				
09:45	0	3	0	1		4	21:45	0	0	0	1			1
10:00	0		0				22:00	0		0				
10:15	0		0				22:15	0		0				
10:30	0		0				22:30	0		0				
10:45	1	1	0	0		1	22:45	0	0	0	0			
11:00	0		0				23:00	0		0				
11:15	0		0				23:15	0		0				
11:30	0		0				23:30	0		0				
11:45	0	0	0	0			23:45	0	0	0	0			
Total Vol.		4		1		**5**			2		5			**7**

Daily Totals

NB	SB	EB	WB	Combined
6	6			**12**

	AM			PM		
Split %	80.0%	20.0%	**41.7%**	28.6%	71.4%	**58.3%**
Peak Hour	08:30	08:30	**08:30**	12:15	16:45	**16:45**
Volume	3	1	**4**	1	2	**2**
P.H.F.	0.38	0.25	**0.50**		0.50	**0.50**

Average Daily Traffic Volumes

Prepared by: Southland Car Counters

Volumes for: Sunday, January 23, 2005 City: Bonsall Project #: 05-4015-001

Location: Dai Dang Meditation Driveway @ Camino Del Rey

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		0					12:00	0		1				
00:15	0		0					12:15	1		2				
00:30	0		0					12:30	2		2				
00:45	0	0	0	0				12:45	1	4	2	7			11
01:00	0		0					13:00	0		1				
01:15	0		0					13:15	1		2				
01:30	0		0					13:30	2		1				
01:45	0	0	0	0				13:45	0	3	2	6			9
02:00	0		0					14:00	1		1				
02:15	0		0					14:15	0		1				
02:30	0		0					14:30	0		0				
02:45	0	0	0	0				14:45	0	1	0	2			3
03:00	0		0					15:00	1		1				
03:15	0		0					15:15	0		0				
03:30	0		0					15:30	1		1				
03:45	0	0	0	0				15:45	0	2	0	2			4
04:00	0		0					16:00	0		0				
04:15	0		0					16:15	0		0				
04:30	0		0					16:30	0		1				
04:45	0	0	0	0				16:45	0	0	0	1			1
05:00	0		0					17:00	0		0				
05:15	0		0					17:15	0		0				
05:30	0		0					17:30	0		0				
05:45	0	0	0	0				17:45	0	0	0	0			
06:00	0		0					18:00	0		0				
06:15	0		0					18:15	0		0				
06:30	0		0					18:30	0		0				
06:45	0	0	0	0				18:45	0	0	0	0			
07:00	0		0					19:00	0		0				
07:15	0		0					19:15	0		0				
07:30	0		0					19:30	0		0				
07:45	0	0	0	0				19:45	0	0	0	0			
08:00	1		1					20:00	0		0				
08:15	0		0					20:15	1		0				
08:30	4		0					20:30	0		0				
08:45	2	7	1	2			9	20:45	0	1	0	0			1
09:00	2		0					21:00	0		0				
09:15	2		1					21:15	0		1				
09:30	0		0					21:30	0		0				
09:45	0	4	0	1			5	21:45	0	0	0	1			1
10:00	1		1					22:00	0		0				
10:15	1		0					22:15	0		0				
10:30	0		0					22:30	0		0				
10:45	0	2	2	3			5	22:45	0	0	0	0			
11:00	0		0					23:00	0		0				
11:15	0		1					23:15	0		0				
11:30	0		0					23:30	0		0				
11:45	0	0	0	1			1	23:45	0	0	0	0			
Total Vol.		13		7			**20**			11		19			**30**

Daily Totals

NB	SB	EB	WB	Combined
24	26			**50**

	AM			PM		
Split %	65.0%	35.0%	**40.0%**	36.7%	63.3%	**60.0%**
Peak Hour	08:30	11:45	**08:30**	12:00	12:00	**12:00**
Volume	10	5	**12**	4	7	**11**
P.H.F.	0.63	0.63	**0.75**	0.63	0.88	**0.69**

