

1 **4.9 TRANSPORTATION/CIRCULATION**

2 The following assessment of the impacts of the proposed project on traffic and
3 circulation is based on the Traffic and Circulation Study prepared for the project by Associated
4 Transportation Engineers, revised 2014 (see Appendix K).

5 **4.9.1 Setting**

6 The quality of traffic service provided by a roadway system can be described through the
7 Level of Service (LOS) concept. LOS is a standardized means of describing traffic conditions
8 by comparing traffic volumes in a roadway system with the system's capacity. An LOS rating of
9 A, B or C indicates that the roadway is operating efficiently. Minor delays are possible on an
10 arterial with a LOS of D. Level E represents traffic volumes at or near the capacity of the
11 highway, resulting in possible delays and unstable flow.

12 **4.9.1.1 Previous Analysis**

13 The Tajiguas Landfill has been in operation since 1967. An expansion of the
14 landfill (Tajiguas Landfill Expansion Project) was last approved in 2002. The
15 traffic analysis prepared for the Expansion Project was based on a maximum of
16 1,500 tons of waste per day with a corresponding traffic level of a maximum of
17 234 vehicles per day (184 waste haul vehicles per day + 50 other vehicles
18 per day). The EIR (01-EIR-05) prepared for the Expansion Project which was
19 based on the traffic study prepared for the project by ATE; found that proposed
20 landfill expansion would not generate significant traffic impacts. No change to
21 the impact determination occurred in association with CEQA review of the
22 Tajiguas Landfill Reconfiguration and Baron Ranch Restoration Project since
23 that project did not modify the permitted waste or traffic volumes. The Solid
24 Waste Facility Permit issued to the County is consistent with waste and traffic
25 volumes analyzed in the prior Tajiguas Landfill Environmental Documents and
26 allows for a maximum of 1,500 tons of waste per day with a maximum of 184
27 waste haul vehicles and 50 other vehicles per day.

28 **4.9.1.2 Existing Street Network**

29 U.S. Highway 101 is a divided four-lane facility within the vicinity of the project
30 site. U.S. Highway 101 is the principal route between the cities of Goleta,
31 Santa Barbara, Carpinteria, and Ventura to the south; and the cities of Buellton
32 and Santa Maria to the north. Access to the landfill is provided by an at-grade
33 intersection that connects the landfill access road to U.S. Highway 101 (see
34 Figure 4.9-1). Turn lanes are provided at the intersection for traffic inbound and
35 outbound from the landfill access road. There is a median opening on U.S.
36 Highway 101 at the U.S. Highway 101/landfill access road intersection that
37 provides full access to U.S. Highway 101.

4.9.1.3 U.S. Highway 101 Operations

Existing traffic volumes were collected on U.S. Highway 101 adjacent to the project site in December 2012 and January 2013 for this project. Pursuant to County and Caltrans policies, existing LOS were calculated for U.S. Highway 101 using the operations methodology outlined in the Highway Capacity Manual (Transportation Research Board, 2010). The LOS calculations also follow the Caltrans recommendation to analyze operations for the peak 15 minutes within the a.m. and p.m. peak hour periods (whereas the County focuses on operations for the peak 1-hour period). "Peak Hour Factors" are applied to the hourly volumes collected in the field to simulate traffic flows and operations experienced during the highest 15-minute period within each peak hour. The traffic counts collected in the field show that the peak hour factor is 0.92 for the a.m. peak period and 0.91 for the p.m. peak period. The LOS analyses also account for the number of trucks using the facility. About 6 percent of the existing traffic flow on U.S. Highway 101 is comprised of trucks with 3 or more axles. Table 4.9-1 shows the existing LOS for U.S. Highway 101 adjacent to the project site for the a.m. and p.m. peak periods.

Table 4.9-1. U.S. Highway 101: Existing Levels of Service

Time Period	Direction	LOS
a.m. Peak	Northbound	LOS A
	Southbound	LOS B
p.m. Peak	Northbound	LOS B
	Southbound	LOS A

As shown in Table 4.9-1, U.S. Highway 101 currently operates at LOS A to B adjacent to the project site during the a.m. and p.m. peak periods. In addition to carrying through traffic, U.S. Highway 101 is used by commuters traveling to Santa Barbara-Goleta work places from north county areas during the a.m. peak period and then return home to the north county areas during the p.m. peak period. Therefore, the predominate flow is southbound during the a.m. peak period and northbound during the p.m. peak period.

