

## **APPENDIX F**

- **Transportation and Circulation Background Information**

--Traffic Impact Report, Pinnacle Traffic Engineering  
(March 2008)

--Traffic Impact Report – Response to Comments Memo  
(June 2009)



# TRAFFIC IMPACT REPORT

## Cold Canyon Landfill Expansion

Corral De Piedra Land Company

(DRC2005-00170, ED06-126)

San Luis Obispo County, California

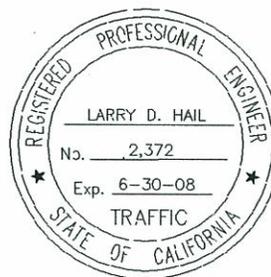
Prepared for:

**Morro Group, Inc.**

1422 Monterey Street, Suite C200

San Luis Obispo, CA 93401

(805) 543-7095



Larry D. Hail, CE, TE, PTOE

**PINNACLE TRAFFIC ENGINEERING**

930 San Benito Street

Hollister, California 95023

PinnacleTE.com

(831) 638-9260 / FAX (831) 638-9268

March 3, 2008

## EXECUTIVE SUMMARY

The following report presents an evaluation of the potential traffic impacts associated with the Cold Canyon Landfill Expansion project in San Luis Obispo County. The Cold Canyon Landfill is located at 2268 Carpenter Canyon Road (State Route 227). Access is provided via a driveway about 0.80 miles south of Corbett Canyon Road. Proposed improvements include the expansion of the landfill disposal area and daily operational capacity. The project includes an expansion of disposal and processing areas, and extends the hours of operation for a majority of the existing activities. The expansion will require 41 new employees (increase from 79 to 120). Project on-site improvements include a new entrance located about 2,800' south of the existing entrance (existing driveway will be closed). A new scale house with 3 scales will also be constructed about 1,200' east of SR 227. Off-site project improvements on State Route 227 include the installation of a southbound left turn lane and northbound acceleration lane at the proposed driveway.

Traffic at the existing landfill is comprised of employee trips, local contractor trucks and trailers, municipal garbage trucks and vehicles transporting recycled commodities. To document current weekday conditions new traffic count data was collected at the existing driveway during the morning (7-9 AM) and afternoon (4-6 PM) peak commuter time periods. Traffic volume data provided by the landfill operators was also referenced. The data demonstrated that the existing landfill facility generates about 330 vehicles on an average weekday (660 daily trips ends, 10% during AM peak and 5% during the PM peak). On Saturdays the trip generation is 76% of the weekday average (Sunday, 54% of the average). The trip generation estimates indicate that the expansion project will generate approximately 200 new daily vehicle trips (net increase), with 18 new trips during the AM peak hour and 88 new trips during the PM peak hour. The data reviewed for the traffic analysis demonstrated that about 60% of the employee trips and 75% of medium and large vehicles (trucks) are oriented to and from the north on State Route 227.

The primary focus of the traffic analysis was to evaluate the potential safety impacts to operations on State Route 227 at the proposed landfill access entrance. To document current conditions at the existing driveway new traffic count and vehicle classification data was collected. Sight distance measurements were recorded at both driveway locations (existing and proposed), with a sampling of vehicle speeds on State Route 227. Information contained in numerous public documents and records provided by the California Highway Patrol were also reviewed. State Route 227 adjacent to the existing landfill has a single 12' travel lane in each direction, with a southbound left turn lane at the existing landfill driveway (55 mph speed limit). There is a horizontal curve and a series of vertical curves between the existing and proposed landfill driveway locations. The horizontal curve is posted with a 50 mph curve ahead "advisory" speed limit. Detailed traffic count data for State Route 227 was provided by Caltrans (2005, 2006 and 2007). The evaluation of existing operations indicated that average daily traffic volumes on State Route 227 are within acceptable limits (level of service C or better). Average vehicle delays at the State Route 227 / existing driveway intersection are also within acceptable limits during the AM and PM peak hour periods.

The evaluation of potential impacts was performed using “level of service” (LOS) standards established by San Luis Obispo County and Caltrans, and “level of significance” guidelines defined in the California Environmental Quality Act (CEQA). The evaluation of existing plus project and cumulative traffic conditions demonstrated that the landfill expansion project will not significantly impact current daily or peak hour operations on State Route 227. The project traffic volumes will not substantially increase traffic in relation to existing load and capacity, or exceed the established LOS standard (LOS C or better).

An evaluation of project access on State Route 227 included a review of roadway conditions, vehicle speeds, traffic accident data and the adequacy of sight distance. The proposed driveway will be located about 2,800’ south of the existing entrance (175’ north of Patchett Road). The new scale house location will eliminate any potential for on-site queued vehicles to impact operations on State Route 227. State Route 227 north the proposed driveway is relatively level for about 400-500’ followed by a series of vertical curves on an upward grade alignment. There are vertical curve crest located about 860’ and 1,200’ north of the proposed driveway. South of the driveway location State Route 227 continues on a slight upgrade slope with a relatively straight horizontal alignment. Data collected at the proposed driveway location demonstrated that vehicle speeds on State Route 227 were approximately 60 mph in both directions. Traffic accident data was provided by the California Highway Patrol for a 5 ½ year period (2002-2007). This data indicated that there were 10 reported accidents along the mile section of State Route 227 adjacent to the landfill property. The data did not document any significant accident patterns at either the existing or proposed driveway locations. The review of project access also concluded that stopping sight distance on State Route 227 is adequate for at least 65-70 mph (proposed driveway location). Total cumulative peak hour traffic demands at the project driveway will not warrant a separate northbound right turn lane on State Route 227.

The design of improvements along State Route 227 shall comply with current State standards. The southbound left turn and northbound acceleration lanes shall be designed to accommodate the appropriate percentage of large vehicles. Passing in both directions on State Route 227 shall be prohibited adjacent to the left turn and acceleration lane improvements. The proposed driveway should be designed to maximize the availability of corner sight distance for exiting vehicles (minimize potential impact to through traffic). The design of improvements should also minimize potential conflict with vehicles accessing Patchett Road. The proposed project improvements will mitigate any potential impact to safety on State Route 227. Therefore, the project traffic will not substantially increase hazards at the proposed driveway location.

## **TABLE OF CONTENTS**

Report Section	Page
I. Introduction .....	1
II. Existing Conditions .....	3
III. Project Conditions .....	7
IV. Cumulative Conditions .....	14
V. Project Access .....	17

### **LIST OF TABLES**

Table 1 - Existing Peak Hour LOS Analysis .....	6
Table 2A - Existing Landfill Trip Generation (Average Weekday) .....	9
Table 2B - Proposed Landfill Trip Generation (Average Weekday).....	11
Table 3 - Existing Plus Project Peak Hour LOS Analysis .....	13
Table 4 - Cumulative Peak Hour LOS Analysis .....	14
Table 5 - Summary of CHP Traffic Accident Data .....	19
Table 6 - Vehicle Speeds and Sight Distance Data .....	20

### **LIST OF FIGURES**

Figure 1 - Project Location Map .....	2
Figure 2 - Existing Weekday Traffic Volumes .....	4
Figure 3 - Project Site Plan .....	8
Figure 4A - Existing Weekday Project Traffic Volumes .....	10
Figure 4B - Proposed Weekday Project Traffic Volumes .....	12
Figure 5 - Total Cumulative Weekday Traffic Volumes .....	15
Figure 6 - Alignment of SR 227 .....	18

### **APPENDIX MATERIAL**

- Summary of Caltrans Detailed Traffic Count Data for SR 227
- New Turning Movement Traffic Count Data (December 5, 2007)
  - SR 227 / Existing Landfill Driveway
- Level of Service (LOS) Descriptions
- Level of Service 24-Hour ADT Volume Threshold Criteria
- Level of Service (LOS) Value - Vehicle Delay Relationship Data
- Level of Service (LOS) Worksheets
- 2006 and 2007 Traffic Volume Data for existing Cold Canyon Landfill
- California MUTCD Traffic Signal Warrant Graph (Warrant #3)
- Vehicle Speed Data on SR 227 (both Existing and Proposed Driveway Location)
- California Highway Patrol (CHP) Traffic Accident Data (April 2002 to Dec. 2007)
- Caltrans Highway Design Manual (HDM) Sight Distance Criteria
- SR 227 Sight Distance Data (both Existing and Proposed Driveway Location)
- Right Turn Lane Warrant Graph

## I. INTRODUCTION

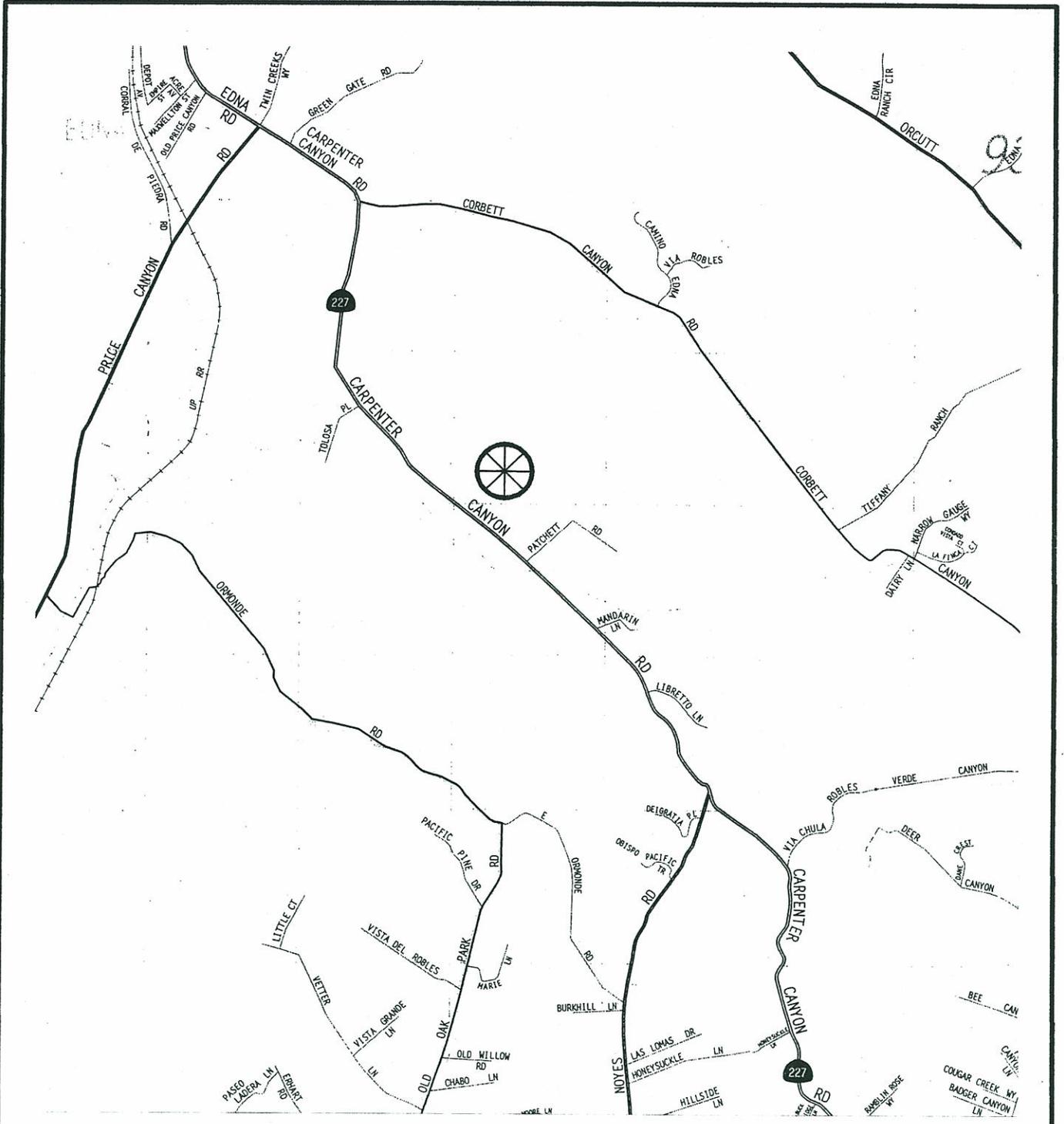
The following report presents an evaluation of the potential traffic impacts associated with the Cold Canyon Landfill Expansion project in San Luis Obispo County. Cold Canyon Landfill is located at 2268 Carpenter Canyon Road (State Route 227). The facility encompasses a total of approximately 121 acres on the east side of State Route (SR) 227, with access provided via a driveway located about 1.25 miles south of Price Canyon Road. Current landfill hours are 8:00 AM to 3:00 PM (7 days per week), with 79 employees. Operations at the existing facility include (1) typical landfill operations, (2) a resource recovery park, (3) composting operations, (4) a material recovery facility and (5) various support activities. The general location of the existing Cold Canyon Landfill is illustrated on Figure 1.

The proposed project will increase the landfill facility to a total of approximately 206 acres. The proposed hours of operation for most facility activities will be extended to 7:00 AM-5:00 PM, except processing at the material recovery facility which will operate until 10:00 PM (2 shifts). Proposed project improvements to the existing facility include:

- Expand Landfill Footprint
- Increase Allowable Tonnage Limit
- Expand and Relocate Resource Recovery Park
- Expand and Modify Composting Operations
- Expand and Enhance Material Recovery Facility
- Construct New Entrance and Scale House
- Construct New Maintenance Building
- Increase Total Number of Employees to 120

The scope of the analysis was based on information contained in the Initial Study Environmental Checklist (DRC2005-00170), and consultation with staff at the San Luis Obispo County Public Works Department (Richard Marshall) and Caltrans (James Kilmer). The primary focus of the traffic analysis was to evaluate the potential safety impacts to operations on SR 227 at the landfill access entrance (roadway and intersection geometrics, vehicle speeds, accident history, adequacy of sight distance, traffic control device warrants, etc). The analysis also evaluates the potential impact to operations on SR 227 (ie: level of service). New data was collected for the analysis (ie: peak hour traffic counts, observation of existing operations, measurement of sight distance parameters and a sampling of vehicle speeds). Detailed traffic volume data for the existing landfill facility was provided for 2006. Historical traffic count data for SR 227 was also provided by Caltrans (2005, 2006 and 2007). Traffic accident data for SR 227 was obtained from the California Highway Patrol (CHP). Information contained in the following public documents was also reviewed and referenced in the traffic analysis:

1. Final Environmental Impact Report Cold Canyon Landfill Expansion (Oct. 1991)
2. 2005 Regional Transportation Plan, San Luis Obispo Council of Governments (SLOCOG)
3. San Luis Obispo Area Plan, County of San Luis Obispo (Jan. 2007)
4. Route Concept Report for Route 227, Caltrans (July 1999)
5. Route 227 Project Study Report (PSR), Caltrans
6. Final Environmental Impact Report (EIR) Cold Canyon Landfill Expansion (October 1991)



**LEGEND**



NORTH



= Project Site

**PINNACLE  
TRAFFIC  
ENGINEERING**

Cold Canyon Landfill Expansion  
- Traffic Impact Report -

**FIGURE 1  
PROJECT  
LOCATION MAP**

## II. EXISTING CONDITIONS

The street system serving the project site includes SR 227 (Carpenter Canyon Road) and Price Canyon Road. The following is a description of the street system, an overview of existing traffic conditions and an analysis of existing operations.

### Network Description

SR 227 is a north-south State highway facility that extends between US101 in the City of Arroyo Grande and SR 1 in the City of San Luis Obispo. SR 227 is signalized at Price Canyon Road. Corbett Canyon Road is stop sign controlled at SR 227 and located about 0.8 miles north of the existing landfill entrance. Noyes Road is located about 1.5 miles south of the existing facility. Tolosa Place, Patchett Road and Mandarin Lane are local residential collector streets between Corbett Canyon Road and Noyes Road. Adjacent to the existing landfill SR 227 has a single 12' lane in each direction, with a southbound left turn lane at the existing driveway. The speed limit is 55 mph, except the through the horizontal curve south of the existing driveway (0.3 miles) which is posted with a 50 mph curve ahead "advisory" speed limit.

Price Canyon Road is a 2 lane County arterial that extends between US101 and SR 227 (opposite Twin Creeks Way). West of SR 227, Price Canyon Road has a posted speed limit of 55 mph. This arterial serves as an alternative link between US101 and the southeastern portion of the City of San Luis Obispo.

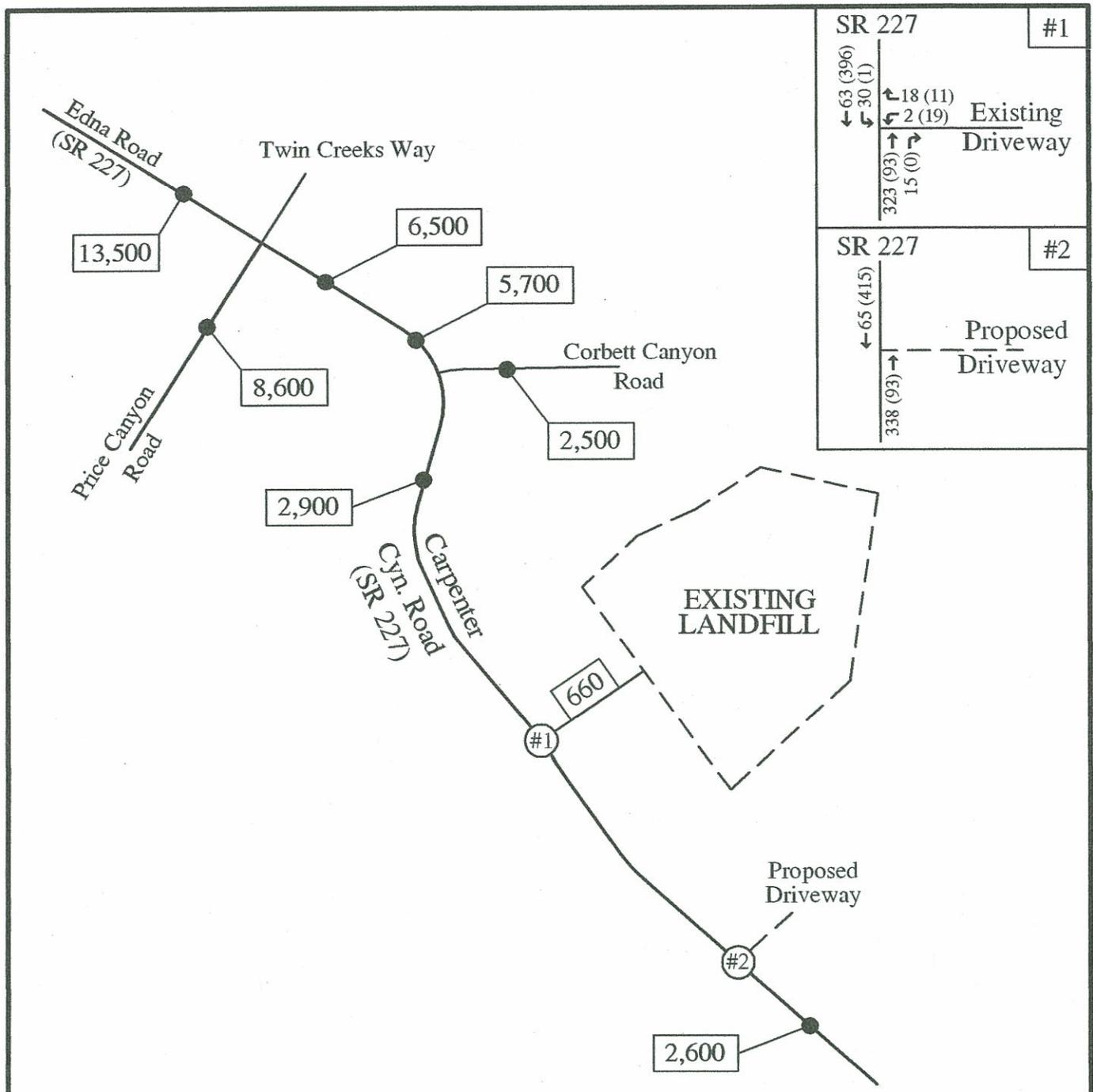
### Traffic Volumes

Existing daily traffic volumes for SR 227 were obtained from detailed count data provided by Caltrans staff. This included 7-day data for 2005, 2006 and 2007 (January, February, March, April, May, October, November and December). Existing daily traffic volume data for Price Canyon Road and Corbett Canyon Road was referenced from the County's current "Traffic Volumes" publication (November 2007). New turning movement traffic count data was collected at the SR 227 / existing landfill driveway intersection during the morning (7:00-9:00 AM) and afternoon (4:00-6:00 PM) peak travel periods (December 5, 2007). Based on a review of the data provided by Caltrans and the landfill operators, the peak hour data for the landfill driveway was increased slightly to represent annual average weekday conditions at the existing facility. The existing average weekday traffic volumes are illustrated on Figure 2. A summary of the Caltrans traffic data (2005-2007) is included with the Appendix Material. Copies of the new peak hour traffic count and 2006 landfill traffic volume data are also provided with the Appendix Material.