APPENDIX C

- Speed Surveys for Camino Del Rey
- Line of Sight

Speed Surveys for Camino Del Rey

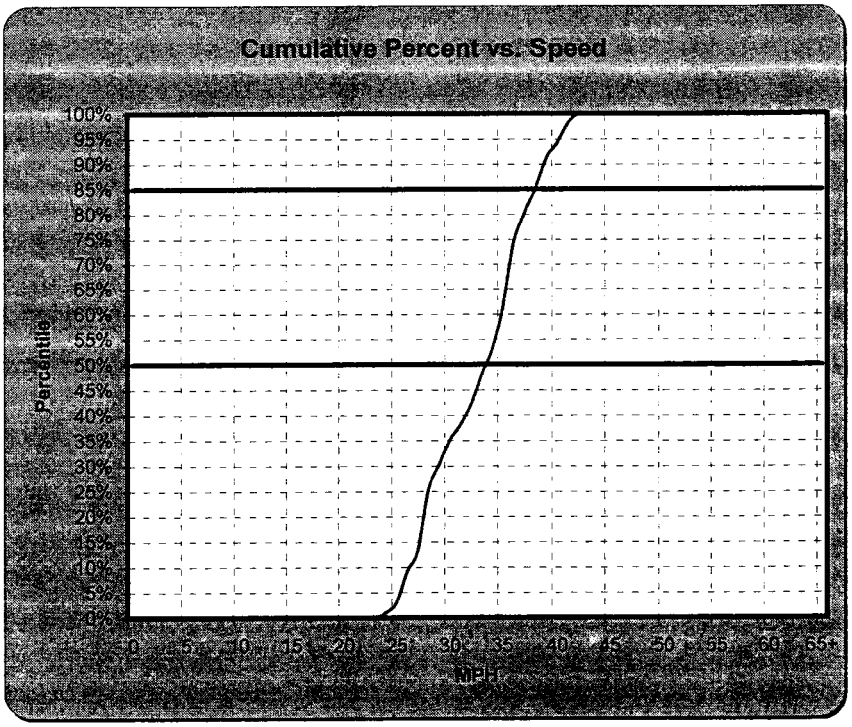
Camino Del Rey w/o Dai Dang Access

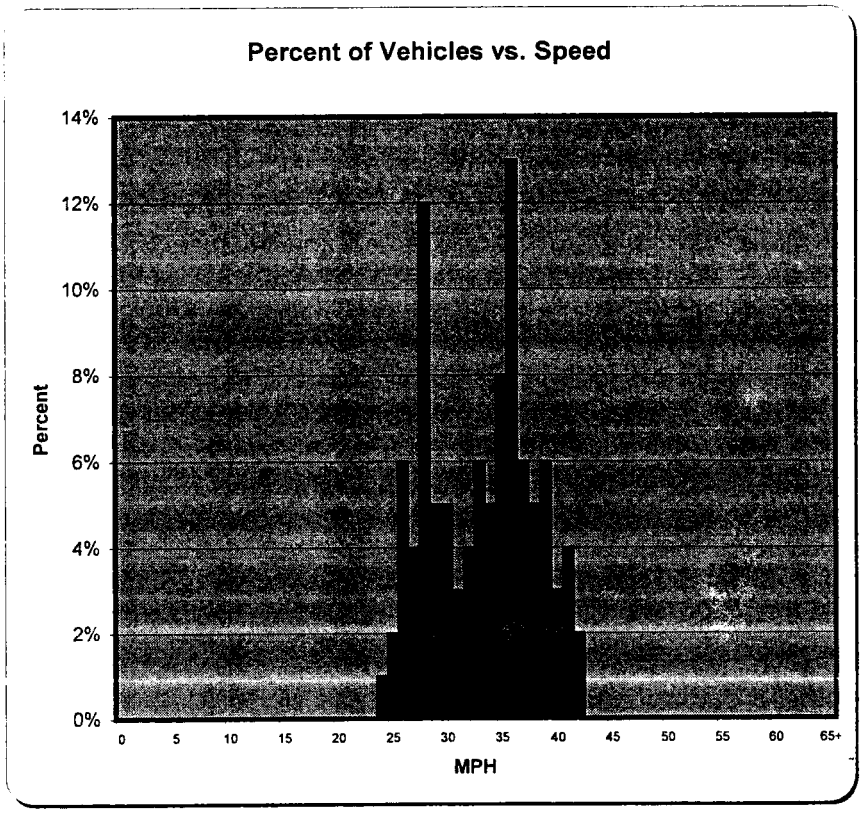
Date of Count: 9/8/2005
Beginning Time: 10:40 AM - 2:00 PM
Direction Counted: Eastbound
Posted Speed Limit: 45MPH
Observer: Vonessa Centracchio

50th Percentile Speed: 34 mph
85th Percentile Speed: 38 mph
Average Speed: 33.2 mph
Range of Speeds Observed: 24 - 42 mph
Number of Vehicles Observed: 100