4.9.1.4 U.S. Highway 101/Landfill Access Road Operations

The U.S. Highway 101/landfill access road intersection forms a "T" configuration. There is a median opening on U.S. Highway 101 that provides full access for turning into and out of the landfill access road. There are also turn lanes on both directions of U.S. Highway 101 for turning into and out of the landfill access road. The intersection is controlled by a stop sign on the outbound approach from the landfill access road. Outbound traffic turning left from the landfill access road cross the northbound U.S. Highway 101 traffic stream when a gap is available and then merge into the southbound U.S. Highway 101 traffic stream in the existing acceleration lane. Similarly, inbound traffic from southbound U.S. Highway 101 cross the northbound U.S. Highway 101 traffic stream when a gap is available and then turn into the landfill access road. Outbound right turns are not required to wait for gaps in the northbound U.S. Highway 101 traffic stream since there is an acceleration lane for merging into the northbound U.S. Highway 101 traffic stream.

Levels of Service

Pursuant to County and Caltrans policies, LOS was calculated for the U.S. Highway 101/landfill access road intersection using the methodology outlined in the Highway Capacity Manual. Existing a.m. and p.m. peak hour traffic volumes were collected at the U.S. Highway 101/landfill access road intersection in January 2013 for this project. Fifteen vehicles were observed turning at the intersection during the a.m. peak period and 4 vehicles were observed turning at the intersection during the p.m. peak period. Delays and LOS were calculated for the intersection for the a.m. and p.m. peak commuter periods. The LOS calculations follow the Caltrans recommendation to analyze operations for the peak 15 minutes within the a.m. and p.m. peak hour periods using peak hour factors measured in the field (peak hour factors are 0.92 for a.m. peak period and 0.91 for p.m. peak period). Table 4.9-2 shows the existing a.m. and p.m. peak period LOS for the U.S. Highway 101/landfill access road intersection.

Table 4.9-2. U.S. Highway 101/Landfill Access Road: Existing Levels of Service

Movement	Delay/LOS ¹	
	a.m. Peak	p.m. Peak
Inbound left turn	9.4 Sec./LOS A	17.2 Sec./LOS C
Inbound right turn	0.0 Sec./LOS A	0.0 Sec./LOS A
Outbound left & right turns ²	13.1 Sec./LOS B	13.8 Sec./LOS B

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

² Single lane approach. Average delay for combined left + right turns.

1 The data presented in Table 4.9-2 indicate that the delays for traffic entering
2 and exiting the landfill access road equate to LOS A to B during the a.m. peak
3 period and LOS A to C during the p.m. peak period. These operations are
4 considered acceptable based on the County's LOS C operating standard and
5 Caltrans' desire to maintain operations at LOS C or better.

6 **Gap Analysis**

7 A field study was conducted to determine the minimum gap required in the
8 northbound U.S. Highway 101 traffic stream for trucks to cross when
9 entering/exiting the landfill access road. The County provided an 18-wheel
10 semi-tractor trailer and truck driver for the study. The truck was fully loaded,
11 and was observed turning to/from the landfill access road to determine the
12 minimum gap typically used by trucks when crossing the northbound U.S.
13 Highway 101 traffic stream. The minimum gap used by trucks is about 7-8
14 seconds (truck driver waited for traffic gap of 7-8 seconds before crossing the
15 northbound U.S. Highway 101 traffic stream). It is noted that passenger
16 vehicles use shorter gaps - as short as 5 seconds.

17 A gap study was also conducted in December 2012 to ascertain the number of
18 gaps that are available in the northbound U.S. Highway 101 traffic stream that
19 are sufficient in length for landfill trucks to cross the northbound U.S. Highway
20 101 traffic stream when entering/exiting the landfill access road. Gaps were
21 measured throughout the day between 7 a.m. and 5 p.m., the hours of
22 operations for the landfill. Table 4.9-3 shows the number of gaps per hour in
23 the northbound U.S. Highway 101 traffic stream that are 8 seconds or longer -
24 the minimum assumed for vehicles to cross the northbound U.S. Highway 101
25 traffic stream. The available gaps shown in Table 4.9-3 were calculated by
26 assuming an 8 second gap plus a 7 second follow-up time for gaps measured
27 at more than 8 seconds (the 7 second follow-up time is the time that it takes for
28 the second vehicle in queue to move up to the stop bar after the first vehicle
29 has departed from the stop bar). Table 4.9-3 also provides the number of
30 vehicles per hour entering/exiting the landfill access road observed on the same
31 day that the gap study was performed.