### Level of Service (LOS) Analysis

#### LOS Methodology

Various LOS methodologies are used to evaluate traffic operations. Operations range from LOS "A" (free-flowing conditions) to LOS "F" (forced-flow conditions). LOS values for roadway segments can be estimated by comparing average daily traffic volume (ADT) data with "24 Hour ADT Threshold Criteria" developed from data in the Highway Capacity Manual (HCM2000). LOS values for intersection operations are based on estimated vehicle delays (ie: number of delay



SR 227		#1
← 63 (396)	→ 18 (11)	Existing Driveway
← 30 (1)	→ 2 (19)	
← 323 (93)	→ 15 (0)	
SR 227		#2
← 65 (415)	→	Proposed Driveway
← 338 (93)	→	

### LEGEND

- ← 00 (00) = AM (PM) Peak Hour Traffic Volume
- 000 = Average Daily Traffic (ADT) Volume



**PINNACLE  
TRAFFIC  
ENGINEERING**

Cold Canyon Landfill Expansion  
- Traffic Impact Report -

**FIGURE 2  
EXISTING  
WEEKDAY  
TRAFFIC VOLUMES**

seconds per vehicle). Delays are reported for the overall intersection operations as an average and for each critical movement (ie: stop sign controlled approaches, main line left-turn lanes, etc). During peak commuter travel periods traffic operations can be constrained at local intersections. Therefore, an analysis of intersection peak hour operations can be a good method for measuring the potential impacts associated with a specific project. A brief description of the LOS values, the 24 Hour ADT Threshold Criteria and the LOS-vehicle delay relationship data are included with the Appendix Material.

#### LOS Criteria

San Luis Obispo County has established the LOS "C" threshold as the lower limit for acceptable traffic operations in rural areas (LOS D is acceptable in urban areas). The Caltrans traffic impact study guidelines state that Caltrans endeavors to maintain a target LOS at the transition between LOS C and D on State highway facilities. The minimum acceptable LOS used in the evaluation of potential project impacts in this report is LOS C. Therefore, mitigation measures would be required if the proposed project reduces operations to LOS D or below.

#### Level of Significance Criteria

The California Environmental Quality Act (CEQA) guidelines state that an impact will be considered significant if the project will:

- Create an increase in traffic which is substantial in relation to the existing load and capacity,
- Exceed, either individually or cumulatively, the established LOS standard,
- Substantially increase hazards due to design or incompatible uses, or
- Result in inadequate emergency access or parking

Any identified project specific or cumulative impact will require the appropriate mitigation measure to offset the impact to "less than significant."

#### Existing Conditions Analysis

The data on Figure 2 indicates that existing weekday traffic volumes on SR 227 adjacent to the Cold Canyon Landfill are within the LOS A range (less than 4,000 ADT). The detailed Caltrans traffic count data (2005-2007) demonstrates that daily traffic volumes on a typical Saturday are about 35% less than an average weekday. Traffic volumes on a Sunday are about 50% less than an average weekday. Data published by Caltrans (2006 Annual Average Daily Truck Traffic on the California State Highway System) indicates that the annual average daily traffic on SR 227 south of Price Canyon Road is comprised of approximately 5.3% truck traffic.

To document conditions at the landfill driveway intersection a LOS analysis was conducted for the AM and PM peak hour periods (average weekday). The analysis of intersection operations was performed using the LOS methodologies outlined in the 2000HCM. The "Trafix" program was used to simulate peak hour operations at the SR 227 / existing driveway intersection. To accurately model existing operations the appropriate peak hour factor (PHF) and percent truck traffic adjustment factors were applied. The results of the existing peak hour LOS analysis are presented in Table 1. Copies of the LOS worksheets are included with the Appendix Material.

**Table 1 - Existing Peak Hour LOS Analysis**

Study Intersection	Vehicle Delay - LOS Value	
	AM Peak Hour	PM Peak Hour
<u>SR 227 / Existing Driveway (a)</u> Westbound Approach (b)	<u>1.1 - A</u> (13.0 - B)	<u>0.7 - A</u> (11.5 - B)

(a) Total average vehicle delay - LOS value

(b) Stop sign controlled, approach delay - LOS value

The data in Table 1 indicates that average vehicle delays at the SR 227 / existing driveway intersection are within the LOS A range during both the AM and PM peak hour periods. A review of the LOS worksheets also demonstrates that delays on the westbound approach (landfill exit traffic) are within the LOS B range. Observations of actual peak period conditions confirmed that peak hour traffic operations are within acceptable limits (LOS C or better). Traffic exiting the existing landfill during peak hour periods is less than the minimum (Warrant #3) traffic signal warrant criteria defined in the California Manual on Uniform Traffic Control Devices (MUTCD, September 2006). It should be noted that the existing scale house is located about 400' from SR 227. Information provided by the landfill operators indicates that during peak weekends periods the queues can extend to SR 227. Discussions regarding vehicle speeds, traffic accident data and the adequacy of sight distance on SR 227 are presented under project access.

### **III. PROJECT CONDITIONS**

The following is a description of the proposed project, an estimate of the project trip generation quantities, an assignment of the project trips to SR 227 and an evaluation of the potential impacts associated with the "existing plus project" conditions.

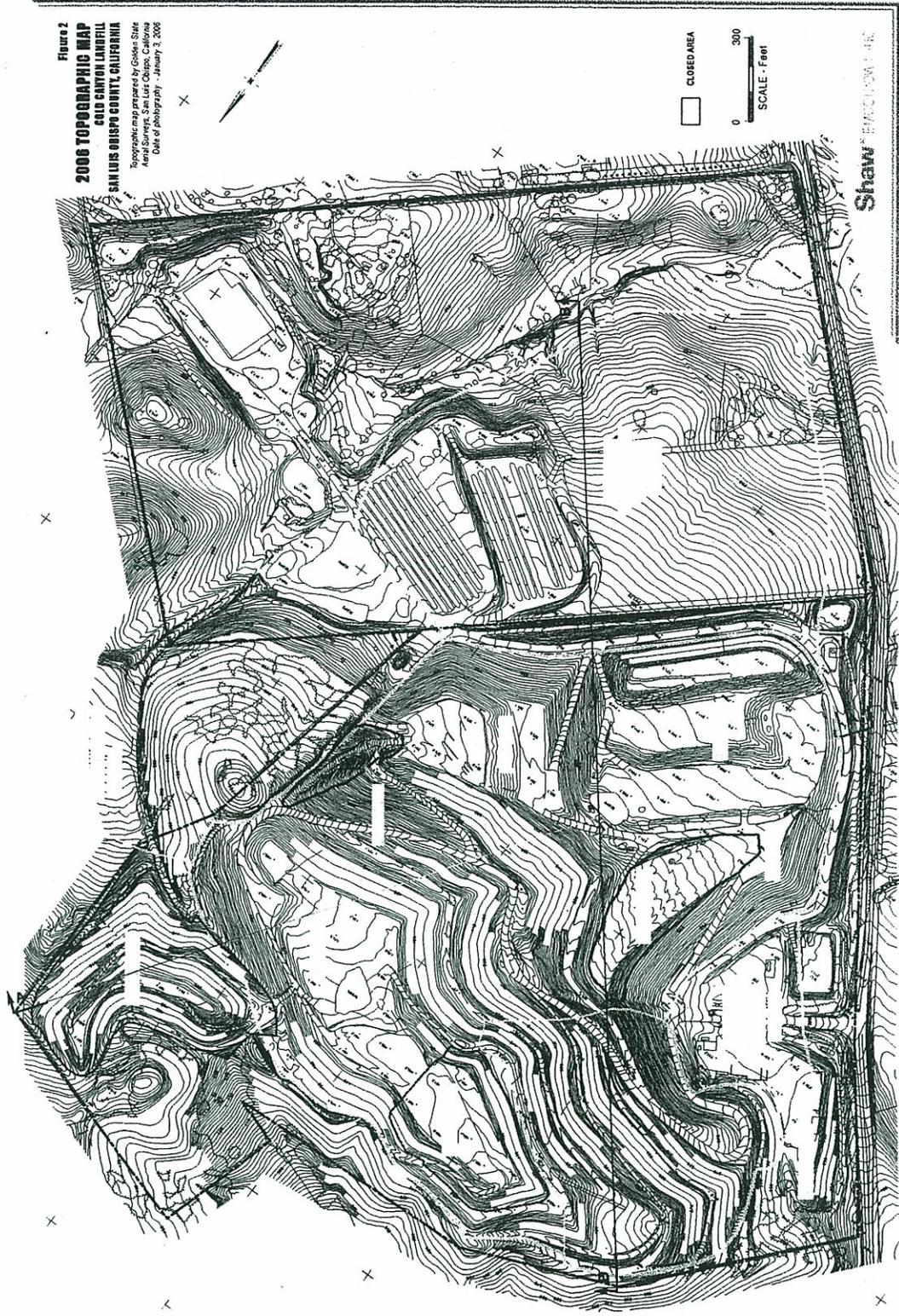
#### **Description**

Cold Canyon Landfill is located at 2268 Carpenter Canyon Road. The proposed project will increase the existing landfill facility to a total of approximately 206 acres. The proposed hours of operation for various on-site activities will be extended to 7:00 AM-5:00 PM, except processing at the material recovery facility which will operate until 10:00 PM (2 shifts). Proposed project improvements to the existing facility include the expansion of landfill area and daily operational capacity. The expansion will include the areas devoted to the resource recovery park, composting operations and the material recovery facility. The expansion will also require 41 new employees for daily operations (increase from 79 to 120). On-site project improvements include a new entrance driveway located about 2,800' south of the existing driveway. The new driveway will be located about 175' north of Patchett Road. A new scale house with 3 scales will be constructed about 1,200' from SR 227. Once the new driveway is constructed, the existing driveway will be closed and all traffic (ingress and egress) will use the new driveway. Off-site project improvements proposed by the applicant include a southbound left turn lane and northbound acceleration lane on SR 227 at the new driveway. Off-site improvements would be constructed within the State right-of-way (R/W). A copy of the Project Site Plan is provided on Figure 3.

#### **Trip Generation and Assignment**

All traffic associated with current operations uses the existing facility driveway on SR 227. The landfill traffic is comprised of employee trips, local contractor trucks and trailers, municipal garbage trucks and vehicles transporting recycled commodities. The existing permit allows up to 542 vehicles per day (1,084 two way trip ends). Data provided by the existing landfill operators demonstrates that the 7-day average was approximately 300 vehicles per day in 2006. Monday through Friday the average was 330 vehicles per day (typical weekday). Trip generation on Saturdays was 76% of the weekday average (250 vehicles) and on a Sunday was 54% of the average (178 vehicles). The busiest day of 2006 was in June. A total of 439 vehicles entered the landfill facility. June was also the busiest month in 2006 (weekday average of 385). Peak month operations are about 15-20% higher than average month conditions.

The new turning movement count data collected at the existing driveway also included vehicle classification information (number of small, medium and large vehicles). Small vehicles include passenger cars and pickup trucks, while medium sized vehicles include pickup trucks with trailers and small commercial trucks (2 or 3 axel). All local municipal trucks and trucks with 3 or more axels were considered large vehicles. A breakdown of the weekday trip generation associated with the existing operations is presented in Table 2A (annual average). A copy of the 2006 traffic volume data provided by the landfill operators is included with the Appendix Material.



**Table 2A - Existing Landfill Trip Generation (Average Weekday)**

Project Site Components	Number of Vehicle Trips				Daily
	AM Peak Hour		PM Peak Hour		
	IN	OUT	IN	OUT	
<b>Existing Average Weekday:</b>					
Small Vehicles (a)	21	2	1	29	-
Medium Vehicles (b)	7	3	0	0	-
Large Vehicles (c)	17	15	0	1	-
<b>Totals:</b>	<b>45</b>	<b>20</b>	<b>1</b>	<b>30</b>	<b>660</b>

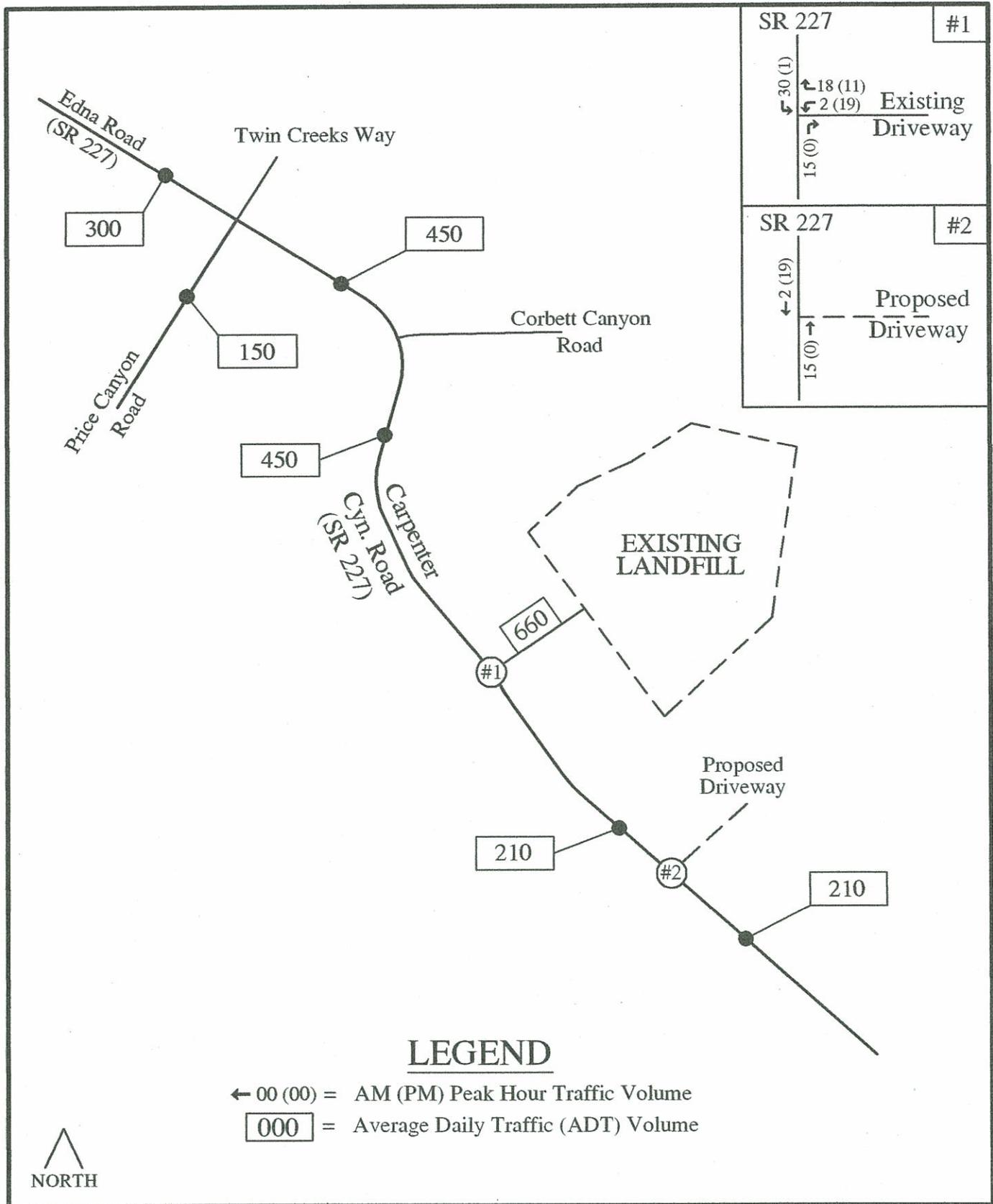
- (a) Passenger vehicles and pickup trucks
- (b) Trucks with trailers and/or small commercial trucks (2 or 3 axel)
- (c) Municipal trucks and trucks with more than 3 axels
- (d) Daily trip rate of 1.5 trips per employee (79 employees)

The data in Table 2A demonstrates that the existing landfill generates about 660 vehicle trips on an average weekday (2 way trip ends). Approximately 10% of the daily traffic occurs during the AM peak hour, while only 5% occurs during the PM peak hour. The data also indicates that about 70% of the total AM peak hour trips are inbound and approximately 95% of the total PM peak hour trips are outbound. The existing landfill service area includes the north coast and southern San Luis Obispo County, between San Simeon and Nipomo. A review of the new data and information in Cold Canyon Landfill Expansion Final EIR (October 1991) indicates that about 65-70% of the total daily traffic travels to and from the north on SR 227. Figure 4A illustrates the existing weekday traffic volumes associated with the current landfill operations.

The expansion of the landfill disposal area will not necessarily increase traffic volumes (permanent disposal daily tonnage limit will remain at 1,200 tons per day). However, traffic to and from the landfill will increase as a result of the expanded processing limits for the resource recovery park, composting operation and materials recovery facility (MRF). The extended hours and additional employees (41) will also generate new trips to and from the landfill. The hours of operation for some on-site activities will increase by 30-60 minutes per day (ie: 7:30 to 7:00 AM and 4:30 to 5:00 PM). The hours allowed for the receipt of material at the landfill (general public) and composting area will increase by 3 hours per day. The MRF hours will extend between 7:00 AM and 10:00 PM (two employee shifts). Employee shifts at the landfill are expected to occur as follows:

- Approximately 51% of the new employees will be assigned to the MRF (21 employees)
- Approximately 15-20 employees will work the second shift at the MRF (3:00 PM-10:00 PM).
- There will be approximately 100 day shift employees at the landfill (7:00 AM to 5:00 PM)

Beginning the day shift at 7:00 AM (in lieu of 7:30 AM) may slightly reduce employee demands during the AM peak commuter period (7-9 AM). Ending the day shift at 5:00 PM (in lieu of 4:30 PM) should not significantly increase the number of employee trips during PM peak commuter period (4-6 PM). It was concluded that on an average weekday peak hour demands associated with employee trips will increase by about 25-30% (21 new day shift employees / 79 existing day



SR 227	#1
↑ 30 (1) ↑ 18 (11) ↓ 2 (19) ↓ 15 (0)	Existing Driveway
SR 227	#2
↓ 2 (19) ↓ 15 (0)	Proposed Driveway

**LEGEND**

← 00 (00) = AM (PM) Peak Hour Traffic Volume  
 [000] = Average Daily Traffic (ADT) Volume



shift employees). Second shift employees will not increase typical AM or PM peak hour demands, but will increase total weekday traffic demands (estimated at 50%). The employee increases are expected to occur incrementally over the life of the landfill as the local demand for the landfill services increase.

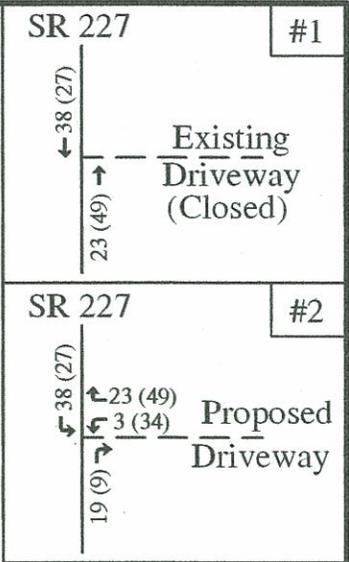
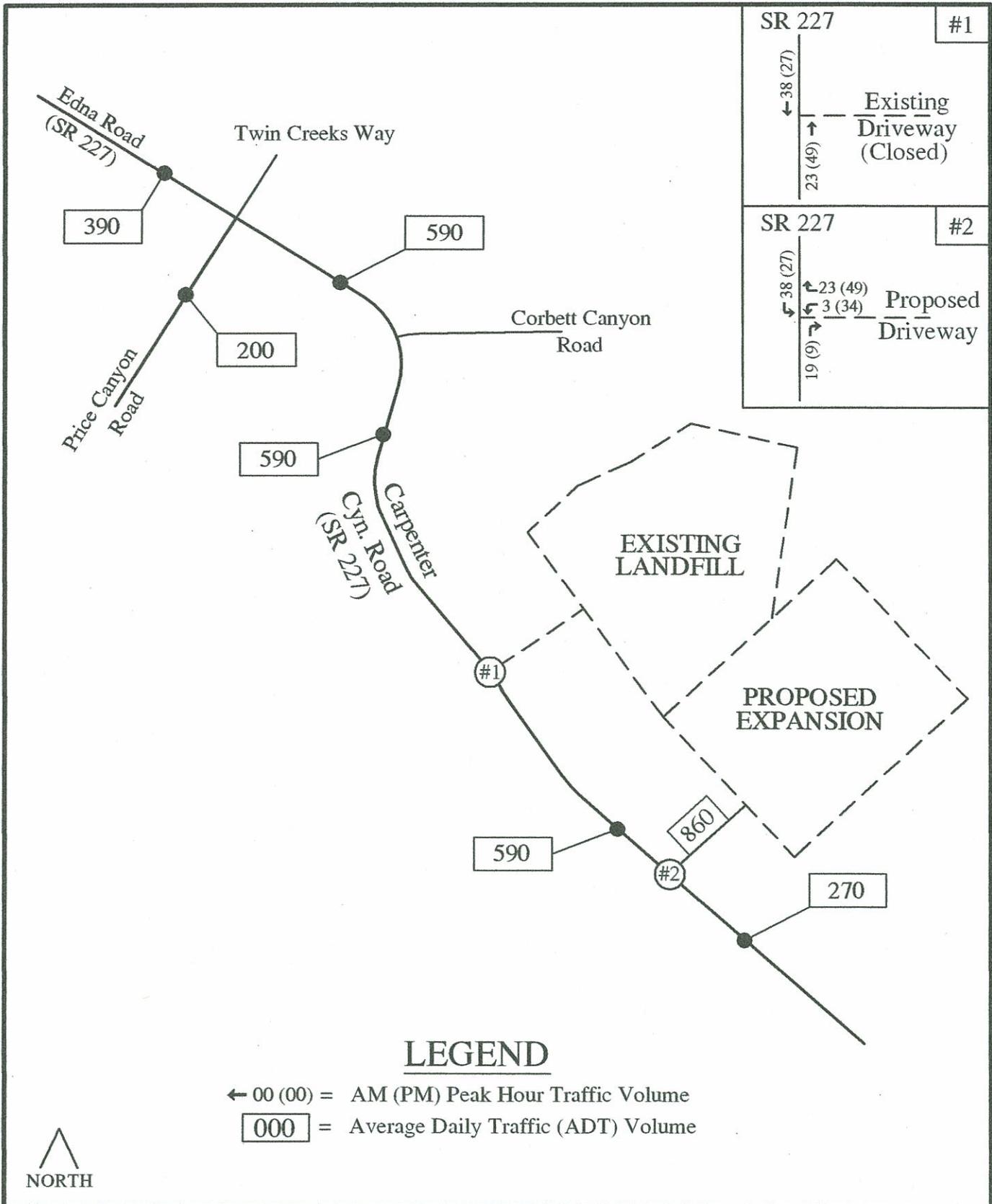
The expanded hours for the receipt of material and increased processing limits at the resource recovery park, composting area and materials recovery facility will increase AM and PM peak hour demands on an average weekday. Data provided by the landfill operators demonstrates that beginning the day shift at 7:00 AM (in lieu of 8:00 AM) will increase the morning demands by 5-10%. Therefore, it was estimated that the expanded hours and increased processing limits will increase weekday AM peak hour demands at the facility by at least 25% (medium and large vehicles). Data also illustrates that the afternoon peak hour of generation is about 30-65% higher than the morning peak hour (peak day;  $1.28=73/57$  and average day;  $1.66=53/32$ ). Since only 2 medium-to-large sized vehicles were recorded between 4:00-6:00 PM it was estimated that the project trips during the PM peak hour trips will be at least 50% greater than the AM peak hour. Traffic associated with the expanded hours and increased processing limits will also increase daily demands by about 25%. The expanded landfill trip generation estimates are presented in Table 2B.