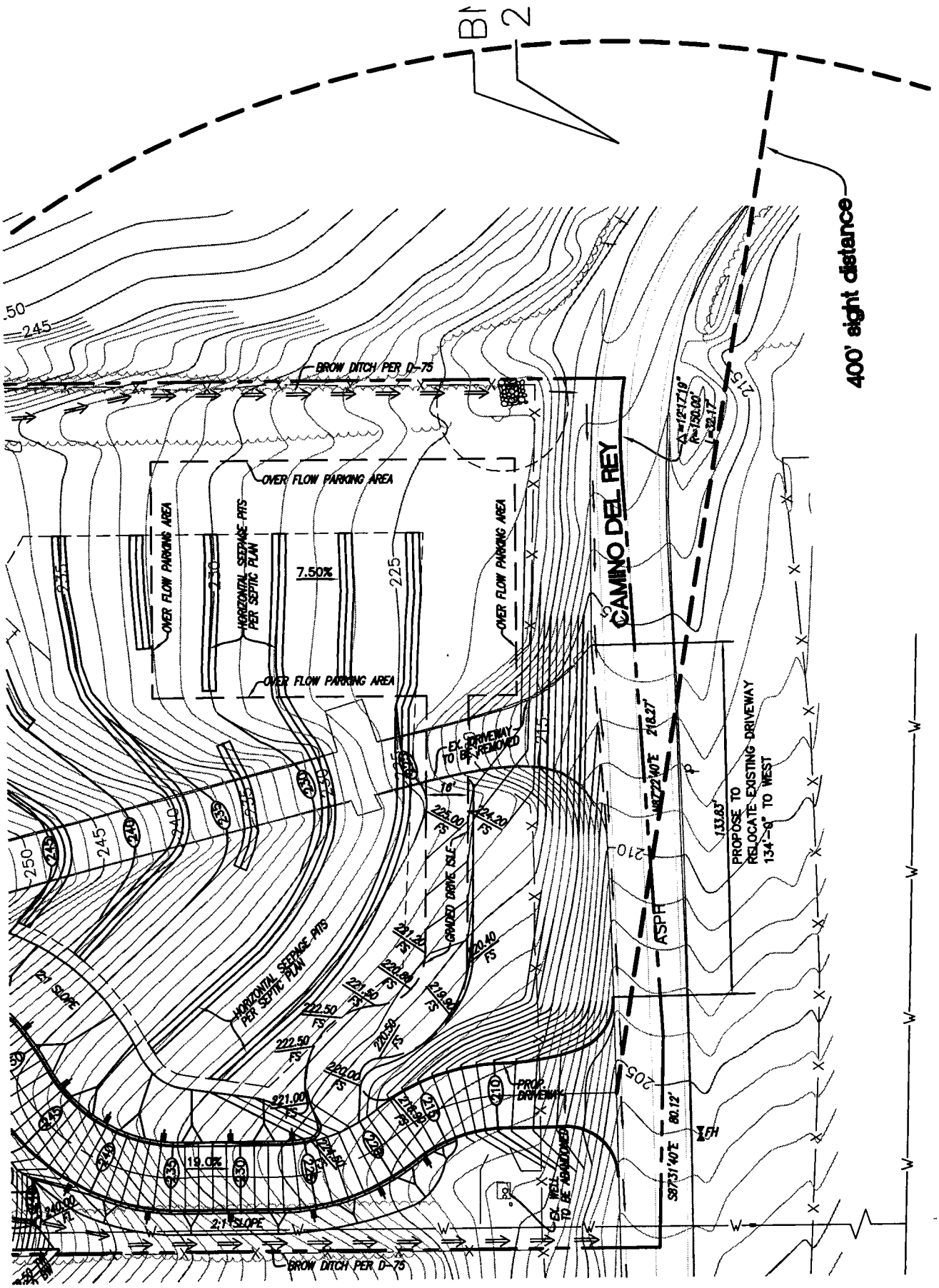
10 MPH Pace: 28 - 37 mph
Percent Within Pace: 67.0%
Percent Over Pace Speed: 20.0%
Percent Under Pace Speed: 13.0%