32 As shown, the number of available gaps are highest during the morning period
33 when commuter traffic is predominately using southbound U.S. Highway 101
34 (240 available gaps during 7-8 a.m. peak commuter period) and lowest during
35 the afternoon period when commuter traffic is predominately using northbound
36 U.S. Highway 101 (83 available gaps during the 4-5 p.m. beginning of the
37 evening peak commuter period). The gap analysis indicates there are ample
38 gaps for traffic to enter/exit the landfill access road. For example, there were
39 240 available gaps during 7-8 a.m. peak commuter period and there were 22
40 vehicles entering/exiting the landfill access road during that hour.

1

Table 4.9-3. U.S. Highway 101/Landfill Access Road: Available Gaps

Hour	Available Northbound Gaps ¹	Landfill Traffic ²
7-8 a.m.	240	22
8-9 a.m.	220	18
9-10 a.m.	221	16
10-11 a.m.	180	29
11 a.m. - 12 Noon	178	20
12 Noon - 1 p.m.	169	29
1-2 p.m.	162	18
2-3 p.m.	135	16
3-4 p.m.	116	28
4-5 p.m.	83	0 ³

¹ Number of available gaps (≥ 8 seconds + 7 seconds follow-up time).

² Number of vehicles entering/exiting landfill access road (trucks + other vehicles).

³ Landfill closed at 4 p.m. on day of gap study.

2

Turn Lanes

3

4

5

6

7

8

9

10

As noted, the intersection contains turn lanes for all movements turning to and from the landfill access road. While not required at such intersections, turn lanes are beneficial to the safety and efficiency of the intersection. Traffic entering and leaving the main stream of traffic merges and diverges most efficiently with the through traffic when speed differentials are minimized by turn lanes. The length of the turn lanes at the U.S. Highway 101/landfill access road intersection are listed in Table 4.9-4, along with the lengths recommended in the Caltrans Highway Design Manual (2006).

11

Table 4.9-4. U.S. Highway 101/Landfill Access Road: Turn Lanes

Turn Lane	Actual Length	Recommended ¹	
		Standard Vehicles	Trucks
U.S. Highway 101 NB Deceleration Lane	180 Feet	580 Feet	485 Feet
U.S. Highway 101 NB Acceleration Lane	825 Feet	1,350 Feet	1,350 Feet
U.S. Highway 101 SB Deceleration Lane	400 Feet	630 Feet	535 Feet
U.S. Highway 101 SB Acceleration Lane	380 Feet	1,350 Feet	1,350 Feet

¹ Recommended truck distances for deceleration are shorter because they are based on 55 mph truck speed limit.

12

1 As shown in Table 4.9-4, the turn lanes are shorter than those recommended
2 by Caltrans. While the turn lanes do not meet the distances recommended by
3 Caltrans, they are beneficial to the safety and efficiency of the intersection.
4 Most notably, the deceleration lane for right turns entering the landfill access
5 road from the U.S. Highway 101 northbound is relatively short (about 180 feet).
6 Santa Barbara County has submitted an encroachment permit to Caltrans to
7 lengthen this lane to 380 feet.

8 Field review was conducted to determine if landfill trucks properly utilize the
9 dedicated turn lanes. A County-owned 18-wheel semi-tractor trailer was used
10 for the analysis. The field review found that semi-tractor trailer truck wheels
11 track within the turn lanes provided. It is noted that trucks use the paved
12 shoulder just prior to the 180-foot turn lanes when turning right from northbound
13 U.S. Highway 101 onto the landfill access road.

14 **Sight Distances**

15 Drivers of vehicles departing the landfill access road should have an
16 unobstructed view along U.S. Highway 101 sufficient in length to permit them to
17 anticipate and avoid potential collisions. Caltrans sight distance standards
18 were used to determine minimum sight distance requirements at the landfill
19 access road. The Caltrans minimum sight distance standard is 770 feet for a
20 70 mph design speed. The sight distance looking to the south from the
21 driveway was measured at more than 1,450 feet, which exceeds the Caltrans
22 minimum standard of 770 feet for crossing a stream of traffic traveling at 70
23 mph. Therefore, the sight distances present at the intersection exceed the
24 Caltrans minimum standard.