**Table 2B - Expanded Landfill Trip Generation (Average Weekday)**

Project Site Components	Number of Vehicle Trips				Daily
	AM Peak Hour		PM Peak Hour		
	IN	OUT	IN	OUT	
<b>Proposed Average Weekday:</b>					
Small Vehicles (a & b)	27	3	2	38	180
Medium and Large Vehicles (c & d)	30	23	34	45	680
<b>Proposed Project Totals :</b>	<b>57</b>	<b>26</b>	<b>36</b>	<b>83</b>	<b>860</b>
Existing Facility Total :	45	20	1	30	660
<b>Net Project Increase :</b>	<b>+12</b>	<b>+6</b>	<b>+35</b>	<b>+53</b>	<b>+200</b>

- (a) Project trips increase by 30% during peak periods and 50% on a daily basis
- (b) Daily trip rate of 1.5 trips per employee (120 employees)
- (c) Project AM peak hour demands will increased by 25%
- (d) Project PM peak hour demands will be 50% greater than AM peak hour

The data in Table 2B indicates that the expanded landfill facility will generate about 860 daily trips, with 83 trips during the AM peak hour (57 inbound and 26 outbound) and 119 trips during the PM peak hour (36 inbound and 83 outbound). The proposed project will result in a net increase of approximately 200 daily trips, with 18 new trips during the AM peak hour and 88 new trips during the PM peak hour. The new project trips were assigned to SR 227 using distribution percentages similar to those documented for existing conditions. Approximately 60% of the employee trips and 75% of the truck trips (medium and large vehicles) will be oriented to and from the north on SR 227. As previously discussed, the existing driveway will be closed and all landfill traffic will use the new entrance (2,800' south of existing driveway). Figure 4B illustrates the weekday traffic volumes associated with the proposed project. The trip generation quantities in Table 2B do not include a reduction for the recently established employee vanpool program.



**PINNACLE  
TRAFFIC  
ENGINEERING**

Cold Canyon Landfill Expansion  
- Traffic Impact Report -

**FIGURE 4B  
PROPOSED  
WEEKDAY PROJECT  
TRAFFIC VOLUMES**

## Levels of Service Analysis

The evaluation of “project” conditions is an analysis of existing plus project traffic operations. A review of the project traffic volumes on Figures 4A and 4B demonstrates that the proposed landfill expansion will increase traffic volumes by 140 ADT on SR 227 (north of landfill). Existing plus project daily traffic along this segment of SR 227 will remain within acceptable limits (LOS C or better). Similar to the existing conditions analysis, the peak hour LOS values were calculated for proposed driveway intersection on SR 227. The results of the existing plus project LOS analysis are presented in Table 3. Copies of the LOS worksheets are included with the Appendix Material.

**Table 3 - Existing Plus Project Peak Hour LOS Analysis**

Study Intersection	Vehicle Delay - LOS Value	
	AM Peak Hour	PM Peak Hour
<b><u>SR 227 / Proposed Driveway (a)</u></b> Westbound Approach (b)	<b><u>1.4 - A</u></b> (13.2 - B)	<b><u>1.9 - A</u></b> (11.7 - B)

(a) Total average delay - LOS value

(b) Stop sign controlled, approach delay - LOS value

The data in Table 3 demonstrates that total average delays at the SR 227 / proposed driveway intersection will remain within the LOS A range during the AM and PM peak hour periods. Vehicle delays on the westbound approach (landfill exit traffic) will be within the LOS B range. Existing plus project traffic at the proposed landfill driveway will be below that the minimum peak hour traffic signal warrant criteria defined in the California MUTCD (Warrant #3). A copy of the California MUTCD traffic signal warrant criteria is included with the Appendix Material.

## Conclusions

The project traffic volumes will not substantially increase traffic in relation to existing load and capacity, or exceed the established LOS standard (LOS C or better). Therefore, it is concluded that the project traffic will not significantly impact existing operations provided that the off-site project improvements are constructed in conjunction with the landfill expansion. Discussions regarding any potential safety impacts are presented in Section V, Project Access.

#### IV. CUMULATIVE CONDITIONS

Cumulative traffic conditions are typically comprised of existing volumes, plus traffic generated by other known approved and/or pending projects. Contact with the San Luis County Planning Department did not identify any future projects that will significantly increase weekday traffic volumes on SR 227 (adjacent to landfill). However, data in the 2005 Regional Transportation Plan (RTP) does demonstrate that 20 year traffic projections could increase traffic volumes by about 40% between Printz Road and Price Canyon Road (2% per year). Future improvements identified in the Route 227 PSR (Caltrans) include the widening of SR 227 to a 4 lane facility north of Price Canyon Road. No future roadway improvements for SR 227 adjacent to the landfill are identified in the other reference documents.

#### Traffic Volumes

Background traffic demands on SR 227 adjacent to the landfill were derived by increasing the existing traffic volumes 40% to account for future background traffic growth (over the next 20 years). The total cumulative traffic volumes were then estimated by combining the background traffic demands and the new project trips resulting from the proposed landfill expansion. The total cumulative weekday traffic projections are illustrated on Figure 5.

#### Levels of Service Analysis

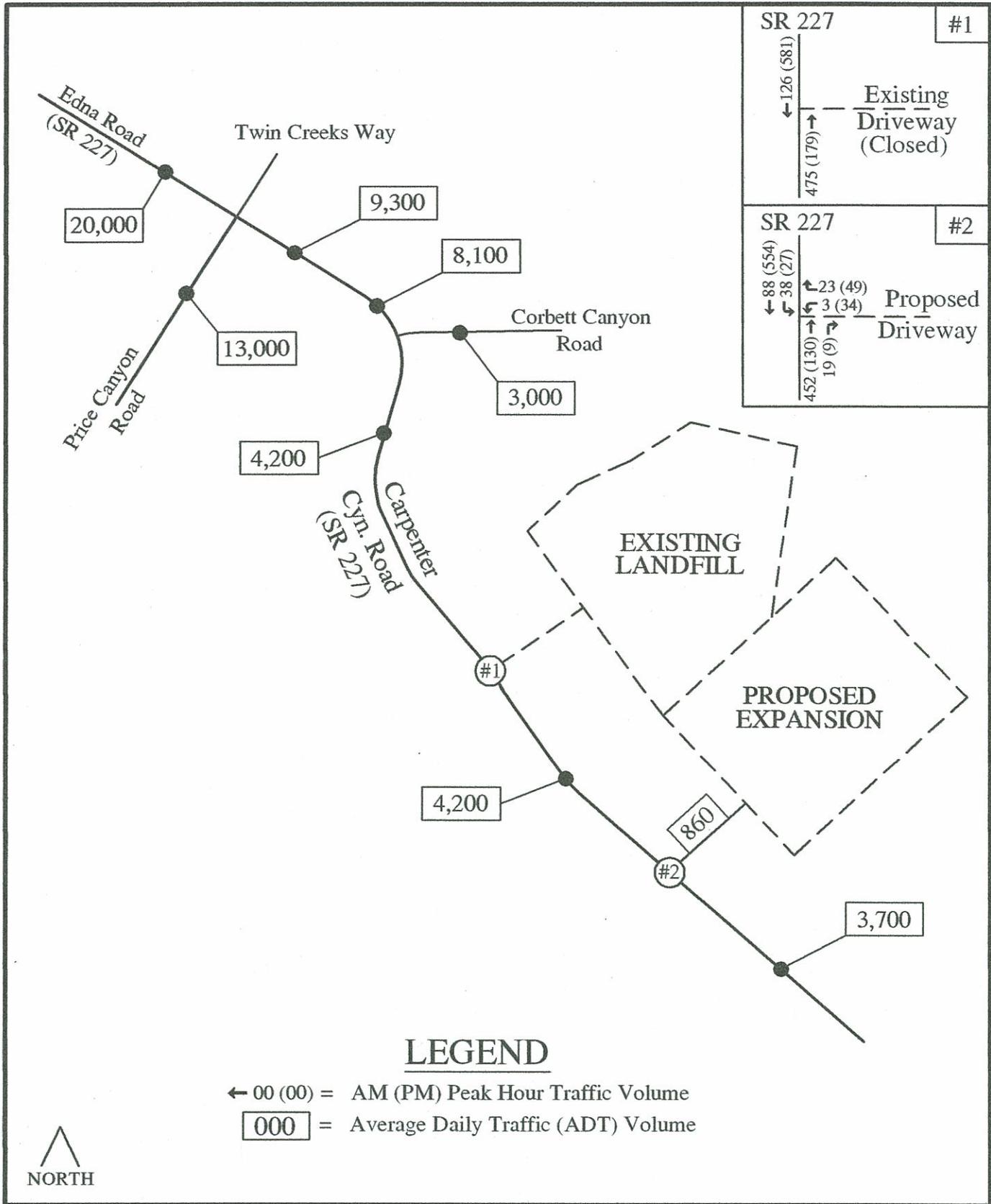
A review of the data on Figure 5 demonstrates that total cumulative daily traffic volumes on SR 227 adjacent to the landfill will be within the LOS B range (4,000 to 8,000 ADT). Similar to the existing and project conditions analysis, the cumulative LOS values were calculated for the SR 227 / proposed driveway intersection. The intersection LOS analysis was conducted with and without the new project trips. The results of the cumulative LOS analysis are presented in Table 4. Copies of the LOS worksheets are included with the Appendix Material. The without project scenario is comprised of traffic volumes associated with the existing landfill facility.

**Table 4 - Cumulative Peak Hour LOS Analysis**

Study Intersection	Peak Hour	Vehicle Delay - LOS Value	
		Without Project	With Project
<u>SR 227 / Proposed Driveway (a)</u> Westbound Approach (b)	AM	<u>1.0 - A</u> (15.3 - C)	<u>1.2 - A</u> (15.8 - C)
	PM	<u>0.6 - A</u> (13.5 - B)	<u>1.7 - A</u> (13.6 - B)

(a) Total average delay - LOS value

(b) Stop sign controlled, approach delay - LOS value



SR 227	#1
← 126 (381)	Existing Driveway (Closed)
475 (179) →	
SR 227	#2
88 (554)	Proposed Driveway
38 (27)	
23 (49)	
3 (34)	
452 (130)	19 (9)

**PINNACLE  
TRAFFIC  
ENGINEERING**

Cold Canyon Landfill Expansion  
- Traffic Impact Report -

**FIGURE 5  
TOTAL CUMULATIVE  
WEEKDAY  
TRAFFIC VOLUMES**

The data in Table 4 demonstrates that total average vehicle delays at the SR 227 / proposed driveway intersection will be within the LOS A range during the AM and PM peak hour periods (without or with the expanded landfill facility new trips). Delays on the proposed driveway (westbound approach) will be within the LOS B-C range. Total cumulative peak hour traffic demands at the proposed landfill driveway will remain below that the minimum California MUTCD signal warrant criteria (Warrant #3). A copy of the California MUTCD traffic signal warrant criteria is included with the Appendix Material.

## **Conclusions**

The project traffic volumes will not substantially increase traffic in relation to existing load and capacity, or exceed the established LOS standard (LOS C or better). Therefore, it is concluded that the project traffic will not significantly impact cumulative traffic operations provided that the off-site project improvements are constructed in conjunction with the landfill expansion. Discussions regarding any potential safety impacts are presented in Section V, Project Access.

## V. PROJECT ACCESS

As stated in the Introduction, the primary focus of the traffic analysis was to evaluate the potential safety impacts to operations on SR 227. The existing landfill driveway (PM=5.90) is located about 0.8 miles south of Corbett Canyon Road (PM=6.70). SR 227 heads north of the existing driveway on a downgrade slope with a relatively straight horizontal alignment and unobstructed line of sight. A vertical curve crest on SR 227 is located about 950' south of the existing driveway.

The proposed driveway will be located about 2,800' south of the existing entrance and 175' north of Patchett Road (estimated PM=5.35). Patchett Road is a private driveway that serves about 3-4 single family detached dwelling units (SFDU). The proposed location is about 100' south of a vertical curve "low point" (sag). SR 227 to the south continues with a slight upgrade slope and a relatively straight horizontal alignment. North of the proposed driveway there is a short relatively level section (400') followed by several vertical curves on an upward grade and a short horizontal curve to the east (beyond vertical curve crest). The first vertical curve is about 860' north of the driveway and changes the upgrade slope (3% grade change). The second vertical curve's crest is about 1,200' north of the proposed driveway location. The general alignment of SR 227 north of the proposed location is illustrated on Figure 6.

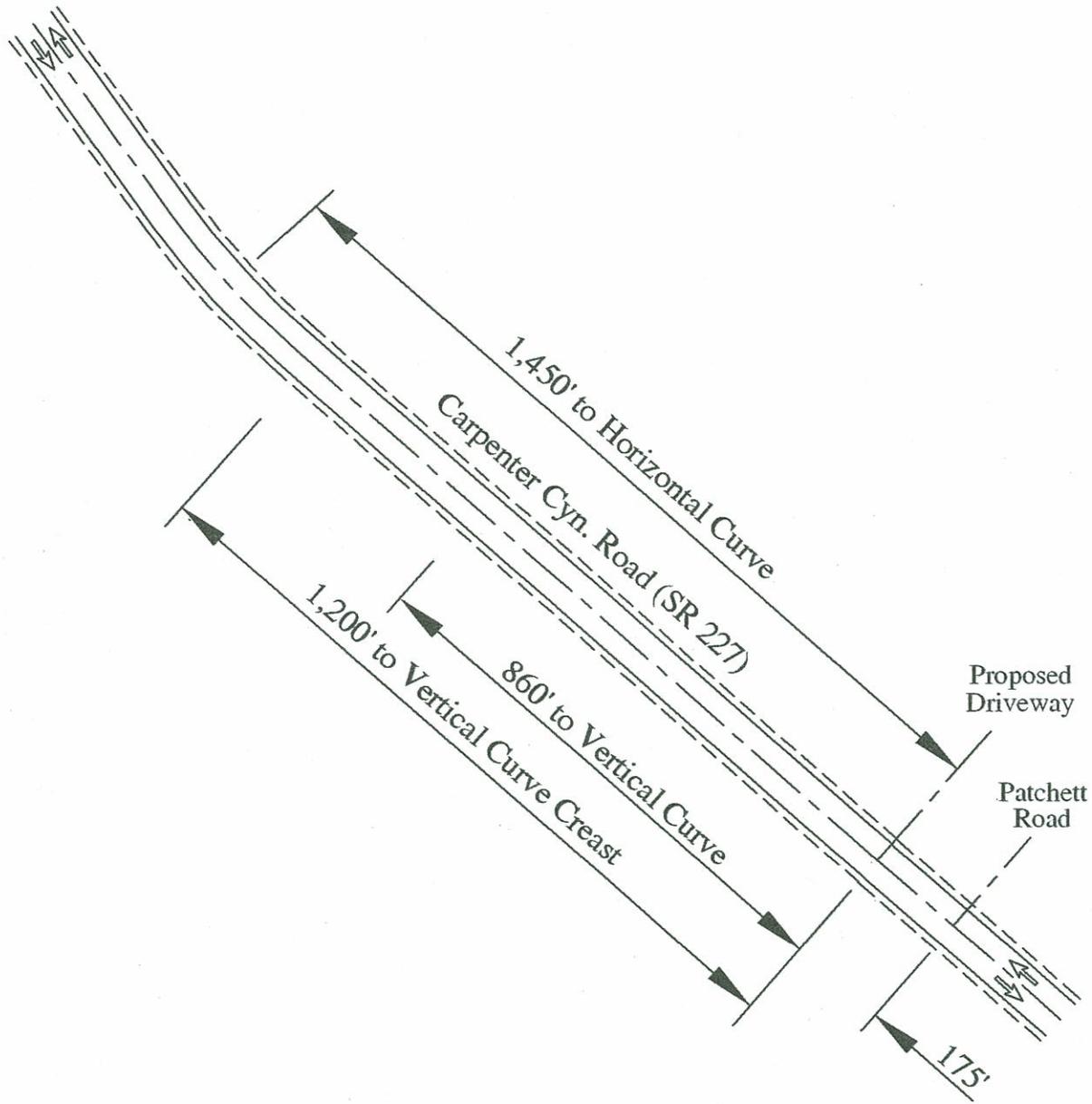
Proposed off-site road improvements include installing a southbound left turn lane and northbound acceleration lane on SR 227. No specific design for the off-site improvements has been proposed at the time of this analysis. The location of the new scale house is about 1,200' from SR 227. This would eliminate any potential for on-site queued vehicles to impact operations on SR 227. Area for an additional scale (inbound) will be provided at the new scale house for future use, if needed.

The evaluation of project access assumes the following:

- All off-site project improvements within the State R/W would be designed according to current State standards (ie: 12' lane and 8' shoulder widths, transition tapers, etc).
- The southbound left turn lane would include the appropriate deceleration and storage area for large vehicles. About 35-40% of the southbound left turns during the AM peak hour are comprised of large loaded trucks. Vehicle storage would be provided for a minimum of 100' with an additional 315' (minimum) for vehicle deceleration (40 mph). The appropriate bay taper (90' minimum) and transitions tapers would also be provided.
- The northbound acceleration lane for vehicles exiting the proposed driveway would provide adequate area for large vehicles to accelerate to at least 45-50 mph. 75-80% of exiting vehicles during the AM peak hour turn right and proceed north on SR 227. A minimum of approximately 1000' would be provided for vehicle acceleration.

### Vehicle Speeds

A random sample of vehicle speeds was collected on SR 227 adjacent to the landfill during "free-flowing" conditions (December 5, 2007). The data at the existing driveway demonstrated that average vehicle speeds in both directions were about 50-55 mph. Speeds on SR 227 adjacent to the proposed driveway location were approximately 60 mph in both directions. The speed data for SR 227 is presented with the sight distance data (Table 6). Copies of the vehicle speed data are included with the Appendix Material.



## Traffic Accident Data

Traffic accident data for SR 227 was obtained from the CHP for a 66 month period between April 2002 and December 2007 (Price Canyon Road to Noyes Road). During this period 5 ½ year period there were 10 reported accidents along the mile section of SR 227 adjacent to the landfill property. A summary of the CHP accident data is presented in Table 5. The accident location, date, day of the week, primary collision factor, type of accident and direction of travel are provided for each accident. A copy of the CHP accident data is provided with the Appendix Material.

**Table 5 - Summary of CHP Traffic Accident Data (PM-6.20 to PM-5.10)**

Post Mile Acc. No. (a)	Date (Day)	Time Of Day	Primary Factor	Type	Dir.
PM-6.00 (#9)	1/18/07 (Thurs)	2:15 PM	Imp. Pass	Sideswipe	SB/SB
<b>Existing Landfill Driveway (PM-5.90)</b>					
PM-5.88 (#6)	6/1/04 (Tuesday)	4:10 PM	Imp. Turn	Broadside	SB/SB (b)
PM-5.630 (#1)	6/21/02 (Friday)	8:40 AM	Unsafe Speed	Hit Object	NB
PM-5.59 (#4)	8/20/03 (Wed.)	11:55 AM	Wrong Side	Sideswipe	NB/SB
PM-5.49 (#5)	11/16/03 (Sunday)	8:30 PM	Imp. Turn	Sideswipe	NB/NB
<b>Patchett Road (PM-5.32)</b>					
N/A - (#10)	3/22/07	8:45 PM	N/A	N/A	N/A
PM-5.29 (#2)	7/22/02 (Monday)	8:00 PM	ROW	Broadside	NB/WB
PM-5.28 (#3)	7/5/03 (Saturday)	5:45 PM	Imp. Turn	Sideswipe	SB/SB
PM-5.16 (#8)	8/25/05 (Thurs.)	3:00 PM	Hazard	Hit Object	NB
PM-5.09 (#7)	3/9/05 (Wed.)	8:15 PM	Not Driver	Animal	-

(a) Accident identification number on CHP traffic accident records (Appendix).