MPH	Number of Vehicles	Percent of Count	Cumulative Percent of Count
0	0	0.0%	0.0%
1	0	0.0%	0.0%
2	0	0.0%	0.0%
3	0	0.0%	0.0%
4	0	0.0%	0.0%
5	0	0.0%	0.0%
6	0	0.0%	0.0%
7	0	0.0%	0.0%
8	0	0.0%	0.0%
9	0	0.0%	0.0%
10	0	0.0%	0.0%
11	0	0.0%	0.0%
12	0	0.0%	0.0%
13	0	0.0%	0.0%
14	0	0.0%	0.0%
15	0	0.0%	0.0%
16	0	0.0%	0.0%
17	0	0.0%	0.0%
18	0	0.0%	0.0%
19	0	0.0%	0.0%
20	0	0.0%	0.0%
21	0	0.0%	0.0%
22	0	0.0%	0.0%
23	0	0.0%	0.0%
24	1	1.0%	1.0%
25	2	2.0%	3.0%
26	6	6.0%	9.0%
27	4	4.0%	13.0%
28	12	12.0%	25.0%
29	5	5.0%	30.0%
30	5	5.0%	35.0%
31	3	3.0%	38.0%
32	4	4.0%	42.0%
33	6	6.0%	48.0%
34	5	5.0%	53.0%
35	8	8.0%	61.0%
36	13	13.0%	74.0%
37	6	6.0%	80.0%
38	5	5.0%	85.0%
39	6	6.0%	91.0%
40	3	3.0%	94.0%
41	4	4.0%	98.0%
42	2	2.0%	100.0%
43	0	0.0%	100.0%
44	0	0.0%	100.0%
45	0	0.0%	100.0%
46	0	0.0%	100.0%
47	0	0.0%	100.0%
48	0	0.0%	100.0%
49	0	0.0%	100.0%
50	0	0.0%	100.0%
51	0	0.0%	100.0%
52	0	0.0%	100.0%
53	0	0.0%	100.0%
54	0	0.0%	100.0%
55	0	0.0%	100.0%
56	0	0.0%	100.0%
57	0	0.0%	100.0%
58	0	0.0%	100.0%
59	0	0.0%	100.0%
60	0	0.0%	100.0%
61	0	0.0%	100.0%
62	0	0.0%	100.0%
63	0	0.0%	100.0%
64	0	0.0%	100.0%
65+	0	0.0%	100.0%