25 **Accident Data**

26 Accident data was provided by Caltrans for the area within 1/2 mile of the U.S.
27 Highway 101/landfill access road intersection (includes intersection and
28 highway within 1/4 mile of intersection). The data encompasses the 10-year
29 period from January 1, 2001 through December 31, 2010, and indicates 8
30 accidents occurred over this period (0.07 accidents per million vehicles). In
31 comparison, the State average is 0.30 accidents per million vehicles. None of
32 the accidents involved landfill vehicles. The accident data indicate the rate of
33 accidents at the intersection is well below the statewide average for
34 similar intersections, which is expected given the intersection's configuration and
35 environment (low delays, ample gaps, provision of turn lanes and good sight
36 distances).

37

4.9.1.5 Traffic Baseline

Landfill Traffic Volumes

As noted above, traffic counts were collected in the vicinity of the Tajiguas Landfill in December 2012 and January 2013. Review of County scale-house records at the Tajiguas Landfill show that disposal of material in 2012 was relatively low when compared to previous years. The relatively low levels of waste disposal at the landfill can be attributed to the downturn in the economy which has resulted in lower housing starts (less C&D waste) and less residential and commercial waste. Table 4.9-5 provides the number of vehicles weighed at the scale-house on peak days, peak day disposal volumes and annual waste disposal volumes between 2004 and 2012.

Table 4.9-5. Historical Landfill Activity

Year	Trucks Per Peak Day	Peak Day Waste Receipt (Tons)	Total Landfilled (Tons, LEA reporting)
2004	129	1,457	248,072
2005	128	1,583	250,925
2006	120	1,363	222,248
2007	127	1,642	218,992
2008	132	1,388	215,628
2009	114	1,475	192,219
2010	115	1,490	178,804
2011	109	1,405	173,138
2012	97	1,297	165,847

The data shows that disposal levels and peak day truck trips were somewhat constant between 2004 and 2008; and then slowly declined between the peak in 2008 and the low recorded in 2012. It is noted that the peak of 132 trucks per day recorded in 2008 is well below the permitted level of 184 trucks per day. Furthermore, the number of other vehicles (employee and miscellaneous vehicles) in 2012 was 32 and the number of other vehicles in 2008 was 35, which are also below the permitted level of 50 other vehicles per day. Therefore, traffic from landfill operations is well below what was identified and analyzed in the prior landfill environmental documents. Also note that the number of peak day trucks and peak day waste receipt are not closely correlated.

The peak year of 2008 was selected to represent "baseline" traffic conditions for assessing traffic operations and project impacts since the landfill generated significantly less traffic in 2012 due to poor economic conditions and it is reasonable to assume that MSW tonnage received will rebound as the economy improves. Permitted levels were not used as the baseline since the recorded scale-house data show historic traffic volumes are well below the permitted levels.

Traffic on U.S. Highway 101 adjacent to the site was about the same in 2008 as in 2012 (2008 = 29,500 average daily trips [ADT]; 2012 = 30,000 ADT). Therefore, the traffic levels recorded for U.S. Highway 101 in 2012, with 2008 landfill traffic using the landfill access road (turning to/from U.S. Highway 101) is considered the baseline in this analysis.

U.S. Highway 101 - Baseline Operations

Baseline traffic operations for U.S. Highway 101 are the same as shown for existing conditions since the 2012 traffic volumes are used for the Baseline analysis. As shown in Table 4.9-1, U.S. Highway 101 operates at LOS A to B adjacent to the project site during the a.m. and p.m. peak hour periods.

U.S. Highway 101/Landfill Access Road - Baseline Operations

Figure 4.9-1 shows the baseline traffic volumes for the U.S. Highway 101/landfill access road intersection. Delays and LOS were calculated for the a.m. and p.m. peak commuter periods using the baseline traffic volumes. Table 4.9-6 compares the existing and baseline operations at the intersection.