(b) Involved vehicle performing u-turn, not using landfill entrance.

The data in Table 5 indicates that only 1 accident occurred near the existing driveway over the past 5 ½ years (#6). This accident involved a vehicle performing a u-turn within a construction zone. 3 accidents involved a vehicle passing (#3, #5 and #9) and 3 involved only 1 vehicle (#1, #7 and #8). There were 2 reported accidents that involved vehicles entering or exiting Patchett Road (#2 and #3). Both of these accidents occurred after 5:00 PM. No detailed data was provided for accident #10 (nearest cross street-Patchett Road). The data does not document any significant accident patterns at the existing or proposed driveway location. There were no fatality accidents on the section of SR 227 for which data was provided (Price Canyon Road to Noyes Road). Only 1 accident involved a large truck (Price Canyon Road, east-to-northbound).

## Adequacy of Sight Distance

The review of project access includes an evaluation of sight distance on SR 227. Stopping sight distance is the minimum distance required by a driver to bring a vehicle to a complete stop after an object on the roadway becomes visible. Corner sight distance is the minimum time required for a "waiting vehicle to either cross all lanes of through traffic, cross the near lanes and turn left or

right, without requiring through traffic to radically alter their speed” (Caltrans HDM). The review of sight distance was conducted using criteria in the Caltrans Highway Design Manual (HDM, Chapters 200 and 400). The Caltrans HDM states that, at private road intersections and rural driveways the minimum corner sight distance shall be equal to the stopping sight distance (Topic 405.1-2c). The existing landfill driveway can be seen from at least 1,500’ when traveling southbound on SR 227. Traveling northbound this driveway is visible from about 1,000’ (crest of vertical curve). The line of sight looking south from the proposed driveway is relatively obstructed for at least 2,000.’ Southbound vehicles can see the proposed driveway location from at least 860’. Passing in the southbound direction is allowed from the vertical curve crest located about 1,200’ north of the proposed driveway location (passing is prohibited for northbound vehicles). The stopping sight distance measurements were recorded by placing a portable delineator on the shoulder stripe adjacent to each driveway. The sight distance measurements were then equated to vehicle speeds based on data in Tables 201.1 (HDM). The average vehicle speed and distance parameters for each driveway are presented in Table 6. Copies of the Caltrans HDM sight distance material and the sight distance measurements are included with the Appendix Material.

**Table 6 - Vehicle Speed and Sight Distance Data**

<b>Study Intersection Along SR 227</b>	<b>Average Speeds (mph)</b>	<b>Stopping Sight Distance</b>
<u>Existing Driveway:</u>		
Northbound -	51.4	1,050’ (75-80 mph)
Southbound -	54.1	1,500’ (75-80 mph)
<u>Proposed Driveway:</u>		
Northbound -	59.6	2,000’ (75-80 mph)
Southbound -	58.5	860’ (65-70 mph) 1,200 (75-80 mph)

The data in Table 6 demonstrates that stopping distance on SR 227 at the existing and proposed driveway locations is adequate for vehicles traveling at 75-80 mph. Stopping sight distance from the vertical curve located 860’ north of the driveway is adequate for 65-70 mph. This vertical curve crest also limits the line of sight looking north from the proposed driveway location (driver position). Based on the Caltrans 7 ½ second criterion (Table 405.1A), corner sight distance for vehicles exiting the proposed driveway and proceeding south will be acceptable for 65-70 mph.

Again it should be mentioned that the evaluation of project access assumes:

- All proposed off-site improvements would be designed according to current State standards.
- The southbound left turn and northbound acceleration lanes on SR 227 would be designed to accommodate a high percentage of large vehicles.
- The proposed driveway would be designed to maximize the availability of sight distance for vehicles exiting landfill (minimize potential impact to vehicles on SR 227).
- The proposed off-site improvements would be designed to minimize any potential conflict with vehicles accessing Patchett Road (less 50 ADT).

## **Right Turn Channelization**

A review of right turn lane channelization criteria was performed using material referenced in the "A Policy on Geometric Design of Highways and Streets," published by the American Association of State Highway and Transportation Officials (AASHTO). The warrant graph for a 2 lane highway uses the total peak hour approach volume and number of right turns. The total cumulative peak hour traffic demands will not satisfy the minimum criteria requiring a separate northbound right turn lane on SR 227. A copy of the right turn lane warrant graph is included with the Appendix Material.

## **Conclusions**

Based on the material reviewed for the evaluation of access, it is concluded that the proposed landfill expansion and relocation of the entrance will not exacerbate any existing unsafe conditions or substantially increase hazards at the proposed driveway location. Therefore, the proposed project off-site improvements mitigate any potential impact to operations or safety on SR 227.

## END ##

## APPENDIX MATERIAL

### Contents:

- Summary of Caltrans Detailed Traffic Count Data for SR 227
- New Turning Movement Traffic Count Data (December 5, 2007)
  - SR 227 / Existing Landfill Driveway
- Level of Service (LOS) Descriptions
- Level of Service 24-Hour ADT Volume Threshold Criteria
- Level of Service (LOS) Value - Vehicle Delay Relationship Data
- Level of Service (LOS) Worksheets
- 2006 and 2007 Traffic Volume Data for existing Cold Canyon Landfill
- California MUTCD Traffic Signal Warrant Graph (Warrant #3)
- Vehicle Speed Data on SR 227 (both Existing and Proposed Driveway Location)
- California Highway Patrol (CHP) Traffic Accident Data (April 2002 to Dec. 2007)
- Caltrans Highway Design Manual (HDM) Sight Distance Criteria
- SR 227 Sight Distance Data (both Existing and Proposed Driveway Location)
- Right Turn Lane Warrant Graph

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street • Hollister, CA 95023

(831) 638-9260 • FAX (831) 638-9268

PinnacleTE.com (PTE@sbcglobal.net)

## Cold Canyon Landfill Expansion; San Luis Obispo County, CA - Summary of Caltrans Traffic Count Data (SR 227), North of Price Cyn Rd. -

Period	Direction	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
2006-07	Total	13,506	8,604	6,646

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Feb. 2007 (02-08)	NB	6,491	4,490	3,011
	SB	<u>6,993</u>	<u>4,818</u>	<u>3,305</u>
		<b>13,484</b>	<b>9,308</b>	<b>6,316</b>
Feb. 2007 (09-16)	NB	6,388	3,558	3,058
	SB	<u>7,000</u>	<u>3,929</u>	<u>3,268</u>
		<b>13,388</b>	<b>7,487</b>	<b>6,326</b>
Feb. 2007 (17-24)	NB	6,385	4,034	3,272
	SB	<u>7,023</u>	<u>4,429</u>	<u>3,545</u>
		<b>13,408</b>	<b>8,463</b>	<b>6,817</b>
Feb. 2007 (25-28)	NB	6,241		2,894
	SB	<u>6,780</u>		<u>3,116</u>
		<b>13,021</b>		<b>6,010</b>
Average	Total	13,325	8,419	6,367

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
March 2007 (01-08)	NB	6,451	4,238	3,218
	SB	<u>7,041</u>	<u>4,522</u>	<u>3,535</u>
		<b>13,492</b>	<b>8,760</b>	<b>6,753</b>
March 2007 (09-16)	NB	6,423	4,054	3,265
	SB	<u>7,057</u>	<u>4,398</u>	<u>3,541</u>
		<b>13,480</b>	<b>8,452</b>	<b>6,806</b>
March 2007 (17-24)	NB	6,408	4,032	3,364
	SB	<u>7,009</u>	<u>4,429</u>	<u>3,652</u>
		<b>13,417</b>	<b>8,461</b>	<b>7,016</b>
March 2007 (25-31)	NB	6,507	4,196	3,182
	SB	<u>7,110</u>	<u>4,712</u>	<u>3,580</u>
		<b>13,617</b>	<b>8,908</b>	<b>6,762</b>
Average	Total	13,502	8,645	6,834

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Apr. 2007 (01-08)	NB	6,664	3,931	3,105
	SB	<u>7,323</u>	<u>4,297</u>	<u>3,103</u>
		<b>13,987</b>	<b>8,228</b>	<b>6,208</b>
Apr. 2007 (09-16)	NB	6,250	3,918	3,243
	SB	<u>6,826</u>	<u>4,379</u>	<u>3,376</u>
		<b>13,076</b>	<b>8,297</b>	<b>6,619</b>
Apr. 2007 (17-24)	NB	6,470	4,197	2,931
	SB	<u>7,137</u>	<u>4,512</u>	<u>3,177</u>
		<b>13,607</b>	<b>8,709</b>	<b>6,108</b>
Apr. 2007 (25-30)	NB	6,418	4,267	3,267
	SB	<u>7,072</u>	<u>4,585</u>	<u>3,534</u>
		<b>13,490</b>	<b>8,852</b>	<b>6,801</b>
Average	Total	13,540	8,522	6,434

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
May 2007 (01-08)	NB	6,448	4,275	3,352
	SB	<u>6,997</u>	<u>4,548</u>	<u>3,696</u>
		<b>13,445</b>	<b>8,823</b>	<b>7,048</b>
May 2007 (09-16)	NB	6,511	4,159	3,175
	SB	<u>7,156</u>	<u>4,518</u>	<u>3,422</u>
		<b>13,667</b>	<b>8,677</b>	<b>6,597</b>
May 2007 (17-24)	NB	6,504	4,205	3,383
	SB	<u>7,086</u>	<u>4,653</u>	<u>3,701</u>
		<b>13,590</b>	<b>8,858</b>	<b>7,084</b>
May 2007 (25-29)	NB	6,416	4,123	3,303
	SB	<u>7,031</u>	<u>4,421</u>	<u>3,538</u>
		<b>13,447</b>	<b>8,544</b>	<b>6,841</b>
Average	Total	13,537	8,726	6,893

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Oct. 2006 (01-08)	NB	6,603	4,097	3,251
	SB	<u>7,194</u>	<u>4,489</u>	<u>3,448</u>
		<b>13,797</b>	<b>8,586</b>	<b>6,699</b>
Oct. 2006 (09-16)	NB	6,714	3,952	3,236
	SB	<u>7,143</u>	<u>4,427</u>	<u>3,417</u>
		<b>13,857</b>	<b>8,379</b>	<b>6,653</b>
Oct. 2006 (17-24)	NB	6,551	4,424	3,304
	SB	<u>7,182</u>	<u>4,839</u>	<u>3,562</u>
		<b>13,733</b>	<b>9,263</b>	<b>6,866</b>
Oct. 2006 (25-31)	NB	6,520	4,389	3,328
	SB	<u>7,178</u>	<u>4,808</u>	<u>3,614</u>
		<b>13,698</b>	<b>9,197</b>	<b>6,942</b>
Average	Total	13,771	8,856	6,790

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Nov. 2006 (01-08)	NB	6,505	4,278	3,422
	SB	<u>7,253</u>	<u>4,798</u>	<u>3,598</u>
		<b>13,758</b>	<b>9,076</b>	<b>7,020</b>
Nov. 2006 (09-16)	NB	6,255	4,029	3,337
	SB	<u>7,067</u>	<u>4,353</u>	<u>3,567</u>
		<b>13,322</b>	<b>8,382</b>	<b>6,904</b>
Nov. 2006 (17-24)	NB	6,473	4,444	3,328
	SB	<u>7,356</u>	<u>4,921</u>	<u>3,563</u>
		<b>13,829</b>	<b>9,365</b>	<b>6,891</b>
Nov. 2006 (25-31)	NB	6,032	3,711	3,100
	SB	<u>6,977</u>	<u>4,145</u>	<u>3,337</u>
		<b>13,009</b>	<b>7,856</b>	<b>6,437</b>
Average	Total	13,480	8,670	6,813

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street • Hollister, CA 95023  
 (831) 638-9260 • FAX (831) 638-9268  
 PinnacleTE.com (PTE@sbcglobal.net)

## Cold Canyon Landfill Expansion; San Luis Obispo County, CA - Summary of Caltrans Traffic Count Data (SR 227), North of Price Cyn Rd. -

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Jan. 2007 (01-08)	NB SB			
Jan. 2007 (06-16)	NB SB	6,460 <u>7,025</u> <b>13,485</b>	4,033 <u>4,505</u> <b>8,538</b>	3,311 <u>3,540</u> <b>6,851</b>
Jan. 2007 (17-24)	NB SB	6,389 <u>7,123</u> <b>13,512</b>	4,123 <u>4,552</u> <b>8,675</b>	3,042 <u>3,333</u> <b>6,375</b>
Jan. 2007 (25-31)	NB SB	6,355 <u>6,814</u> <b>13,169</b>	3,719 <u>4,244</u> <b>7,963</b>	2,865 <u>3,083</u> <b>5,948</b>
<b>Average</b>	<b>Total</b>	<b>13,389</b>	<b>8,392</b>	<b>6,391</b>

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street • Hollister, CA 95023  
 (831) 638-9260 • FAX (831) 638-9268  
 PinnacleTE.com (PTE@sbcglobal.net)

## Cold Canyon Landfill Expansion; San Luis Obispo County, CA - Summary of Caltrans Traffic Count Data (SR 227), South of Price Cyn Rd. -

Period	Direction	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
<b>2005</b>	<b>Total</b>	<b>6,488</b>	<b>4,253</b>	<b>3,230</b>

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Oct. 2005 (01-08)	NB SB			
Oct. 2005 (09-13)	NB SB			
Oct. 2005 (24-31)	NB SB	3,198 <u>3,290</u> 6,488	2,025 <u>2,228</u> 4,253	1,557 <u>1,673</u> 3,230
Oct. 2005 (25-28)	NB SB			
Average	Total	6,488	4,253	3,230

Period	Dir.	Daily Traffic Volumes		
		Ave. Wk.	Saturday	Sunday
Dec. 2005 (01-07)	NB SB			
Dec. 2005 (08-15)	NB SB			
Dec. 2005 (16-23)	NB SB			
Dec. 2005 (25-31)	NB SB			
Average	Total			

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)														15-Min. Totals	Hourly Totals
	Northbound				Westbound Right			Southbound				Westbound Left				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Vehicle Type	(S)	(M)	(L)		(S)	(M)	(L)		(S)	(M)	(L)	(S)	(M)	(L)		
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT		
4:00-4:15PM	0	0	0	21	4	0	1	93	1	0	0	1	0	0	121	
4:15-4:30PM	0	0	0	22	2	0	0	88	0	0	0	0	0	0	112	
4:30-4:45PM	0	0	0	28	2	0	0	91	0	0	0	8	0	0	129	
4:45-5:00PM	0	0	0	25	5	0	1	95	1	0	0	3	0	0	130	492
5:00-5:15PM	0	0	0	21	2	0	0	82	0	0	0	5	0	0	110	481
5:15-5:30PM	0	0	0	19	0	0	0	128	0	0	0	1	0	0	148	517
5:30-5:45PM	0	0	0	21	0	0	0	96	0	0	0	0	0	0	117	505
5:45-6:00PM	0	0	0	22	0	0	0	75	0	0	0	0	0	0	97	472
2 Hour Totals :	0	0	0	179	15	0	2	748	2	0	0	18	0	0		

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
4:30-5:30PM	0	0	0	93	9	0	1	396	1	0	0	17	0	0	517
			0				10				1			17	

**PM PEAK HOUR FACTOR = 517 / 4 x 148 = 0.87**

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)												15-Min. Totals	Hourly Totals	
	Northbound				Westbound Right			Southbound			Westbound Left				
				4				8							
Vehicle Type															
Direction				NB				SB							
4:00-4:15PM				21				93						114	
4:15-4:30PM				22				88						110	
4:30-4:45PM				28				91						119	
4:45-5:00PM				25				95						120	463
5:00-5:15PM				21				82						103	452
5:15-5:30PM				19				128						147	489
5:30-5:45PM				21				96						117	487
5:45-6:00PM				22				75						97	464
2 Hour Totals :				179				748							

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
4:30-5:30PM	0	0	0	93	0	0	0	396	0	0	0	0	0	0	489
			0				0				0			0	

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

**JUST DRIVEWAY**

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)														15-Min. Totals	Hourly Totals
	Northbound				Westbound Right			Southbound				Westbound Left				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Vehicle Type	(S)	(M)	(L)		(S)	(M)	(L)		(S)	(M)	(L)	(S)	(M)	(L)		
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT		
4:00-4:15PM	0	0	0		4	0	1		1	0	0	1	0	0	7	
4:15-4:30PM	0	0	0		2	0	0		0	0	0	0	0	0	2	
4:30-4:45PM	0	0	0		2	0	0		0	0	0	8	0	0	10	
4:45-5:00PM	0	0	0		5	0	1		1	0	0	3	0	0	10	29
5:00-5:15PM	0	0	0		2	0	0		0	0	0	5	0	0	7	29
5:15-5:30PM	0	0	0		0	0	0		0	0	0	1	0	0	1	28
5:30-5:45PM	0	0	0		0	0	0		0	0	0	0	0	0	0	18
5:45-6:00PM	0	0	0		0	0	0		0	0	0	0	0	0	0	8
2 Hour Totals :	0	0	0		15	0	2		2	0	0	18	0	0		

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
4:30-5:30PM	0	0	0	0	9	0	1	0	1	0	0	17	0	0	28
			0				10				1			17	

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)														15-Min. Totals	Hourly Totals
	Northbound				Westbound Right			Southbound				Westbound Left				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	(S)	(M)	(L)		(S)	(M)	(L)		(S)	(M)	(L)	(S)	(M)	(L)		
Vehicle Type	(S)	(M)	(L)		(S)	(M)	(L)		(S)	(M)	(L)	(S)	(M)	(L)		
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Totals	Totals
7:00-7:15AM	2	0	0	45	0	0	0	19	2	1	1	0	0	0	70	
7:15-7:30AM	3	0	0	58	0	0	1	13	3	0	4	0	0	0	82	
7:30-7:45AM	3	0	0	89	0	1	4	17	1	0	5	1	0	0	121	
7:45-8:00AM	5	1	0	101	0	0	5	21	3	0	5	0	0	1	142	415
8:00-8:15AM	1	1	0	75	1	1	3	12	0	4	2	0	0	0	100	445
8:15-8:30AM	0	0	4	48	2	3	3	10	2	2	4	0	2	0	80	443
8:30-8:45AM	2	1	1	41	1	0	4	22	3	1	3	0	0	1	80	402
8:45-9:00AM	0	0	1	48	5	2	4	23	1	3	4	1	1	1	94	354
2 Hour Totals :	16	3	6	505	9	7	24	137	15	11	28	2	3	3		

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
7:15-8:15AM	12	2	0	323	1	2	13	63	7	4	16	1	0	1	445
			14				16				27			2	

**AM PEAK HOUR FACTOR = 445 / 4 x 142 = 0.78**

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)												15-Min. Totals	Hourly Totals
	Northbound								Southbound					
				4					8					
Vehicle Type														
Direction				NB					SB					
7:00-7:15AM				45					19					
7:15-7:30AM				58					13					
7:30-7:45AM				89					17					
7:45-8:00AM				101					21					363
8:00-8:15AM				75					12					386
8:15-8:30AM				48					10					373
8:30-8:45AM				41					22					330
8:45-9:00AM				48					23					279
2 Hour Totals :				505					137					

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
7:15-8:15AM	0	0	0	323	0	0	0	63	0	0	0	0	0	0	386
			0				0				0			0	

# PINNACLE TRAFFIC ENGINEERING

( Cold Canyon Landfill Expansion - Traffic Impact Report )

Intersection: Carpenter Canyon Road (SR227) and Existing Driveway

Weather: Dry & Clear

Date: 12/5/07 (Wed.)