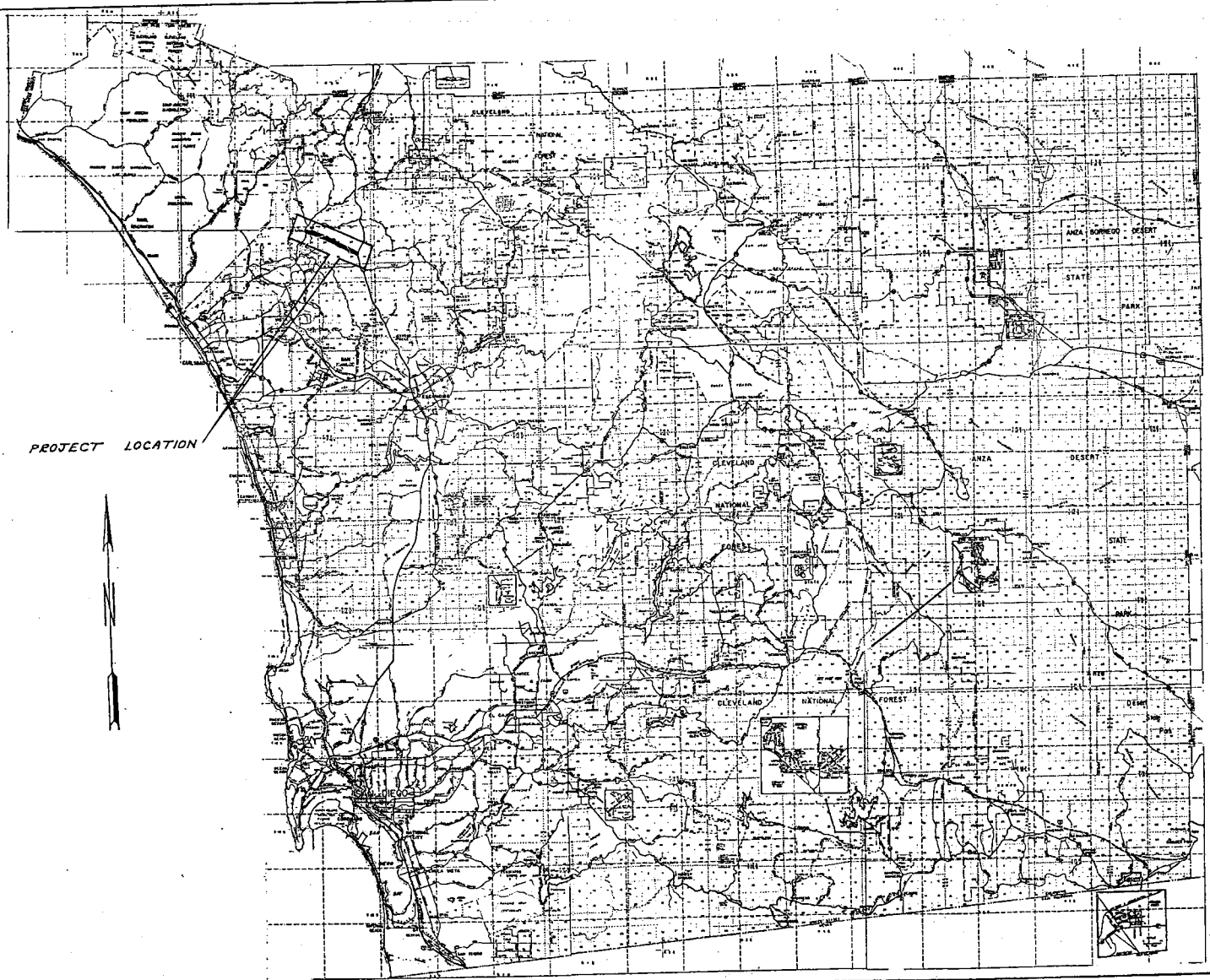
Line of Sight


400' sight distance
BROW DITCH PER D-75
OVER FLOW PARKING AREA
OVER FLOW PARKING AREA
HORIZONTAL SEEPAGE PITS PER SEPTIC PLAN
7.50%
OVER FLOW PARKING AREA
OVER FLOW PARKING AREA
CAMINO DEL REY
EX. DRIVEWAY TO BE REMOVED
GRADED DRIVE ISLE
HORIZONTAL SEEPAGE PITS PER SEPTIC PLAN
2:1 SLOPE
19.0%
2:1 SLOPE
PROP. DRIVEWAY
EX. WELL TO BE ABANDONED
BROW DITCH PER D-75
PROPOSE TO RELOCATE EXISTING DRIVEWAY 134'-0" TO WEST
133.83'
218.27'
80.12'
ASPH
FH

APPENDIX D

- Route Location Study for SA 100

MICROFILMED AT 22½ REDUCTION



COUNTY OF SAN DIEGO, CALIFORNIA

ROUTE LOCATION

S.A. 100

MOOSA CANYON ROAD

SHEET 1 OF 5

STUDY BY: R.C. Smith CHECKED BY:

200 SCALE ROUTE LOCATION STUDY

A. Definition

A 200 scale route location study is a preliminary alignment study based on data provided by topographic maps having a scale of 1" = 200' and contour intervals of 5'

These studies are not sufficiently specific to provide construction detail or exact right-of-way requirements. The primary purpose of the study is to establish the single most practical horizontal alignment and grade between defined terminals, accuracy consistent with the available data, of a particular General Plan route.

B Limitation

The user is cautioned that changes in culture and topography may have occurred along the study line since the time of photogrammetry.

The routes are subject to adjustment within reasonable limits at the time of final design.

C. Use

Completed 200 scale route location studies provide a general department policy on the preferred ultimate alignment. This document is available to the public and other departments.