Count Conducted By: Larry Hail

**JUST DRIVEWAY**

Beginning Time of Count	Intersection Turning Movement - Direction / Turning Movement (a)														15-Min. Totals	Hourly Totals
	Northbound				Westbound Right			Southbound				Westbound Left				
	1 (S)	2 (M)	3 (L)	4	5 (S)	6 (M)	7 (L)	8	9 (S)	10 (M)	11 (L)	12 (S)	13 (M)	14 (L)		
Vehicle Type	(S)	(M)	(L)		(S)	(M)	(L)		(S)	(M)	(L)	(S)	(M)	(L)	Totals	Totals
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT		
7:00-7:15AM	2	0	0		0	0	0		2	1	1	0	0	0	6	
7:15-7:30AM	3	0	0		0	0	1		3	0	4	0	0	0	11	
7:30-7:45AM	3	0	0		0	1	4		1	0	5	1	0	0	15	
7:45-8:00AM	5	1	0		0	0	5		3	0	5	0	0	1	20	52
8:00-8:15AM	1	1	0		1	1	3		0	4	2	0	0	0	13	59
8:15-8:30AM	0	0	4		2	3	3		2	2	4	0	2	0	22	70
8:30-8:45AM	2	1	1		1	0	4		3	1	3	0	0	1	17	72
8:45-9:00AM	0	0	1		5	2	4		1	3	4	1	1	1	23	75
2 Hour Totals :	16	3	6		9	7	24		15	11	28	2	3	3		

Peak Period															
Direction	NBRT	NBRT	NBRT	NB	WBRT	WBRT	WBRT	SB	SBLT	SBLT	SBLT	WBLT	WBLT	WBLT	Total
7:15-8:15AM	12	2	0		1	2	13		7	4	16	1	0	1	59
			14				16				27			2	

The ability of a highway system to carry traffic is expressed in terms of its "service Level" at critical locations, usually intersections. Service levels are defined as follows:

- "A" Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
- "B" Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
- "C" Conditions of stable flow, delays are low to moderate, full use of peak direction signal phase(s) is experienced.
- "D" Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
- "E" Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
- "F" Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Roadway Type	LOS A	LOS B	LOS C	LOS D	LOS E
8 Lane Freeway	51,000	79,000	112,000	136,000	146,000
6 Lane Freeway	39,000	59,000	85,000	102,000	110,000
4 Lane Freeway	26,000	40,000	57,000	69,000	74,000
8 Lane Expressway	35,000	54,000	75,000	90,000	98,000
6 Lane Expressway	28,000	42,000	56,000	67,000	74,000
4 Lane Expressway	18,000	27,000	36,000	45,000	50,000
8 Lane Divided Arterial (with Left-Turn Lanes)	40,000	47,000	54,000	61,000	68,000
6 Lane Divided Arterial (with Left-Turn Lanes)	32,000	38,000	43,000	49,000	54,000
4 Lane Divided Arterial (with Left-Turn Lanes)	22,000	25,000	29,000	32,500	36,000
4 Lane Undivided Arterial (with Left-Turn Lanes)	19,000	22,000	25,500	28,000	31,500
4 Lane Undivided Arterial (without Left-Turn Lanes)	16,000	19,000	22,000	24,000	27,000
2 Lane Arterial (with Left-Turn Lanes)	11,000	12,500	14,500	16,000	18,000
2 Lane Arterial (without Left-Turn Lanes)	8,500	10,000	11,750	13,250	15,000
2 Lane Rural Highway	4,000	8,000	12,000	17,000	25,000
2 Lane Collector	6,000	7,500	9,000	10,500	12,000
2 Lane Local	1,200	1,400	1,600	1,800	2,000

Source data contained in the Highway Capacity Manual (2000HCM)

## TWO-WAY STOP SIGN CONTROLLED INTERSECTIONS

EXHIBIT 17-2. LEVEL-OF-SERVICE CRITERIA FOR TWSC INTERSECTIONS

Level of Service	Average Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

## ALL-WAY STOP SIGN CONTROLLED INTERSECTIONS

The level-of-service criteria are given in Exhibit 17-22. The criteria for AWSC intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS.

EXHIBIT 17-22. LEVEL-OF-SERVICE CRITERIA FOR AWSC INTERSECTIONS

Level of Service	Control Delay (s/veh)
A	0–10
B	> 10–15
C	> 15–25
D	> 25–35
E	> 35–50
F	> 50

## SIGNALIZED INTERSECTIONS

The average control delay per vehicle is estimated for each lane group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Exhibit 16-2.

EXHIBIT 16-2. LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #1 SR 227 / Existing Driveway

\*\*\*\*\*

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[ 13.0]

\*\*\*\*\*

Street Name: SR 227 Ex. Driveway

Approach:	North Bound					South Bound					East Bound			West Bound						
Movement:	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign			Stop Sign						
Rights:	Include					Include					Include			Include						
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	323	15	30	63	0	0	0	0	2	0	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	323	15	30	63	0	0	0	0	2	0	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:	0	414	19	38	81	0	0	0	0	3	0	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	414	19	38	81	0	0	0	0	3	0	23

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.2	7.3	7.0
FollowUpTim:	xxxxx	xxxx	xxxxx	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.2	4.7	4.0

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	433	xxxx	xxxxx	xxxx	xxxx	xxxxx	581	581	424
Potent Cap.:	xxxx	xxxx	xxxxx	1051	xxxx	xxxxx	xxxx	xxxx	xxxxx	370	337	496
Move Cap.:	xxxx	xxxx	xxxxx	1051	xxxx	xxxxx	xxxx	xxxx	xxxxx	360	325	496
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.05

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	478	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				13.0	
ApproachLOS:	*			*			*				B	

\*\*\*\*\*

Note: Queue reported is the number of cars per lane.

\*\*\*\*\*

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 SR 227 / Existing Driveway
\*\*\*\*\*

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 11.5]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows include North Bound, South Bound, East Bound, and West Bound details.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume across different approaches.

Critical Gap Module: Table with columns for Critical Gp, FollowUpTim across different approaches.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap across different approaches.

Level Of Service Module: Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS across different approaches.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #1 SR 227 / New Driveway

\*\*\*\*\*

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[ 13.2]

\*\*\*\*\*

Street Name: SR 227 New Driveway

Approach:	North Bound					South Bound					East Bound			West Bound						
Movement:	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign			Stop Sign						
Rights:	Include					Include					Include			Include						
Lanes:	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0

Volume Module:

Base Vol:	0	323	19	38	63	0	0	0	0	3	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	323	19	38	63	0	0	0	0	3	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:	0	414	24	49	81	0	0	0	0	4	0	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	414	24	49	81	0	0	0	0	4	0	29

Critical Gap Module:

Critical Gp:	xxxxx	xxxx	xxxxx	4.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.2	7.3	7.0
FollowUpTim:	xxxxx	xxxx	xxxxx	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.2	4.7	4.0

Capacity Module:

Cnflct Vol:	xxxx	xxxx	xxxxx	438	xxxx	xxxxx	xxxx	xxxx	xxxxx	604	604	426
Potent Cap.:	xxxx	xxxx	xxxxx	1046	xxxx	xxxxx	xxxx	xxxx	xxxxx	358	326	494
Move Cap.:	xxxx	xxxx	xxxxx	1046	xxxx	xxxxx	xxxx	xxxx	xxxxx	345	311	494
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.06

Level Of Service Module:

2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	471	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx				13.2	
ApproachLOS:	*			*			*				B	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 SR 227 / New Driveway
\*\*\*\*\*

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: B[ 11.7]

Street Name: SR 227 New Driveway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0

Volume Module:
Base Vol: 0 93 9 27 396 0 0 0 0 34 0 49
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 93 9 27 396 0 0 0 0 34 0 49
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87 0.87
PHF Volume: 0 107 10 31 455 0 0 0 0 39 0 56
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Volume: 0 107 10 31 455 0 0 0 0 39 0 56

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxx xxxxx 6.4 6.5 6.2
FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxx xxxxx 3.5 4.0 3.3

Capacity Module:
Cnflct Vol: xxxx xxxx xxxxx 117 xxxx xxxxx xxxx xxxx xxxxx 629 629 112
Potent Cap.: xxxx xxxx xxxxx 1453 xxxx xxxxx xxxx xxxx xxxxx 443 396 936
Move Cap.: xxxx xxxx xxxxx 1453 xxxx xxxxx xxxx xxxx xxxxx 436 388 936
Volume/Cap: xxxx xxxx xxxxx 0.02 xxxx xxxx xxxx xxxx xxxxx 0.09 0.00 0.06

Level of Service Module:
2Way95thQ: xxxx xxxx xxxxx 0.1 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx 7.5 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* \* \*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 636 xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 0.5 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 11.7 xxxxx
Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*
ApproachDel: xxxxxx xxxxxx xxxxxx 11.7
ApproachLOS: \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 SR 227 / New Driveway
\*\*\*\*\*

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C [ 15.3]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for SR 227 and New Driveway.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module: Table with columns for Critical Gp, FollowUpTim.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level Of Service Module: Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 SR 227 / New Driveway
\*\*\*\*\*

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 13.5]

Table with columns: Street Name, Approach, Movement, Control, Rights, Lanes. Rows for North Bound, South Bound, East Bound, West Bound.

Volume Module: Table with columns for Base Vol, Growth Adj, Initial Bse, User Adj, PHF Adj, PHF Volume, Reduct Vol, Final Volume.

Critical Gap Module: Table with columns for Critical Gp, FollowUpTim.

Capacity Module: Table with columns for Cnflct Vol, Potent Cap., Move Cap., Volume/Cap.

Level of Service Module: Table with columns for 2Way95thQ, Control Del, LOS by Move, Movement, Shared Cap., SharedQueue, Shrd ConDel, Shared LOS, ApproachDel, ApproachLOS.

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*
Intersection #1 SR 227 / New Driveway
\*\*\*\*\*

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C [ 15.8]
\*\*\*\*\*

Street Name: SR 227 New Driveway
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
Control: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 0 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0

Volume Module:
Base Vol: 0 452 19 38 88 0 0 0 0 3 0 23
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 452 19 38 88 0 0 0 0 3 0 23
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj: 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78 0.78
PHF Volume: 0 579 24 49 113 0 0 0 0 4 0 29
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 579 24 49 113 0 0 0 0 4 0 29

Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx 4.3 xxxx xxxxxx xxxxxx xxxx xxxxxx 7.2 7.3 7.0
FollowUpTim:xxxxx xxxx xxxxxx 2.4 xxxx xxxxxx xxxxxx xxxx xxxxxx 4.2 4.7 4.0

Capacity Module:
Cnflct Vol: xxxx xxxx xxxxxx 604 xxxx xxxxxx xxxx xxxx xxxxxx 802 802 592
Potent Cap.: xxxx xxxx xxxxxx 905 xxxx xxxxxx xxxx xxxx xxxxxx 267 244 390
Move Cap.: xxxx xxxx xxxxxx 905 xxxx xxxxxx xxxx xxxx xxxxxx 256 231 390
Volume/Cap: xxxx xxxx xxxxxx 0.05 xxxx xxxxxx xxxx xxxx xxxxxx 0.02 0.00 0.08

Level Of Service Module:
2Way95thQ: xxxx xxxx xxxxxx 0.2 xxxx xxxxxx xxxx xxxx xxxxxx xxxx xxxx xxxxxx
Control Del:xxxxx xxxx xxxxxx 9.2 xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx
LOS by Move: \* \* \* A \* \* \* \* \* \* \* \* \* \*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxxx xxxx xxxx xxxxxx xxxx xxxx xxxxxx xxxx 368 xxxxxx
SharedQueue:xxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx 0.3 xxxxxx
Shrd ConDel:xxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx xxxx xxxxxx xxxxxx 15.8 xxxxxx
Shared LOS: \*
ApproachDel: xxxxxx xxxxxx xxxxxx 15.8
ApproachLOS: \*

Note: Queue reported is the number of cars per lane.
\*\*\*\*\*

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #1 SR 227 / New Driveway

\*\*\*\*\*

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[ 13.6]

\*\*\*\*\*

Street Name:	SR 227			New Driveway								
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	0	1	0	1	0	0	0	0	0	1

Volume Module:												
Base Vol:	0	130	9	27	554	0	0	0	0	34	0	49
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	130	9	27	554	0	0	0	0	34	0	49
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	0	149	10	31	637	0	0	0	0	39	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	149	10	31	637	0	0	0	0	39	0	56

Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3

Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	160	xxxx	xxxxx	xxxx	xxxx	xxxxx	853	853	155
Potent Cap.:	xxxx	xxxx	xxxxx	1401	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	294	886
Move Cap.:	xxxx	xxxx	xxxxx	1401	xxxx	xxxxx	xxxx	xxxx	xxxxx	321	287	886
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.06

Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	515	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.6	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx				13.6	
ApproachLOS:	*			*			*				B	

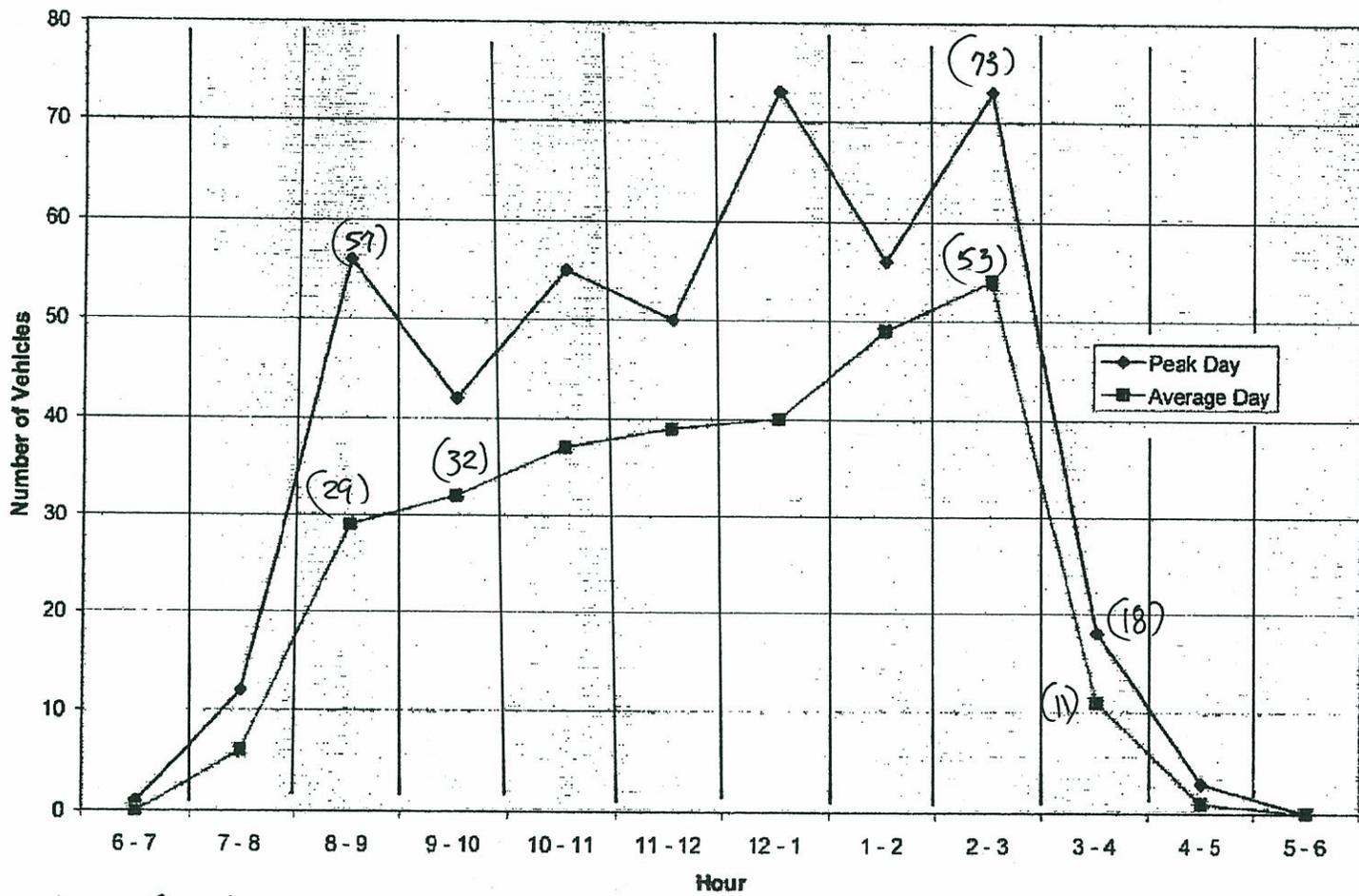
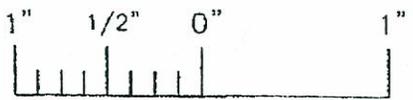
Note: Queue reported is the number of cars per lane.

**Site Vehicle Data <sup>1</sup>**  
**Cold Canyon Landfill**

Day	Average Vehicles per Day <sup>2</sup>												Average
	January	February	March	April	May	June	July	August	September	October	November	December	
Sunday	173	188	166	155	178	211	221	213	199	188	174	71	178
Monday	307	266	282	269	271	374	407	363	288	333	319	298	315
Tuesday	327	330	265	302	334	382	312	376	354	340	314	307	329
Wednesday	333	328	292	283	358	401	377	362	338	317	317	284	332
Thursday	327	323	306	300	331	361	380	374	341	322	270	283	326
Friday	374	335	271	317	351	407	399	350	358	345	313	333	346
Saturday	267	261	185	233	282	282	303	283	261	238	213	190	250
	2108	2051	1767	1859	2105	2410	2399	2321	2139	2083	1920	1766	
	Average Vehicles per Hour <sup>2</sup> $f = 330 \div 301 = 1.96$ (USE + 10%)												
	January	February	March	April	May	June	July	August	September	October	November	December	Average
6 am - 7 am	0	1	0	0	0	0	0	1	0	0	0	0	0
7 am - 8 am	5	6	5	5	6	6	6	6	5	6	5	5	6
8 am - 9 am	28	28	25	26	30	36	35	32	28	27	27	23	29
9 am - 10 am	31	33	29	27	33	38	35	35	32	31	30	28	32
10 am - 11 am	39	35	30	32	38	44	43	42	41	36	34	30	37
11 am - 12 pm	42	37	31	32	39	46	46	45	41	39	36	33	39
12 pm - 1 pm	40	38	35	36	40	45	47	45	40	39	38	33	40
1 pm - 2 pm	53	51	47	44	49	53	51	53	49	50	47	43	49
2 pm - 3 pm	57	50	45	48	54	64	61	61	58	57	50	43	54
3 pm - 4 pm	11	9	8	11	12	15	14	14	12	11	8	8	11
4 pm - 5 pm	1	1	1	1	1	2	1	1	1	1	1	0	1
5 pm - 6 pm	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	307	289	256	262	302	349	339	335	307	297	276	246	298

<sup>1</sup> Site vehicle data based on records for 2006.

<sup>2</sup> Includes vehicles delivering wastes to site (landfill, resource recovery park, compost facility, materials recovery facility) and vehicles transporting recovered materials from the site.



$f = 73/57 = 1.28 (Pk)$

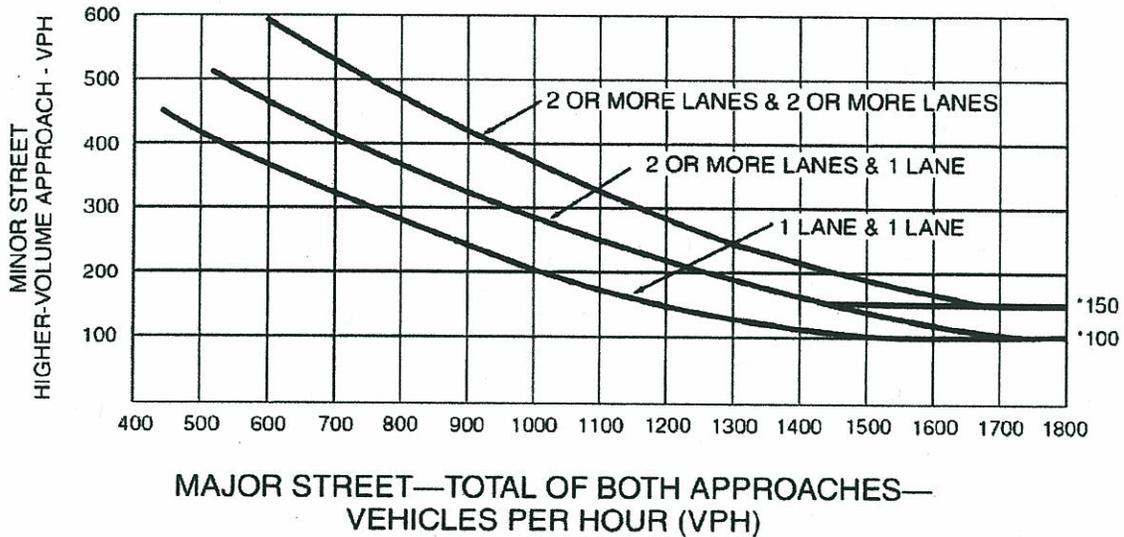
$f = 53/32 = 1.65 (Ava.)$

**Shaw** Environmental, Inc.  
This drawing represents intellectual property of Shaw Environmental, Inc. Any modification to the original by other than Shaw Environmental, Inc. personnel violates the original purpose and use and is registered void. Shaw Environmental, Inc. will not be held liable for any changes made to this document without express written consent of the originator.

DATE JUN. 2007  
 DWN KAB  
 APP APW  
 REV  
 PROJECT NO.  
 115271

**FIGURE 11**  
 COLD CANYON LAND FILL, INC.  
 COLD CANYON LANDFILL  
 SAN LUIS OBISPO COUNTY, CALIFORNIA  
**TRAFFIC DATA**

**Figure 4C-3. Warrant 3, Peak Hour**

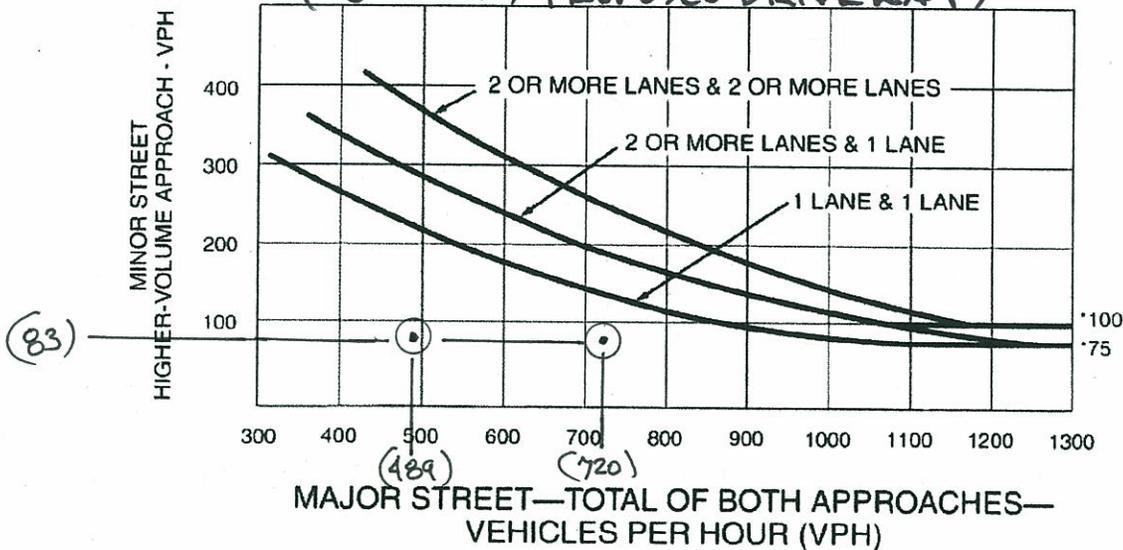


\*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 70 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

(SR 227 / PROPOSED DRIVEWAY)



\*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

WB (cm)

BOTH (cm)

EXIST + (A)  
 CUMULAT (B)

83  
 83

489  
 720

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street  
 Hollister, California 95023  
 (831) 638-9260 / FAX (831) 638-9268

## Cold Canyon Landfill Expansion Project; San Luis Obispo, CA SR 227 @ Existing Dwy. (9:30 - 10:05 AM-12/5/07) - Speed Data (MPH):

Data #	Northbound (NB) - (a)	
1.	53	
2.	46	
3.	56	
4.	53	
5.	44	
6.	63	
7.	46	
8.	56	
9.	58	
10.	56	
11.	44	
12.	48	
13.	49	
14.	58	
15.	50	
16.	58	
17.	46	
18.	44	
19.	49	
20.	49	
21.	59	
22.	50	
23.	49	
24.	51	
25.	51	
<b>Totals:</b>	<b>1286</b>	

Data #	Southbound (SB)	
1.	55	
2.	50	
3.	67	
4.	62	
5.	58	
6.	46	
7.	54	
8.	45	
9.	59	
10.	45	
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		
25.		
<b>Totals:</b>	<b>541</b>	

(a) NB vehicles go slower when trucks present

Dry & Clear

### Average Travel Speeds :

Northbound (NB) : 1286 / 25 =

Southbound (SB) : 541 / 10 =

Dry & Clear

**51.4 MPH**

**54.1 MPH**

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street  
 Hollister, California 95023  
 (831) 638-9260 / FAX (831) 638-9268

## Cold Canyon Landfill Expansion Project; San Luis Obispo, CA SR 227 @ Proposed Dwy. (1:30 - 2:00 PM-12/5/07) - Speed Data (MPH):

Data #	Northbound (NB) - (a)	
1.	72	57
2.	63	58
3.	57	56
4.	56	52
5.	51	65
6.	56	
7.	60	
8.	58	
9.	61	
10.	67	
11.	61	
12.	59	
13.	62	
14.	57	
15.	61	
16.	71	
17.	56	
18.	61	
19.	57	
20.	61	
21.	65	
22.	55	
23.	60	
24.	51	
25.	61	
<b>Totals:</b>	<b>1499</b>	<b>288</b>

Data #	Southbound (SB)	
1.	47	54
2.	52	61
3.	63	59
4.	62	58
5.	55	65
6.	50	
7.	63	
8.	62	
9.	58	
10.	66	
11.	62	
12.	59	
13.	63	
14.	59	
15.	59	
16.	60	
17.	67	
18.	59	
19.	58	
20.	56	
21.	56	
22.	53	
23.	53	
24.	58	
25.	58	
<b>Totals:</b>	<b>1458</b>	<b>297</b>

Dry & Clear

### Average Travel Speeds :

Northbound (NB) :  $(1499+288) / 30 =$

**59.6 MPH**

Southbound (SB) :  $(1458+297) / 30 =$

**58.5 MPH**

Primary Rd RT 227 Distance (ft) 1 Direction Secondary Rd CORBETT CANYON NCIC 9745 State Hwy? Y Route 227 Postmile Prefix R Postmile 6.70 Side of Hwy S  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 5216 Collision Date 20020601 Time 0310 Day SAT  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20021024  
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev FNCTNG Loc Type I Ramp/Int 5

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	15	M	W	HNBD		RAN OFF RD	W	A		0100	CHRY	1996		-	D	J		G							

Primary Rd RT 227 Distance (ft) 1584 Direction N Secondary Rd PATCHETT RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 5.630 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 15840 Collision Date 20020621 Time 0840 Day FRI  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20021120  
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	30	M	O	HNBD		RAN OFF RD	N	A		0100	PONTI	2000		-	C	N		G		DRVR	COMP PN	30	M	1	G	-	0

Primary Rd RT 227 Distance (ft) 36 Direction S Secondary Rd TOLOSA PL NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 6.20 Side of Hwy S  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 14622 Collision Date 20021115 Time 2142 Day FRI  
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20021115  
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	41	F	W	HBD-UI		RAN OFF RD	S	A		0700	TOYOT	1990		-	D	A	22350	K	G	PASS		15	F	3	G	-	0

Primary Rd RT 227 Distance (ft) 1 Direction Secondary Rd PATCHETT RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 5.290 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 10820 Collision Date 20020722 Time 2000 Day MON  
 Primary Collision Factor R-O-W AUTO Violation 21804A Collision Type BROADSIDE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20030303  
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type I Ramp/Int 5

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	43	M	W	HNBD		ENT TRAF	W	D		2200	DODGE	1996		-	D	F		G	PASS		13	M	3	G	-	0
2	DRVR	26	M	W	HNBD		PROC ST	N	A		0100	HYUND	2000		-	D	N		G	PASS	OTH VIS	24	F	3	G	-	0
																				PASS		1	M	6	Q	-	0
																				PASS		1	M	4	Q	-	0

Primary Rd RT 227 Distance (ft) 528 Direction S Secondary Rd CORBETT CANYON NCIC 9745 State Hwy? Y Route 227 Postmile Prefix R Postmile 6.60 Side of Hwy S  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 12259 Collision Date 20020821 Time 0130 Day WED  
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20030303  
 Weather1 FOG Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	23	M	W	IMP UNK	IMP UNK	PROC ST	S	A		0100	OLDSM	1996		-	D	A	22350	-	L						

Primary Rd RT 227 Distance (ft) 21 Direction S Secondary Rd PRICE CANYON RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 7.110 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 11259 Collision Date 20020827 Time 1635 Day TUE  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20030304  
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	34	M	H	HNBD		PROC ST	N	A		0100	CHEVR	1992		-	D	N		G	PASS		27	M	3	G	-	0
2	DRVR	51	F	A	HNBD		STOPPED	N	A		0700	LEXUS	2002		-	D	N		G								



Report run on: 7/17/2007

#700970 04/01/02 - PROV. 03/31/07 COLLISIONS OCCURRED ON STATE ROUTE 227 BET. NOYES RD (MPM 4.280) TO PRICE CYN RD (MPM 7.120), SAN LUIS OBISPO COUNTY

Total Count: 46

Primary Rd	RT 227	Distance (ft)	525	Direction	N	Secondary Rd	NOYES RD	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	-	Postmile	4.380	Side of Hwy	S							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	10750	Collision Date	20030502	Time	0815	Day	FRI								
Primary Collision Factor	UNSAFE SPEED	Violation	22350	Collision Type	HIT OBJECT	Severity	INJURY	# Killed	0	# Injured	1	Tow Away?	Y	Process Date	20040112	Spec Cond	0									
Weather1	CLOUDY	Weather2	RAINING	Rdwy Surface	WET	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	FUNCTNG	Loc Type	H	Ramp/Int	-											
Hit and Run		Motor Veh Involved With	FIXED OBJ	Lighting	DAYLIGHT	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	33	F	W	HNBD	RAN OFF RD	S	A	0100	VOLKS	1998	-	C	N	-	G	-	DRVR	OTH VIS	33	F	1	G	-	0	
Primary Rd	RT 227	Distance (ft)	10	Direction	N	Secondary Rd	NOYES RD	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	-	Postmile	4.290	Side of Hwy	N							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	15608	Collision Date	20030525	Time	2500	Day	SUN								
Primary Collision Factor	IMPROP TURN	Violation	22107	Collision Type	HIT OBJECT	Severity	PDO	# Killed	0	# Injured	0	Tow Away?	N	Process Date	20040112	Spec Cond	0									
Weather1	CLOUDY	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	FUNCTNG	Loc Type	H	Ramp/Int	-											
Hit and Run	MSDMNR	Motor Veh Involved With	FIXED OBJ	Lighting	DARK - NO ST LTS	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	998		IMP UNK	IMP UNK	RAN OFF RD	E	-	9900	-	-	D	N	-	B	-	-	-	-	-						
Primary Rd	RT 227	Distance (ft)	1	Direction	N	Secondary Rd	CORBETT CANYON	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	R	Postmile	6.70	Side of Hwy	S							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	13733	Collision Date	20030530	Time	1945	Day	FRI								
Primary Collision Factor	UNSAFE SPEED	Violation	22350	Collision Type	HIT OBJECT	Severity	INJURY	# Killed	0	# Injured	1	Tow Away?	Y	Process Date	20040112	Spec Cond	0									
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	FUNCTNG	Loc Type	I	Ramp/Int	5											
Hit and Run		Motor Veh Involved With	FIXED OBJ	Lighting	DAYLIGHT	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	16	F	W	HNBD	RAN OFF RD	W	A	0100	CHEVR	1993	-	D	A	22450A	-	G	-	DRVR	OTH VIS	16	F	1	G	-	0
Primary Rd	RT 227	Distance (ft)	1	Direction	N	Secondary Rd	PATCHETT RD	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	-	Postmile	5.280	Side of Hwy	S							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	15144	Collision Date	20030705	Time	1745	Day	SAT								
Primary Collision Factor	IMPROP TURN	Violation	22107	Collision Type	SIDESWIPE	Severity	INJURY	# Killed	0	# Injured	2	Tow Away?	Y	Process Date	20040426	Spec Cond	0									
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	NT PRS/FCTR	Loc Type	H	Ramp/Int	-											
Hit and Run		Motor Veh Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	19	M	H	HNBD	LFT TURN	S	C	0200	KAWAS	2003	-	D	N	-	W	-	DRVR	COMP PN	19	M	1	W	-	1	
2	DRVR	20	M	H	HNBD	PASSING	S	C	0200	HONDA	1991	-	D	A	21750	-	W	-	DRVR	COMP PN	20	M	1	W	-	1
Primary Rd	RT 227	Distance (ft)	1584	Direction	N	Secondary Rd	PATCHETT RD	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	-	Postmile	5.590	Side of Hwy	N							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	13854	Collision Date	20030820	Time	1155	Day	WED								
Primary Collision Factor	WRONG SIDE	Violation	21460A	Collision Type	SIDESWIPE	Severity	INJURY	# Killed	0	# Injured	1	Tow Away?	N	Process Date	20040426	Spec Cond	0									
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	NT PRS/FCTR	Loc Type	H	Ramp/Int	-											
Hit and Run		Motor Veh Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	19	M	W	HNBD	OPPOS LN	N	A	0100	HYUND	2003	-	D	A	22350	-	G	-	PASS	COMP PN	19	F	3	G	-	0
2	DRVR	47	M	H	HNBD	PROC ST	S	F	2700	-	1999	-	D	N	-	G	-	PASS		23	M	3	G	-	0	
Primary Rd	RT 227	Distance (ft)	1	Direction	N	Secondary Rd	PRICE CANYON RD	NCIC	9745	State Hwy?	Y	Route	227	Postmile Prefix	-	Postmile	7.120	Side of Hwy	S							
City	UNINCORP.	County	SAN LUIS OBISPC	Population	9	Rpt Dist	Beat 040	Type 1	CalTrans Dist	5	Badge	14910	Collision Date	20030825	Time	1025	Day	MON								
Primary Collision Factor	R-O-W AUTO	Violation	21801A	Collision Type	BROADSIDE	Severity	INJURY	# Killed	0	# Injured	3	Tow Away?	Y	Process Date	20040426	Spec Cond	0									
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Cntrl Dev	FUNCTNG	Loc Type	I	Ramp/Int	5											
Hit and Run		Motor Veh Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action																				
PARTY INFO										VICTIM INFO																
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	77	F	W	HNBD	LFT TURN	N	A	0800	NISSA	1994	-	D	N	-	G	-	DRVR	COMP PN	82	F	1	G	-	0	
2	DRVR	23	F	W	HNBD	PROC ST	S	A	0100	FORD	1983	-	D	N	-	G	-	DRVR	COMP PN	998	F	3	G	-	0	

3

4

Report run on: 7/17/2007

#700970 04/01/02 - PROV. 03/31/07 COLLISIONS OCCURRED ON STATE ROUTE 227 BET. NOYES RD (MPM 4.280) TO PRICE CYN RD (MPM 7.120), SAN LUIS OBISPO COUNTY

Case Listing

Total Count: 46

Page 4

Primary Rd RT 227	Distance (ft) 2640	Direction S	Secondary Rd CORBETT CANYON	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 6.20	Side of Hwy N	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 15840	Collision Date 20031011	Time 1720	Day SAT
Primary Collision Factor IMPROP TURN	Violation 22107	Collision Type HIT OBJECT	Severity PDO	# Killed 0	# Injured 0	Tow Away? Y	Process Date 20040818	Weather1 CLEAR	Weather2	Rdwy Surface DRY
Hit and Run	Motor Veh Involved With FIXED OBJ	Lighting DAYLIGHT	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 25 F	W HBD-UI	RAN OFF RD S	A	0700 LAND	2002 - C A 22350	-	G -			
VICTIM INFO										
Primary Rd RT 227	Distance (ft) 1056	Direction N	Secondary Rd PATCHETT RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 5.490	Side of Hwy N	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 10820	Collision Date 20031116	Time 1830	Day SUN
Primary Collision Factor IMPROP TURN	Violation 22107	Collision Type SIDESWIPE	Severity PDO	# Killed 0	# Injured 0	Tow Away? N	Process Date 20040818	Weather1 CLEAR	Weather2	Rdwy Surface DRY
Hit and Run MSDMNR	Motor Veh Involved With OTHER MV	Lighting DARK - NO ST LTS	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 998	IMP UNK IMP UNK	PASSING	N A	0700 FORD	1993 - 3 N	-	-			
2 DRVR 54 F	W HNB	PROC ST	N A	0100 FORD	1994 - 3 N	-	M G	PASS	18 - 3	M G 0
								PASS	13 M 6	M G 0
VICTIM INFO										
Primary Rd RT 227	Distance (ft) 1584	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.580	Side of Hwy S	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 15144	Collision Date 20031127	Time 2315	Day THU
Primary Collision Factor UNSAFE SPEED	Violation 22350	Collision Type OVERTURNED	Severity INJURY	# Killed 0	# Injured 1	Tow Away? Y	Process Date 20040818	Weather1 CLEAR	Weather2	Rdwy Surface DRY
Hit and Run	Motor Veh Involved With NON-CLSN	Lighting DARK - NO ST LTS	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 18 M	W HNB	RAN OFF RD S	C	0200 HONDA	1999 - 3 N	-	P W	DRVR OTH VIS	18 M 1	P W 1
VICTIM INFO										
Primary Rd RT 227	Distance (ft) 1	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.280	Side of Hwy N	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 13937	Collision Date 20040219	Time 0030	Day THU
Primary Collision Factor STOP SGN SIG	Violation 22450A	Collision Type HIT OBJECT	Severity INJURY	# Killed 0	# Injured 2	Tow Away? Y	Process Date 20041228	Weather1 CLEAR	Weather2	Rdwy Surface DRY
Hit and Run	Motor Veh Involved With FIXED OBJ	Lighting DARK - NO ST LTS	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev FNCTNG	Loc Type I	Ramp/Int 5	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 20 F	O HNB	RAN OFF RD E	A	0100 CHEVR	1996 - 3 J	-	L G	PASS OTH VIS	19 M 3	L G 0
								PASS COMP PN	19 F 6	P G 0
VICTIM INFO										
Primary Rd RT 227	Distance (ft) 1056	Direction N	Secondary Rd CORBETT CANYON	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix R	Postmile 6.910	Side of Hwy N	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 13583	Collision Date 20040227	Time 2030	Day FRI
Primary Collision Factor DRVR ALC DRG	Violation 23152A	Collision Type OVERTURNED	Severity PDO	# Killed 0	# Injured 0	Tow Away? Y	Process Date 20041229	Weather1 CLOUDY	Weather2	Rdwy Surface DRY
Hit and Run	Motor Veh Involved With NON-CLSN	Lighting DARK - ST LTS	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 48 F	W HBD-UI	RAN OFF RD N	A	0100 DATSU	1980 - 3 A 22107	-	P G			
VICTIM INFO										
Primary Rd RT 227	Distance (ft) 730	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.420	Side of Hwy S	
City UNINCORP.	County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 13583	Collision Date 20040323	Time 0040	Day TUE
Primary Collision Factor DRVR ALC DRG	Violation 23152A	Collision Type HIT OBJECT	Severity PDO	# Killed 0	# Injured 0	Tow Away? Y	Process Date 20050110	Weather1 CLOUDY	Weather2	Rdwy Surface SNOWY OR ICY
Hit and Run	Motor Veh Involved With FIXED OBJ	Lighting DARK - NO ST LTS	Ped Action	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -	Spec Cond 0	
PARTY INFO										
Party Type Age Sex	Race Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh CHP Veh Make	Year Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age Sex Seat Pos Safety Equip Ejected
1F DRVR 29 M	O HBD-UI	RAN OFF RD S	D	2200 NISSA	1997 - 3 A 22107	-	L G			
VICTIM INFO										

5

Report run on: 7/17/2007

#700970 04/01/02 - PROV. 03/31/07 COLLISIONS OCCURRED ON STATE ROUTE 227 BET. NOYES RD (MPM 4.280) TO PRICE CYN RD (MPM 7.120), SAN LUIS OBISPO COUNTY

Total Count: 46

6

Primary Rd RT 227		Distance (ft) 85	Direction S	Secondary Rd COLD CANYON LAN	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 5.880	Side of Hwy S	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 011461	Collision Date 20040601	Time 1610	Day TUE
Primary Collision Factor IMPROP TURN		Violation 22107	Collision Type BROADSIDE	Severity PDO	# Killed 0	# Injured 0	Tow Away? N	Process Date 20050316			
Weather1 CLEAR		Weather2	Rdwy Surface DRY	Rdwy Cond1 CONS ZONE	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With OTHER MV	Lighting DAYLIGHT	Ped Action	Cntrl Dev FNCTNG	Loc Type H	Ramp/Int -				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	22	M	W	HNBD	U-TURN	S	A	0100	VOLKS	1997
2	DRVR	42	M	H	HNBD	PROC ST	S	F	2700	WHITE	1987
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	51	M	W	HNBD	LFT TURN	E	F	2700	KENWO2004	2004
2	DRVR	27	M	A	HNBD	PROC ST	N	A	0100	HONDA	2000
Primary Rd RT 227		Distance (ft) 1	Direction S	Secondary Rd PRICE CANYON RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 7.120	Side of Hwy N	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 10927	Collision Date 20040603	Time 0705	Day THU
Primary Collision Factor R-O-W AUTO		Violation 21801A	Collision Type BROADSIDE	Severity PDO	# Killed 0	# Injured 0	Tow Away? N	Process Date 20050307			
Weather1 CLEAR		Weather2	Rdwy Surface DRY	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With OTHER MV	Lighting DAYLIGHT	Ped Action	Cntrl Dev FNCTNG	Loc Type I	Ramp/Int 5				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	51	M	W	HNBD	LFT TURN	E	F	2700	KENWO2004	2004
2	DRVR	27	M	A	HNBD	PROC ST	N	A	0100	HONDA	2000
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	16	M	O	HNBD	RAN OFF RD	S	A	0100	SAAB	1991
2	DRVR	27	M	A	HNBD	PROC ST	N	A	0100	HONDA	2000
Primary Rd RT 227		Distance (ft) 792	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.390	Side of Hwy S	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 011461	Collision Date 20040705	Time 2120	Day MON
Primary Collision Factor IMPROP TURN		Violation 22107	Collision Type HIT OBJECT	Severity PDO	# Killed 0	# Injured 0	Tow Away? Y	Process Date 20050502			
Weather1 CLEAR		Weather2	Rdwy Surface DRY	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With FIXED OBJ	Lighting DARK - NO ST LTS	Ped Action	Cntrl Dev FNCTNG	Loc Type H	Ramp/Int -				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	16	M	O	HNBD	RAN OFF RD	S	A	0100	SAAB	1991
2	DRVR	27	M	A	HNBD	PROC ST	N	A	0100	HONDA	2000
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	19	M	W	HBD-UI	RAN OFF RD	S	A	0700	JEEP	1998
2	DRVR	27	M	A	HNBD	PROC ST	N	A	0100	HONDA	2000
Primary Rd RT 227		Distance (ft) 500	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.370	Side of Hwy S	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 10820	Collision Date 20040718	Time 0130	Day SUN
Primary Collision Factor DRVR ALC/DRG		Violation 23152A	Collision Type HIT OBJECT	Severity INJURY	# Killed 0	# Injured 1	Tow Away? Y	Process Date 20050110			
Weather1 CLEAR		Weather2	Rdwy Surface DRY	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With FIXED OBJ	Lighting DARK - NO ST LTS	Ped Action	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	19	M	W	HBD-UI	RAN OFF RD	S	A	0700	JEEP	1998
2	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	19	M	W	HBD-UI	RAN OFF RD	S	A	0700	JEEP	1998
2	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
Primary Rd RT 227		Distance (ft) 1056	Direction N	Secondary Rd NOYES RD	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix -	Postmile 4.480	Side of Hwy N	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 14910	Collision Date 20040827	Time 0745	Day FRI
Primary Collision Factor UNSAFE SPEED		Violation 22350	Collision Type OVERTURNED	Severity PDO	# Killed 0	# Injured 0	Tow Away? N	Process Date 20050502			
Weather1 CLEAR		Weather2	Rdwy Surface DRY	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With NON-CLSN	Lighting DAYLIGHT	Ped Action	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
2	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
2	DRVR	25	M	H	HNBD	PROC ST	N	C	0200	KAWAS	2004
Primary Rd RT 227		Distance (ft) 1056	Direction S	Secondary Rd CORBETT CANYON	NCIC 9745	State Hwy? Y	Route 227	Postmile Prefix R	Postmile 6.50	Side of Hwy S	
City UNINCORP.		County SAN LUIS OBISPO	Population 9	Rpt Dist	Beat 040	Type 1	CalTrans Dist 5	Badge 13830	Collision Date 20041203	Time 0935	Day FRI
Primary Collision Factor IMPROP TURN		Violation 22107	Collision Type OVERTURNED	Severity PDO	# Killed 0	# Injured 0	Tow Away? Y	Process Date 20050718			
Weather1 CLEAR		Weather2	Rdwy Surface	Rdwy Cond1 NO UNUSL CND	Rdwy Cond2	Spec Cond 0					
Hit and Run		Motor Veh Involved With NON-CLSN	Lighting DAYLIGHT	Ped Action	Cntrl Dev NT PRS/FCTR	Loc Type H	Ramp/Int -				
PARTY INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	49	F	W	HNBD	RAN OFF RD	S	A	0100	OTHER	1989
2	DRVR	49	F	W	HNBD	RAN OFF RD	S	A	0100	OTHER	1989
VICTIM INFO											
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year
1F	DRVR	49	F	W	HNBD	RAN OFF RD	S	A	0100	OTHER	1989
2	DRVR	49	F	W	HNBD	RAN OFF RD	S	A	0100	OTHER	1989