FILE NO D1 S.A. 100 SHEET 1 OF 5 SHEET

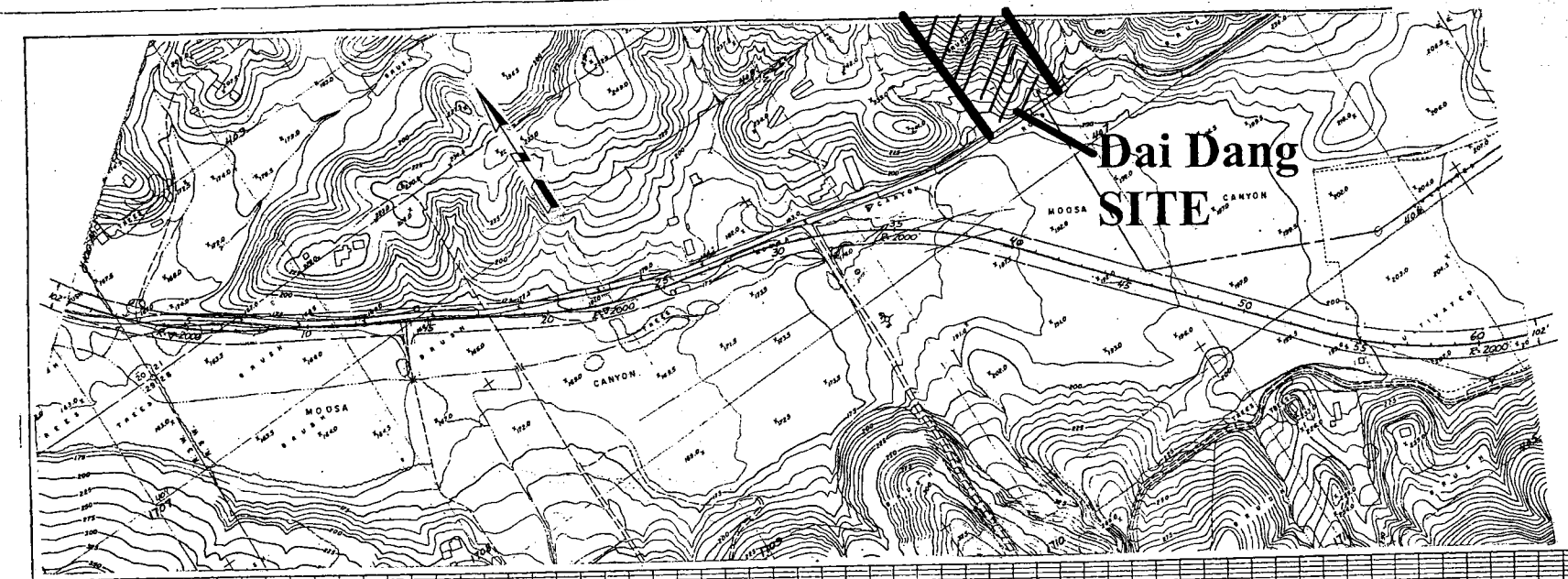
D-1

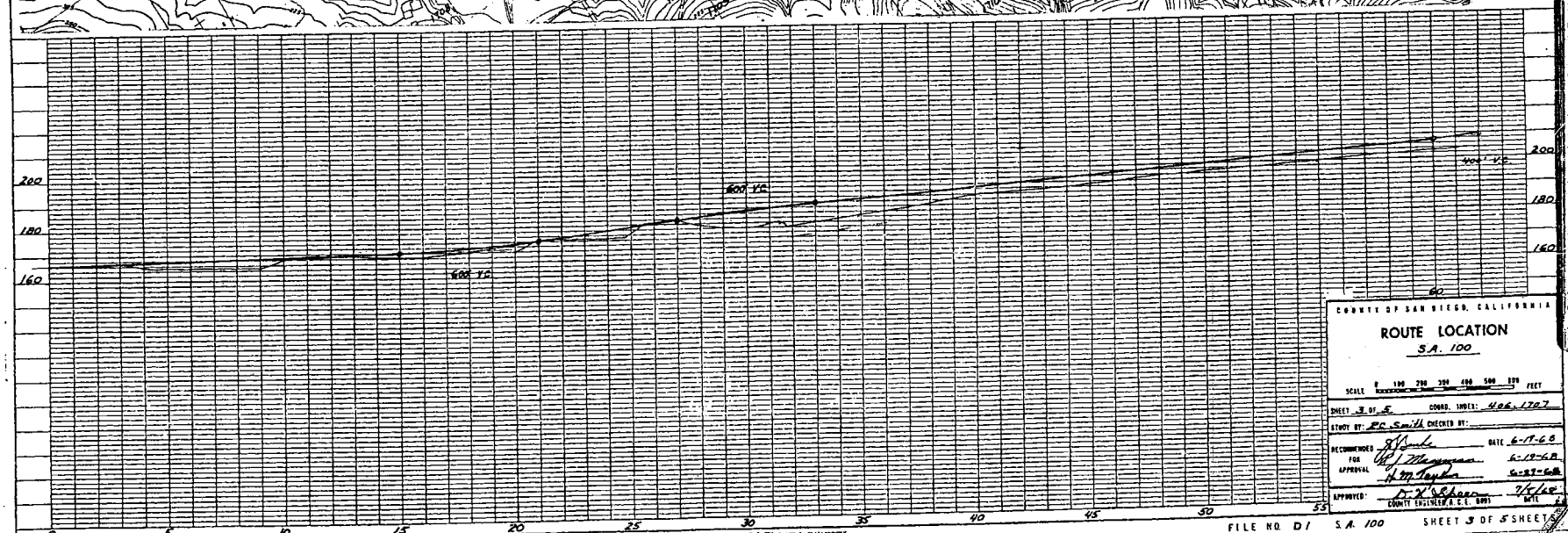
PRECISION
JUL 1 8 1968
MICROFILMED

S.A. 100 SHEET STATION ROAD

FILE NUMBER		NAME AND DESCRIPTION
Reduced Plans D-1	4.32	Moosa Canyon Road Route Location (5 sheets) Bonsall area

MICROFILMED AT 22% REDUCTION





COUNTY OF SAN DIEGO, CALIFORNIA

ROUTE LOCATION

S.A. 100

SCALE 0 100 200 300 400 500 600 FEET

SHEET 3 OF 5 COORD. INDEX: 406, 1207

STUDY BY: R.C. Smith CHECKED BY:

RECOMMENDED FOR APPROVAL: R.C. Smith DATE 6-17-68
H.J. Mayagoitia 6-19-68
H.M. Taylor 6-27-68