Primary Rd RT 227 Distance (ft) 1 Direction Secondary Rd NOYES RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 4.280 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPC Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 14508 Collision Date 20050207 Time 0234 Day MON  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20050817  
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev FNCTNG Loc Type I Ramp/Int 5

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	44	M	H	HBD-UNK	RGT TURN	E	D	2200	CHEVR	1985	- 3	A 22107	-	M H	DRVR	OTH VIS	44	M	1	M H	0

Primary Rd RT 227 Distance (ft) 792 Direction N Secondary Rd NOYES RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 4.420 Side of Hwy S  
 City SAN LUIS OBISPC County SAN LUIS OBISPC Population 4 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 013952 Collision Date 20050213 Time 1810 Day SUN  
 Primary Collision Factor WRONG SIDE Violation 21460A Collision Type SIDESWIPE Severity INJURY # Killed 0 # Injured 3 Tow Away? Y Process Date 20050817  
 Weather1 CLOUDY Weather2 Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	27	M	A	HNBD	OPOS LN	S	A	0100	TOYOT	1996	- 3	A 22350	-	L G	DRVR	OTH VIS	27	M	1	L G	0
2	DRVR	57	M	W	HNBD	PROC ST	N	A	0800	CHEVR	2002	- 3	N	-	M G	DRVR	OTH VIS	57	M	1	M G	0

Primary Rd RT 227 Distance (ft) 1056 Direction S Secondary Rd PATCHETT RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 5.090 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPC Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 013952 Collision Date 20050309 Time 2015 Day WED  
 Primary Collision Factor NOT DRIVER Violation Collision Type OTHER Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20050915  
 Weather1 FOG Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With ANIMAL Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1	DRVR	998	F		HNBD	PROC ST	-	-	-00	-	-	- 3	N	-	P G							

Primary Rd PRICE CANYON RI Distance (ft) 100 Direction S Secondary Rd RT 227 NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 7.10 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPC Population 9 Rpt Dist Beat 046 Type 2 CalTrans Dist 5 Badge 13830 Collision Date 20050413 Time 1135 Day WED  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20051011  
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	46	F	W	HNBD	PROC ST	N	A	0100	LEXUS	1992	- 3	N	-	M G							
2	DRVR	35	M	B	HNBD	PROC ST	N	A	0100	AUDI	2001	- 3	N	-	M G							

Primary Rd RT 227 Distance (ft) 528 Direction N Secondary Rd NOYES RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 4.380 Side of Hwy S  
 City UNINCORP. County SAN LUIS OBISPC Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 14996 Collision Date 20050625 Time 1830 Day SAT  
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20051117  
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	21	M	W	HNBD	RAN OFF RD S	C		0200	HONDA	1992	- 3	N	-	P W	DRVR	OTH VIS	21	M	1	P W	1

Primary Rd RT 227 Distance (ft) 634 Direction S Secondary Rd PATCHETT RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 5.160 Side of Hwy N  
 City UNINCORP. County SAN LUIS OBISPC Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 13937 Collision Date 20050825 Time 1500 Day THU  
 Primary Collision Factor OTHER HAZ Violation 23114A Collision Type OTHER Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20060202  
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0  
 Hit and Run MSDMNR Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	998			HBD-UNK	PROC ST	N	D	2200	-	-	- 3	N	-	- B							

7

3

Primary Rd RT 227	Distance (ft) 528		Direction N		Secondary Rd EAST FORK PISMO		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 5.370		Side of Hwy S							
City UNINCORP.	County SAN LUIS OBISPO		Population 9		Rpt Dist		Beat 040		Type 1		CalTrans Dist 5		Badge 13583		Collision Date 20051019		Time 1615 Day WED							
Primary Collision Factor IMPROP TURN	Violation 22107		Collision Type SIDESWIPE		Severity PDO		# Killed 0		# Injured 0		Tow Away? N		Process Date 20060317		Spec Cond 0									
Weather1 CLEAR	Weather2		Rdwy Surface DRY		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev NT PRS/FCTR		Loc Type H		Ramp/Int -											
Hit and Run	Motor Veh Involved With OTHER MV		Lighting DAYLIGHT		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 53	Sex M	Race W	Sobriety1 HNBD	Sobriety2	Move PASSING	Pre Coll S	Dir D	SW Veh 2200	CHP Veh CHEVR	Year 1997	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role M G	Ext of Inj PASS	Age 20	Sex M	Seat Pos 3	Safety Equip M G	Ejected 0			
2	DRVR 85	M	W	HNBD		PASSING	S	A	0100	CADIL	2001	-	3	N	-	M	G							
Primary Rd RT 227	Distance (ft) 784		Direction N		Secondary Rd NOYES RD		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 4.430		Side of Hwy N							
City UNINCORP.	County SAN LUIS OBISPO		Population 9		Rpt Dist		Beat 040		Type 1		CalTrans Dist 5		Badge 15840		Collision Date 20060101		Time 0815 Day SUN							
Primary Collision Factor UNSAFE SPEED	Violation 22350		Collision Type OVERTURNED		Severity INJURY		# Killed 0		# Injured 1		Tow Away? N		Process Date 20060731		Spec Cond 0									
Weather1 CLOUDY	Weather2		Rdwy Surface WET		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev NT PRS/FCTR		Loc Type H		Ramp/Int -											
Hit and Run	Motor Veh Involved With NON-CLSN		Lighting DAYLIGHT		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 62	Sex F	Race W	Sobriety1 HNBD	Sobriety2	Move PROC ST	Pre Coll N	Dir C	SW Veh 0200	CHP Veh SUZUK	Year 2002	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role P W	Ext of Inj DRVR OTH VIS	Age 62	Sex F	Seat Pos 1	Safety Equip P W	Ejected 3			
2	DRVR 85	M	W	HNBD		PASSING	S	A	0100	CADIL	2001	-	3	N	-	M	G							
Primary Rd RT 227	Distance (ft) 528		Direction N		Secondary Rd NOYES RD		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 4.380		Side of Hwy S							
City UNINCORP.	County SAN LUIS OBISPO		Population 9		Rpt Dist		Beat 040		Type 1		CalTrans Dist 5		Badge 13583		Collision Date 20060216		Time 2218 Day THU							
Primary Collision Factor IMPROP TURN	Violation 22107		Collision Type HIT OBJECT		Severity PDO		# Killed 0		# Injured 0		Tow Away? Y		Process Date 20060616		Spec Cond 0									
Weather1 CLEAR	Weather2		Rdwy Surface DRY		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev NT PRS/FCTR		Loc Type H		Ramp/Int -											
Hit and Run	Motor Veh Involved With FIXED OBJ		Lighting DARK - NO ST LTS		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 22	Sex M	Race H	Sobriety1 HNBD	Sobriety2	Move RAN OFF RD	Pre Coll S	Dir A	SW Veh 0100	CHP Veh MERCU	Year 2000	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role L G	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
2	DRVR 40	F	W	HNBD		STOPPED	E	A	0100	TOYOT	2004	-	3	N	-	M	G	DRVR COMP PN	40	F	1	M	G	0
3	DRVR 64	M	W	HNBD		STOPPED	E	A	0800	FORD	1987	-	3	N	-	P	G	DRVR COMP PN	64	M	1	P	G	0
Primary Rd RT 227	Distance (ft) 114		Direction W		Secondary Rd RT 227		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 7.120		Side of Hwy N							
City UNINCORP.	County SAN LUIS OBISPO		Population 9		Rpt Dist		Beat 046		Type 2		CalTrans Dist 5		Badge 10927		Collision Date 20060927		Time 1505 Day WED							
Primary Collision Factor UNSAFE SPEED	Violation 22350		Collision Type REAR END		Severity INJURY		# Killed 0		# Injured 2		Tow Away? N		Process Date 20070122		Spec Cond 0									
Weather1 CLEAR	Weather2		Rdwy Surface DRY		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev FNCTNG		Loc Type I		Ramp/Int 6											
Hit and Run	Motor Veh Involved With OTHER MV		Lighting DAYLIGHT		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 39	Sex M	Race W	Sobriety1 HNBD	Sobriety2	Move PROC ST	Pre Coll E	Dir D	SW Veh 2200	CHP Veh CHEVR	Year 2003	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role M G	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
2	DRVR 40	F	W	HNBD		STOPPED	E	A	0100	TOYOT	2004	-	3	N	-	M	G	DRVR COMP PN	40	F	1	M	G	0
3	DRVR 64	M	W	HNBD		STOPPED	E	A	0800	FORD	1987	-	3	N	-	P	G	DRVR COMP PN	64	M	1	P	G	0
Primary Rd RT 227	Distance (ft) 1056		Direction N		Secondary Rd NOYES RD		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 4.480		Side of Hwy N							
City GROVER BEACH	County SAN LUIS OBISPO		Population 3		Rpt Dist		Beat 040		Type 1		CalTrans Dist 5		Badge 15144		Collision Date 20061005		Time 0846 Day THU							
Primary Collision Factor IMPROP TURN	Violation 22107		Collision Type HIT OBJECT		Severity INJURY		# Killed 0		# Injured 1		Tow Away? Y		Process Date 20070406		Spec Cond 0									
Weather1 CLOUDY	Weather2		Rdwy Surface WET		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev NT PRS/FCTR		Loc Type H		Ramp/Int -											
Hit and Run	Motor Veh Involved With FIXED OBJ		Lighting DAYLIGHT		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 20	Sex M	Race W	Sobriety1 HNBD	Sobriety2	Move RAN OFF RD	Pre Coll N	Dir A	SW Veh 0100	CHP Veh VOLVO	Year 1987	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role A G	Ext of Inj DRVR OTH VIS	Age 20	Sex M	Seat Pos 1	Safety Equip A G	Ejected 0			
2	DRVR 40	F	W	HNBD		STOPPED	E	A	0100	TOYOT	2004	-	3	N	-	M	G	DRVR COMP PN	40	F	1	M	G	0
3	DRVR 64	M	W	HNBD		STOPPED	E	A	0800	FORD	1987	-	3	N	-	P	G	DRVR COMP PN	64	M	1	P	G	0
Primary Rd RT 227	Distance (ft) 528		Direction N		Secondary Rd TOLOSA PL		NCIC 9745		State Hwy? Y		Route 227		Postmile Prefix -		Postmile 6.30		Side of Hwy S							
City UNINCORP.	County SAN LUIS OBISPO		Population 9		Rpt Dist		Beat 040		Type 1		CalTrans Dist 5		Badge 15144		Collision Date 20061206		Time 1040 Day WED							
Primary Collision Factor IMPROP TURN	Violation 22107		Collision Type OVERTURNED		Severity PDO		# Killed 0		# Injured 0		Tow Away? Y		Process Date 20070406		Spec Cond 0									
Weather1 CLEAR	Weather2		Rdwy Surface DRY		Rdwy Cond1 NO UNUSL CND		Rdwy Cond2		Cntrl Dev NT PRS/FCTR		Loc Type H		Ramp/Int -											
Hit and Run	Motor Veh Involved With NON-CLSN		Lighting DAYLIGHT		Ped Action																			
PARTY INFO														VICTIM INFO										
Party Type 1F	Age DRVR 20	Sex F	Race H	Sobriety1 HNBD	Sobriety2	Move RAN OFF RD	Pre Coll S	Dir A	SW Veh 0100	CHP Veh BMW	Year 1985	Sp Info -	OAF1 Viol 3	OAF2 Safety Equip N	Role A G	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			

Report run on: 7/17/2007

#700970 04/01/02 - PROV. 03/31/07 COLLISIONS OCCURRED ON STATE ROUTE 227 BET. NOYES RD (MPM 4.280) TO PRICE CYN RD (MPM 7.120), SAN LUIS OBISPO COUNTY

Total Count: 46

PARTY INFO															VICTIM INFO									
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Coll Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	20	M	H	HNBD	RAN OFF	RD N	A	0100	TOYOT	2005	- 3	N	-	M	G								
Primary Rd RT 227 Distance (ft) 200 Direction N Secondary Rd NOYES RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 4.320 Side of Hwy N City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 10927 Collision Date 20061209 Time 1010 Day SAT Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20070426 Weather1 CLOUDY Weather2 Rdw Surface WET Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -																								
PARTY INFO															VICTIM INFO									
1F	DRVR	20	M	H	HNBD	RAN OFF	RD N	A	0100	TOYOT	2005	- 3	N	-	M	G								
Primary Rd RT 227 Distance (ft) 110 Direction N Secondary Rd CORBETT CANYON NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 6.720 Side of Hwy N City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 13583 Collision Date 20061212 Time 1823 Day TUE Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20070426 Weather1 CLOUDY Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -																								
PARTY INFO															VICTIM INFO									
1F	DRVR	71	F	H	HNBD	RAN OFF	RD N	A	0700	HONDA	2000	- 3	N	-	L	G	DRVR	OTH VIS	71	F	1	L	G	0
Primary Rd RT 227 Distance (ft) 134 Direction N Secondary Rd NOYES RD NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 4.310 Side of Hwy N City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 11259 Collision Date 20070110 Time 1630 Day WED Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20070518 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -																								
PARTY INFO															VICTIM INFO									
1F	DRVR	22	M	B	HNBD	RAN OFF	RD N	A	0100	BMW	1998	- 3	A	22350	-	M	G							
Primary Rd RT 227 Distance (ft) 528 Direction N Secondary Rd COLD CANYON LAN NCIC 9745 State Hwy? Y Route 227 Postmile Prefix - Postmile 6.0 Side of Hwy S City UNINCORP. County SAN LUIS OBISPO Population 9 Rpt Dist Beat 040 Type 1 CalTrans Dist 5 Badge 11259 Collision Date 20070118 Time 1415 Day THU Primary Collision Factor IMPROP PASS Violation 21750 Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20070521 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type H Ramp/Int -																								
PARTY INFO															VICTIM INFO									
1F	DRVR	52	M	W	IMP UNK	IMP UNK	PASSING	S	C	0200	HARLE	1988	- 3	N	-	A	W							
2	DRVR	79	F	W	HNBD	PROC ST	S	A	0100	VOLVO	2000	- 3	N	-	M	G	PASS		50	F	3	M	G	0

9

Area Information System  
San Luis Obispo Area

Collision Listing  
01/04/08 10:31:26

Log Number	Date	Time	Officer	Status	Evidence #	Occured On	Cross Street
2007120068	12/18/07	0550	WILLOUGHBY R M (015 F			SR 227	NOYES RD
2007110040	11/10/07	1005	KENNY J A (010927) F			SR-227	NOYES ROAD
2007110004	11/01/07	1540	WILLOUGHBY R M (015 F			SR 227	E. Fork Pismo Creek Bridge
2007070043	07/11/07	1945	VILLARS D A (010820) F			SR 227	Noyes Road
2007060038	06/11/07	2120	MAC LEAN R A (014508 F			SR 227	Printz Road
2007050038	05/13/07	1244	REZA D (010644) F			SR 227	NOYES ROAD
2007050018	05/06/07	0830	WILLOUGHBY R M (015 F			SR 227	Noyes Road
2007030074	03/22/07	2045	MAC LEAN R A (014508 F			SR 227	Patchiett Road
2007030073	03/22/07	1625	GORDON J E (011259) F			SR 227	Buck Ridge Lane
2007030071	03/22/07	0735	WILLOUGHBY R M (015 F			SR 227	Noyes Road
2007020092	02/24/07	0300	KENNY J A (010927) F			SR 227	Buck Ridge Lane
2007010066	01/18/07	1415	<del>GORDON J E (011259) F</del>			<del>SR 227</del>	<del>Tolosa Place</del>
2007010036	01/10/07	1630	GORDON J E (011259) F			SR 227	Noyes Road

10

## CHAPTER 200 GEOMETRIC DESIGN AND STRUCTURE STANDARDS

### Topic 201 - Sight Distance

#### Index 201.1 - General

Sight distance is the continuous length of highway ahead visible to the driver. Four types of sight distance are considered here: passing, stopping, decision, and corner. Passing sight distance is used where use of an opposing lane can provide passing opportunities (see Index 201.2). Stopping sight distance is the minimum sight distance to be provided on multilane highways and on 2-lane roads when passing sight distance is not economically obtainable. Stopping sight distance also is to be provided for all elements of interchanges and intersections at grade, including private road connections (see Topic 504, Index 405.1, & Figure 405.7). Decision sight distance is used at major decision points (see Indexes 201.7 and 504.2). Corner sight distance is used at intersections (see Index 405.1, Figure 405.7, and Figure 504.3J).

Table 201.1 shows the standards for stopping sight distance related to design speed, and these shall be the minimum values used in design. Also shown are the values for use in providing passing sight distance.

Chapter 3 of "A Policy on Geometric Design of Highways and Streets," AASHTO, contains a thorough discussion of the derivation of stopping sight distance.

#### 201.2 Passing Sight Distance

Passing sight distance is the minimum sight distance required for the driver of one vehicle to pass another vehicle safely and comfortably. Passing must be accomplished assuming an oncoming vehicle comes into view and maintains the design speed, without reduction, after the overtaking maneuver is started.

**Table 201.1  
Sight Distance Standards**

Design Speed <sup>(1)</sup> (mph)	Stopping <sup>(2)</sup> (ft)	Passing (ft)
20	125	800
25	150	950
30	200	1,100
35	250	1,300
40	300	1,500
45	360	1,650
50	430	1,800
55	500	1,950
60	580	2,100
65	660	2,300
70	750	2,500
75	840	2,600
80	930	2,700

(1) See Topic 101 for selection of design speed.

(2) For sustained downgrades, refer to advisory standard in Index 201.3

The sight distance available for passing at any place is the longest distance at which a driver whose eyes are 3 ½ feet above the pavement surface can see the top of an object 4 ¼ feet high on the road. See Table 201.1 for the calculated values that are associated with various design speeds.

In general, 2-lane highways should be designed to provide for passing where possible, especially those routes with high volumes of trucks or recreational vehicles. Passing should be done on tangent horizontal alignments with constant grades or a slight sag vertical curve. Not only are drivers reluctant to pass on a long crest vertical curve, but it is impracticable to design crest vertical curves to provide for passing sight distance because of high cost where crest cuts are involved. Passing sight distance for crest vertical curves is 7 to 17 times longer than the stopping sight distance.

Ordinarily, passing sight distance is provided at locations where combinations of alignment and

January 4, 2007

profile do not require the use of crest vertical curves.

Passing sight distance is considered only on 2-lane roads. At critical locations, a stretch of 3- or 4-lane passing section with stopping sight distance is sometimes more economical than two lanes with passing sight distance.

Passing on sag vertical curves can be accomplished both day and night because headlights can be seen through the entire curve.

See Part 3 of the Manual on Uniform Traffic Control Devices (MUTCD) for criteria relating to the placement of barrier striping for no-passing zones. Note, that the passing sight distances shown in the MUTCD are based on traffic operational criteria. Traffic operational criteria are different from the design characteristics used to develop the values provided in Table 201.1 and Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets. The aforementioned table and AASHTO reference are also used to design the vertical profile and horizontal alignment of the highway. Consult the Headquarters (HQ) Traffic Liaison when using the MUTCD criteria for traffic operating-control needs.

Other means for providing passing opportunities, such as climbing lanes or turnouts, are discussed in Index 204.5. Chapter 3 of AASHTO, A Policy on Geometric Design of Highways and Streets, contains a thorough discussion of the derivation of passing sight distance.

### 201.3 Stopping Sight Distance

The minimum stopping sight distance is the distance required by the driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eyes, which are assumed to be 3 ½ feet above the pavement surface, to an object ½-foot high on the road. See Index 1003.1(9) for bicycle stopping sight distance guidance.

The stopping sight distances in Table 201.1 should be increased by 20 percent on sustained downgrades steeper than 3 percent and longer than one mile.

### 201.4 Stopping Sight Distance at Grade Crests

Figure 201.4 shows graphically the relationships between length of crest vertical curve, design speed, and algebraic difference in grades. Any one factor can be determined when the other two are known.

### 201.5 Stopping Sight Distance at Grade Sags

From the curves in Figure 201.5, the minimum length of vertical curve which provides headlight sight distance in grade sags for a given design speed can be obtained.

If headlight sight distance is not obtainable at grade sags, lighting may be considered. The Design Coordinator and the HQ Traffic Liaison shall be contacted to review proposed grade sag lighting to determine if such use is appropriate.

### 201.6 Stopping Sight Distance on Horizontal Curves

Where an object off the pavement such as a bridge pier, building, cut slope, or natural growth restricts sight distance, the minimum radius of curvature is determined by the stopping sight distance.

Available stopping sight distance on horizontal curves is obtained from Figure 201.6. It is assumed that the driver's eye is 3 ½ feet above the center of the inside lane (inside with respect to curve) and the object is ½-foot high. The line of sight is assumed to intercept the view obstruction at the midpoint of the sight line and 2 feet above the center of the inside lane when the road profile is flat (i.e. no vertical curve). Crest vertical curves can cause additional reductions in sight distance. The clear distance ( $m$ ) is measured from the center of the inside lane to the obstruction.

The design objective is to determine the required clear distance from centerline of inside lane to a retaining wall, bridge pier, abutment, cut slope, or other obstruction for a given design speed. Using radius of curvature and minimum sight distance for that design speed, Figure 201.6 gives the clear distance ( $m$ ) from centerline of inside lane to the obstruction.

### 404.3 Turning Templates

(1) *General.* The truck-turn template is a design aid for locating the wheel paths of large vehicles as they turn through at-grade intersections. Consideration should be given to the overhang of the truck, where the body of the truck slightly extends (approximately 2 feet) beyond the wheel path. The template is useful for determining corner radii, for positioning island noses, and for establishing clearance to bridge piers, signal poles, and other hardware at intersections. Templates can help determine the width of a channeled separate turning lane. Topic 407 illustrates scaled turning templates for the various design vehicles and turning radii.

(2) *STAA Truck.* The STAA truck-turn templates should be used in the design of all new interchanges and intersections on the National Network and on routes leading from the National Network to designated service and terminal routes. On rehabilitation projects they should be used at interchanges and intersections proposed as service or terminal access routes. In some cases, factors such as cost, right of way, environmental issues, local agency desires, and the type of community being served may limit the use of the STAA templates. In those cases, other appropriate templates should be used.

The minimum practical turning radius is 50 feet. However, the 60-foot radius develops less swept width and may have an advantage. The 60-foot radius should be used in most situations, but the 50-foot radius is acceptable in restricted situations.

(3) *California Truck.* The California truck-turn template should be used in the design of highways not on the National Network. The minimum practical turning radius is 50 feet.

(4) *Bus.* At intersections where truck volumes are light or where the predominate truck traffic consists of mostly 3-axle and 4-axle units, the bus turning template may be used. Its wheel paths sweep a greater width than 3-axle delivery trucks and the smaller buses such as

school buses, but a slightly lesser width than a 4-axle truck.

## Topic 405 - Intersection Design Standards

### 405.1 Sight Distance

(1) *Stopping Sight Distance.* See Index 201.1 for minimum stopping sight distance requirements.

(2) *Corner Sight Distance.*

(a) *General--*At unsignalized intersections a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle.

Adequate time must be provided for the waiting vehicle to either cross all lanes of through traffic, cross the near lanes and turn left, or turn right, without requiring through traffic to radically alter their speed.

The values given in Table 405.1A provide 7-1/2 seconds for the driver on the crossroad to complete the necessary maneuver while the approaching vehicle travels at the assumed design speed of the main highway. The 7-1/2 second criterion is normally applied to all lanes of through traffic in order to cover all possible maneuvers by the vehicle at the crossroad. However, by providing the standard corner sight distance to the lane nearest to and farthest from the waiting vehicle, adequate time should be obtained to make the necessary movement. On multilane highways a 7-1/2 second criterion for the outside lane, in both directions of travel, normally will provide increased sight distance to the inside lanes. Consideration should be given to increasing these values on downgrades steeper than 3 percent and longer than 1 mile (see Index 201.3), where there are high truck volumes on the crossroad, or where the skew of the intersection substantially increases the distance traveled by the crossing vehicle.

January 4, 2007

In determining corner sight distance, a set back distance for the vehicle waiting at the crossroad must be assumed. **Set back for the driver on the crossroad shall be a minimum of 10 feet plus the shoulder width of the major road but not less than 13 feet.** Corner sight distance is to be measured from a 3.5-foot height at the location of the driver on the minor road to a 4.25-foot object height in the center of the approaching lane of the major road. If the major road has a median barrier, a 2-foot object height should be used to determine the median barrier set back.

In some cases the cost to obtain 7-1/2 seconds of corner sight distances may be excessive. High costs may be attributable to right of way acquisition, building removal, extensive excavation, or unmitigable environmental impacts. In such cases a lesser value of corner sight distance, as described under the following headings, may be used.

- (b) **Public Road Intersections** (Refer to Topic 205)--At unsignalized public road intersections (see Index 405.7) corner sight distance values given in Table 405.1A should be provided.

At signalized intersections the values for corner sight distances given in Table 405.1A should also be applied whenever possible. Even though traffic flows are designed to move at separate times, unanticipated vehicle conflicts can occur due to violation of signal, right turns on red, malfunction of the signal, or use of flashing red/yellow mode.

**Where restrictive conditions exist, similar to those listed in Index 405.1(2)(a), the minimum value for corner sight distance at both signalized and unsignalized intersections shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.**

- (c) **Private Road Intersections** (Refer to Index 205.2) and **Rural Driveways** (Refer to Index 205.4)--**The minimum corner sight**

**distance shall be equal to the stopping sight distance as given in Table 201.1, measured as previously described.**

- (d) **Urban Driveways** (Refer to Index 205.3)--Corner sight distance requirements as described above are not applied to urban driveways.

- (3) *Decision Sight Distance.* At intersections where the State route turns or crosses another State route, the decision sight distance values given in Table 201.7 should be used. In computing and measuring decision sight distance, the 3.5-foot eye height and the 0.5-foot object height should be used, the object being located on the side of the intersection nearest the approaching driver.

The application of the various sight distance requirements for the different types of intersections is summarized in Table 405.1B.

- (4) *Acceleration Lanes for Turning Moves onto State Highways.* At rural intersections, with stop control on the local cross road, acceleration lanes for left and right turns onto the State facility should be considered. At a minimum, the following features should be evaluated for both the major highway and the cross road:

- divided versus undivided
- number of lanes
- design speed
- gradient
- lane, shoulder and median width
- traffic volume and composition
- turning volumes
- horizontal curve radii
- sight distance
- proximity of adjacent intersections
- types of adjacent intersections

For additional information and guidance, refer to AASHTO, A Policy on Geometric Design of Highways and Streets, the Headquarters Traffic Liaison and the Design Coordinator.

**Table 405.1A  
Corner Sight Distance  
(7-1/2 Second Criteria)**

Design Speed (mph)	Corner Sight Distance (ft)
25	275
30	330
35	385
40	440
45	495
50	550
55	605
60	660
65	715
70	770

**Table 405.1B  
Application of Sight Distance  
Requirements**

Intersection Types	Sight Distance		
	Stopping	Corner	Decision
Private Roads	X	X <sup>(1)</sup>	
Public Streets and Roads	X	X	
Signalized Intersections	X	(2)	
State Route Inter- sections & Route Direction Changes, with or without Signals	X	X	X

(1) Using stopping sight distance between an eye height of 3.5 ft and an object height of 4.25 ft. See Index 405.1(2)(a) for setback requirements.

(2) Apply corner sight distance requirements at signalized intersections whenever possible due to unanticipated violations of the signals or malfunctions of the signals. See Index 405.1(2)(b).

## 405.2 Left-turn Channelization

(1) *General.* The purpose of a left-turn lane is to expedite the movement of through traffic, control the movement of turning traffic, increase the capacity of the intersection, and improve safety characteristics.

The District Traffic Branch normally establishes the need for left-turn lanes. See "Guidelines for Reconstruction of Intersections," August 1985, published by the California Division of Transportation Operations.

(2) *Design Elements.*

(a) **Lane Width** -- The lane width for both single and double left-turn lanes on State highways shall be 12 feet. Under certain circumstances (listed below), left-turn lane widths of 11 feet or as narrow as 10 feet may be used on RRR or other projects on existing State highways and on roads or streets under other jurisdictions when supported by an approved design exception pursuant to Index 82.2. When considering lane width reductions adjacent to curbed medians, refer to Index 303.5 for guidance on effective roadway width; which may vary depending on drivers' lateral positioning and shy distance from raised curbs.

- On high speed rural highways or moderate speed suburban highways where width is restricted, the minimum width of single or dual left-turn lanes may be reduced to 11 feet.
- In severely constrained situations on low to moderate speed urban highways where large trucks are not expected, the minimum width of single left-turn lanes may be reduced to 10 feet. When double left-turn lanes are warranted under these same circumstances the width of each lane shall be no less than 11 feet. This added width is needed to assure adequate clearance between turning vehicles.

# PINNACLE TRAFFIC ENGINEERING

930 San Benito Street  
Hollister, California 95023  
(831) 638-9260 / FAX (831) 638-9268

## Cold Canyon Landfill Expansion Project; San Luis Obispo, CA (Portable Delineator Placed on Shoulder Stripe @ Dwy. C.L.)

### SR 227 @ Existing Driveway (12/5/07) - Stopping Sight Distance (Feet):

Northbound: 1050' (75-80 mph) (a)

Southbound: >1,500' (75-80 mph) (a)

Dry & Clear

(a) Stopping sight distance adequate for at least 70-75 mph at existing landfill driveway.

### SR 227 @ Proposed Driveway (12/5/07) - Stopping Sight Distance (Feet):

Northbound: >2,000' (75-80 mph) (b)

Southbound: 860' (65-70 mph) (c)

>1,200' (75-80 mph) (d)

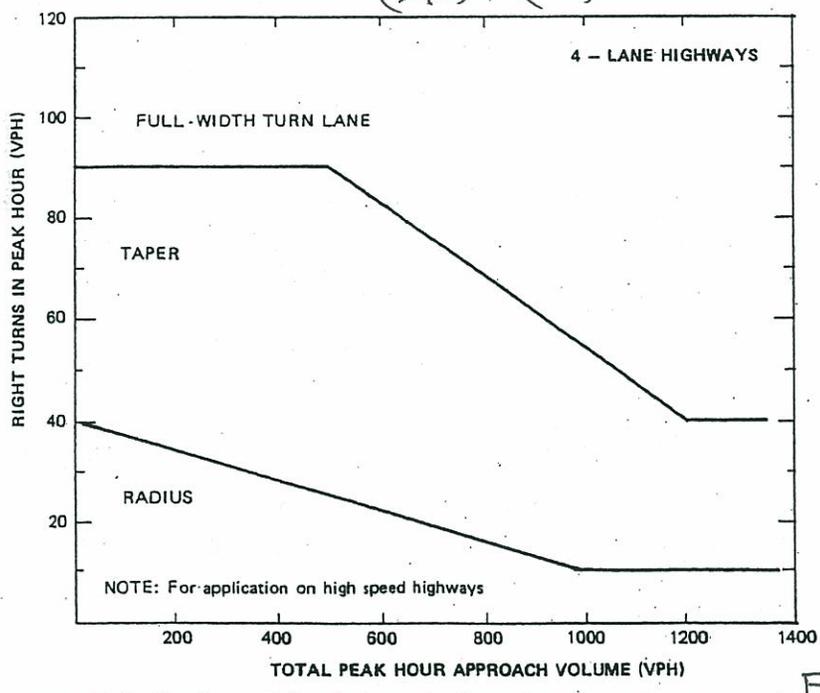
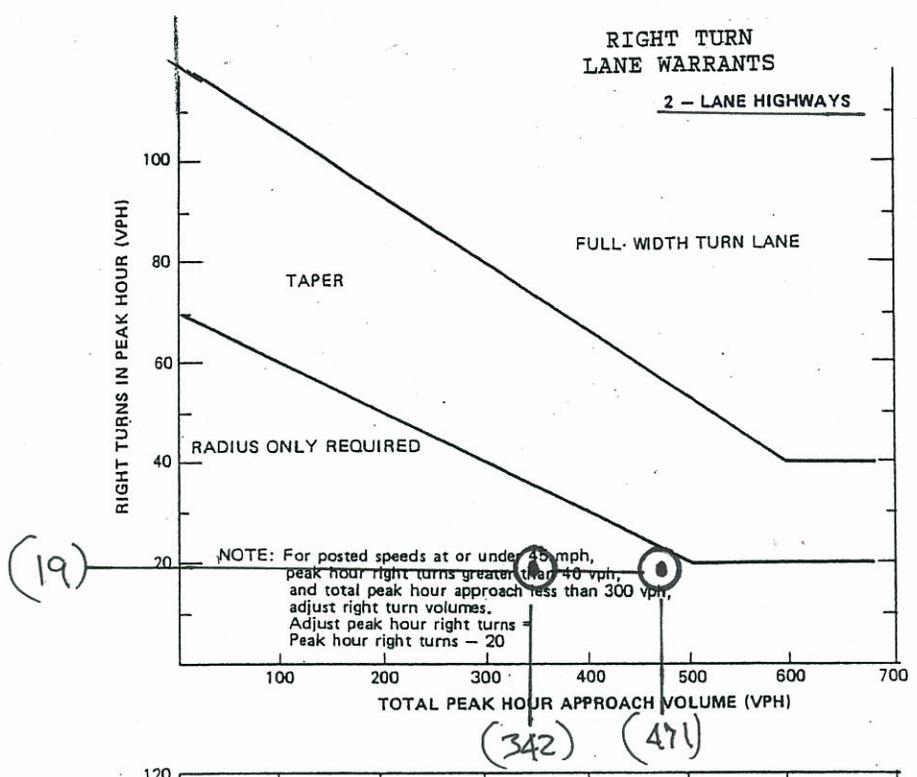
Dry & Clear

(b) Northbound stopping sight distance adequate for at least 75-80 mph at proposed landfill driveway.

(c) Southbound stopping sight distance measured from change in grade location

(d) Southbound stopping sight distance measured from crest vertical curve.

# SR 227 / PROPOSED DRIVEWAY (AM PEAK HOUR)



Source:  
"Intersection Channelization Design Guide",  
NCHRP Report  
279, November,  
1985.

Figure 4-23. Traffic volume guidelines for design of right-turn lanes. (Source: Ref. 4-11)

	(A) <u>EXIST. +</u>	(B) <u>TOT Com.</u>
RT. -	19	19
TOTAL APP. -	342	471



## PINNACLE TRAFFIC ENGINEERING

330 Tres Pinos Road, Suite B2-12  
Hollister, California 95023  
(831) 638-9260 • FAX (831) 638-9268  
PinnacleTE.com

June 20, 2009

Keith Miller  
Morro Group, Inc.  
1422 Monterey Street, Suite C200  
San Luis Obispo, CA 93401

RE: Cold Canyon Landfill Expansion Draft EIR; San Luis Obispo County, California  
Traffic Impact Report - Response to Comment Material

The following material has been prepared in response to comments received on the Draft EIR. The comments are primarily regarding the project trip generation estimates used for the traffic analysis. The EIR traffic report evaluates conditions associated with “average” weekday traffic operations (existing and proposed). Average weekday conditions were documented using historical data provided by the landfill operators and new turning movement traffic count / vehicle classification data collected at the existing entrance. The historical data indicates that on an average weekday the existing landfill generates approximately 330 vehicles (660 daily two-way trip ends). This data also demonstrates that the average weekday incoming landfill material is approximately 913 tons per day (TPD). The existing TPD per vehicle ratio is 2.77 TPD per vehicle (913 TPD / 330 vehicles).

The DEIR Traffic Impact Report (March 3, 2008) provides a more detailed description of the project trip generation estimates. The estimates were derived using the historical landfill data (operational levels, daily and hourly traffic data, etc.) and various assumptions for each project component. Data published in the ITE Trip Generation report was also referenced to quantify the number of trips associated with the existing employees. It was estimated that about 18% of the total daily traffic was attributable to the existing employees (118 ADT). The remaining 542 ADT was attributable to small, median and large vehicles-trucks (82% of existing traffic). The project trip generation quantities estimated for the proposed “average” weekday conditions was 860 ADT (a net increase of +200 ADT). Comments received on the DEIR suggested using the TPD per vehicle ratio to estimate the project trips associated with the proposed permit. The existing permit allows up to 542 vehicles per day (1,084 two way trip ends). Average weekday operations generate about 61% of the existing permitted limit (330/542). The current daily tonnage limit is 1,620 TPD (Table III-2); which is approximately 2.99 TPD per vehicle (1,620 TPD / 542 vehicles per day). The project proposes an increase in the daily tonnage limit to 2,500 TPD (+880 TPD). To present a “worst” case analysis the project trips associated with the proposed permit limits were estimated using the 2.77 TPD per vehicle ratio. Table 1 presents a summary of the trip generation characteristics using the daily tonnage and vehicle limits.

Table 1 - Landfill Trip Generation Characteristics

Study Scenario	Material Received (TPD)	Number of Daily Vehicles	TPD per Vehicle Ratio
<u>Existing Landfill Operations:</u>			
Average Weekday (a) -	913	330	2.77
Permit Limits (b) -	1,620 (c)	542 (c)	2.99
<u>Proposed Landfill Operations:</u>			
Average Weekday (a) -	1,410	510	2.77
Permit Limits (b) -	2,500 (d)	904	2.77 (e)

- (a) Ave. weekday operations generate 61% of daily trip permit limit (330/542).
- (b) Ave. weekday operations receive 56% of daily tonnage permit limit (913/1,620).
- (c) Existing permit limit.
- (d) Proposed permit limit.
- (e) TPD per vehicle ratio representing worst case scenario (permit limits).

The data in Table 1 demonstrates that the proposed operations will generate approximately 1,020 ADT (510 daily vehicles x 2) associated with average weekday operations and 1,808 ADT (904 daily vehicles x 2) associated with daily permit limit operations (2,500 TPD). The net increase associated with the proposed project will vary from +360 ADT (average weekday conditions) to +724 ADT (daily permit conditions). Using this methodology yields about 19% more project trips than estimated for average weekday traffic conditions in Table V.J.-4 of the DEIR (1,020 ADT vs. 860 ADT). Proposed permit limit conditions could generate up to 2.74 times existing average weekday conditions (904/330).

The cumulative intersection “levels of service” (LOS) values were evaluated to determine if the higher trip generation associated the proposed permit conditions (average weekday and permit limit) will impact traffic operations on SR 227. The results of the cumulative LOS analysis are presented in Table 2.

Table 2 - Cumulative Peak Hour LOS Analysis (Permit Limit)

Study Intersection	Peak Hour	Vehicle Delay - LOS Value		
		Without Project	With Project	
			Average Weekday	Permit Limit
<u>SR 227 / Proposed Driveway (a)</u> Westbound Approach (b)	AM	<u>1.0 - A</u> (15.3 - C)	<u>1.4 - A</u> (16.2 - C)	<u>2.4 - A</u> (17.9 - C)
	PM	<u>0.6 - A</u> (13.5 - B)	<u>2.0 - A</u> (14.1 - B)	<u>3.8 - A</u> (18.0 - C)

- (a) Total average delay - LOS value
- (b) Stop sign controlled, approach delay - LOS value

Keith Miller  
June 20, 2009  
Page 3 of 3

The LOS analysis indicates that vehicle delays will be within acceptable limits during both the AM and PM weekday commuter peak periods, as defined by San Luis Obispo County (LOS C) and Caltrans (LOS C/D). Total cumulative daily traffic volumes on SR 227 adjacent to the project site will remain within the LOS B range (2 lane rural highway 4,000-8,000 ADT).

The DEIR Traffic Impact Report also includes an evaluation of the potential safety impacts to operations on SR 227. Project off-site improvements include a separate southbound left turn lane and northbound acceleration lane on SR 227 (at new driveway). Off-site improvements within the State R/W shall be designed according to current Caltrans standards (ie: lane and shoulder widths, etc). The southbound left turn lane shall include the appropriate deceleration and storage area for large vehicles. The northbound acceleration lane shall provide adequate area for large vehicles to accelerate to an appropriate speed as defined by Caltrans prior to entering the northbound travel lane. Based on the "level of significance" criteria defined in the DEIR, the project will not significantly impact traffic operations on SR 227 provided that the off-site access improvements are constructed prior to development of the proposed project. Material presented in this letter does not change the conclusions presented in the DEIR. Please contact me if you have any questions regarding my response material.

Pinnacle Traffic Engineering

Larry D. Hail, CE, TE, PTOE  
President

ldh:msw

attachments