APPROVED: D.K. Dehaan COUNTY ENGINEER, R.C.E. 8091 DATE 7/5/68

K+E PLATE 1. PLAN-PROFILE

FILE NO. D1 S.A. 100 SHEET 3 OF 5 SHEETS

D-3

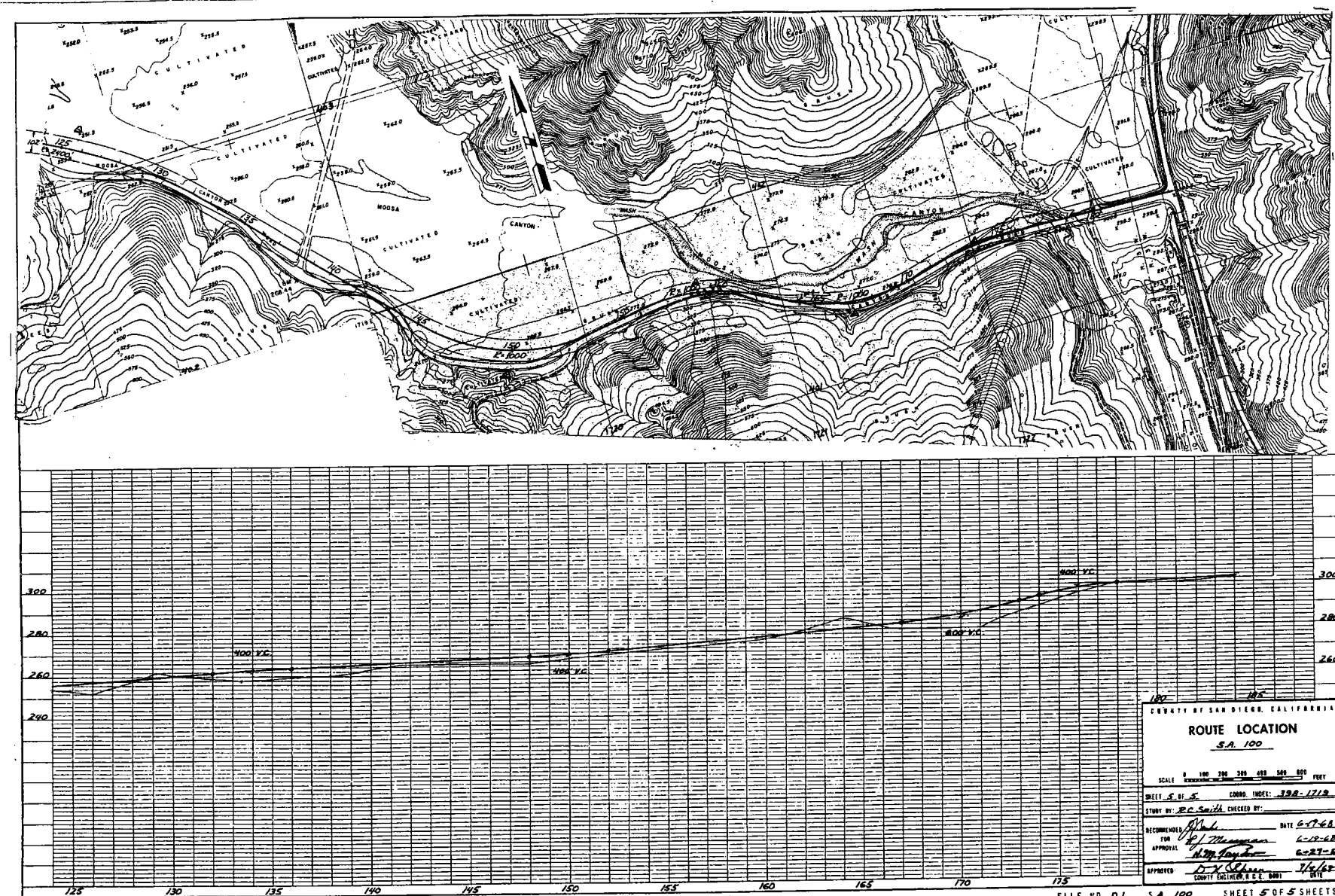
PRECISION
JUL 1 6 1968
MICROFILMED

S.A. 100 GRADE STUDY 2010

FILE NUMBER	NAME AND DESCRIPTION
Bound Plans* Rol	4.32 Moosa Canyon Road Route Location (5 sheets) Bonsall area

*Use on microfilm-out aperture cards

MICROFILMED AT 22½:1 REDUCTION



COUNTY OF SAN DIEGO, CALIFORNIA

ROUTE LOCATION

S.A. 100

SCALE 0 100 200 300 400 500 600 FEET

SHEET 5 OF 5 COORD. INDEX: 398-1719

STUDY BY: R.C. Smith CHECKED BY:

RECOMMENDED FOR APPROVAL: [signature] DATE 6-19-68; [signature] 6-19-68; [signature] 6-27-68

APPROVED: [signature] COUNTY ENGINEER, R.C.E. 8001 DATE 7/4/68

FILE NO. D1 S.A. 100 SHEET 5 OF 5 SHEETS

K+E PLATE 1, PLAN-PROFILE

PRECISION JUL 1 d 1968 MICROFILMED

S.A. 100 SHEET SYSTEM ROAD

FILE NUMBER	NAME AND DESCRIPTION
Reduced Plans* D-1	4.32 Moosa Canyon Road Route Location (5 sheets) Bonsall area

Form EA 370(4/63-Data)
*Aperture cards

D-5

APPENDIX E

- Response to Comments

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

MEMORANDUM

DATE: September 26, 2005

TO: Monica Kling, RBF Consulting E-Mail: MKLING@rbf.com

FROM: Vicki S. Haskell, P.E. VSH

D&A Ref. No: 041105
RE: Dai Dang Meditation Center (P04-016) – Revised Responses to County Comments

Darnell & Associates, Inc. (D&A) has reviewed the County of San Diego's July 18, 2005 comment letter regarding our April 14, 2005 Traffic Study for Dai Dang Meditation Center (P04-016). The following summarizes our responses to each of the County's comments. These responses have been incorporated into our report dated September 26, 2005.

Comment 1: The traffic study states (Pg. 10) that the proposed project will mitigate cumulative impacts by paying into the County's Bonsall area Transportation Impact Fee (TIF) program. The County Board of Supervisors adopted a Countywide TIF program in April 2005. The applicant should verify that he/she agrees to pay the TIF.

Response 1: The applicant will coordinate with the County staff to confirm that they will agree to pay the TIF to mitigate the project's cumulative traffic impacts.

Comment 2: The traffic study should include a copy of the Site Plan.

Response 2: The traffic study has revised to include a copy of the Site Plan on the proposed project. The site plan has been inserted as Figure 3 on page 4 of our September 26, 2005 report.

Comment 3: The focused study shall address the effects of the proposed project on the adjoining curved alignment of Camino Del Rey, and address the sight distance at the proposed Access to Camino Del Rey.

Response 3: A section has been added to the report to discuss the adequacy of sight distance at the project driveway on Camino Del Rey. See page 15 of the strike-out/underline version or our September 26, 2005 report and page 13 of the clean version of our September 26, 2005 report.

Comment 4: The site plan shows access to Wrightwood Road, PRD 125. The traffic study shall address project traffic generation, impacts, and safety aspect of this access and the sight distance at the proposed project access along Wrightwood Road.

Response 4: The access to Wrightwood Road will be gated; and will serve as emergency access only. Therefore, no revisions have been made to the report to address the access to Wrightwood Road.

1446 FRONT STREET • SUITE 300 • SAN DIEGO, CA 92101
PHONE: 619-233-9373 • FAX: 619-233-4034
E-mail: office@darnell-assoc.com

Darnell & ASSOCIATES, INC.
TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

MEMORANDUM

DATE: August 17, 2006

TO: Monica Kling, RBF Consulting, Inc.

FROM: Vicki S. Haskell, P.E. VSH

D&A Ref. No: 041105
RE: Dai Dang Meditation Center (P04-016) Traffic Study- Responses to the County of San Diego Comments Dated December 12, 2005

Darnell & Associates, Inc. (D&A) has reviewed the County of San Diego's December 12, 2005 comment letter regarding our September 26, 2005 Traffic Study for Dai Dang Meditation Center (P04-016). The following summarizes our responses to each of the County's comments. These responses have been incorporated into our report dated August 17, 2006.

Comment 1: On page 15, the traffic study states that the minimum sight distance, based on speed surveys, should be 380 feet looking west and 330 feet looking east. The Public Road Standards – Table 5 states that, "The design speed used to determine the minimum sight distance requirement shall be the greater of the current prevailing speed or the minimum design speed of the respective road classification shown in Table 2."

Response 1: The sight distance discussion has been revised to indicate that, based on the minimum design speed of Camino Del Rey; a minimum of 400 feet of corner sight distance is required east and west of the driveway. See page 14 of the strike-out/underline version and pages 13 and 14 in the clean version of our August 17, 2006 report for the revised sight distance discussion.

Comment 2: Camino Del Rey (SA 100) CE classification (Rural Collector with bike lanes) requires a total right-of-way (ROW) of 94-feet buildout. The 9/30/05 submittal includes a Route Location Study showing SA 100 to be aligned southerly of the existing Camino Del Rey, but running along the Moosa Canyon Creek Floodway. The Traffic Study should address the Route Locations study information and discuss its effect on the project site.

Response 2: A discussion on the Route Location Study for SA 100 has been added to the traffic study (See pages 13 and 14 of the strike-out/underline version and page 13 of the clean version of our August 17, 2006 report.)

1446 FRONT STREET • SUITE 300 • SAN DIEGO, CA 92101
PHONE: 619-233-9373 • FAX: 619-233-4034
E-mail: office@darnell-assoc.com