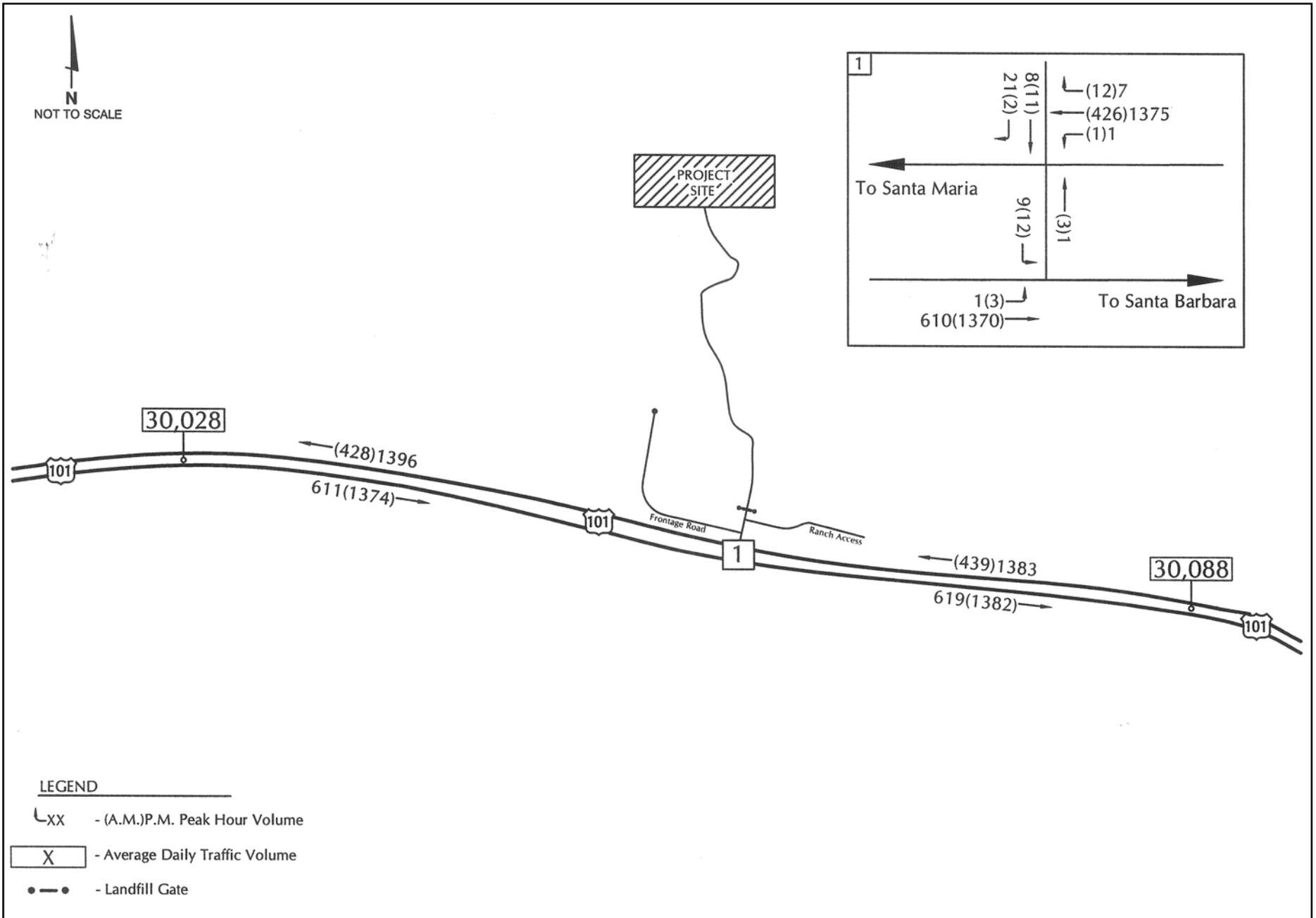
Table 4.9-6. U.S. Highway 101/Landfill Access Road: Baseline Levels of Service

Movement	Delay/LOS ¹			
	a.m. Peak		p.m. Peak	
	Existing	Baseline	Existing	Baseline
Inbound left turn	9.4 Sec./LOS A	10.0 Sec./LOS A	17.2 Sec./LOS C	19.9 Sec./LOS C
Inbound right turn	0.0 Sec./LOS A	0.0 Sec./LOS A	0.0 Sec./LOS A	0.0 Sec./LOS A
Outbound left & right turns ²	13.1 Sec./LOS B	12.6 Sec./LOS B	13.8 Sec./LOS B	23.3 Sec./LOS C

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

² Single lane approach. Average delay for combined left + right turns.

As shown, the delays for traffic entering and exiting the landfill access road during the a.m. peak period at the U.S. Highway 101 intersection equate to LOS A to B, the same LOS at shown for existing conditions. The delays and LOS are also about the same for the p.m. peak period, however, the delays for traffic outbound from the landfill equate to LOS C whereas they are LOS B for existing conditions.



SOURCE: Associated Transportation Engineers

BASELINE TRAFFIC VOLUMES
FIGURE 4.9-1

4.9.2 Impact Analysis and Mitigation Measures

4.9.2.1 Thresholds of Significance

Caltrans Standards

U.S. Highway 101 falls under the jurisdiction of Caltrans. Caltrans District 5 has established LOS goals for U.S. Highway 101 in their Transportation Concept Report (Caltrans, 2001), which indicates LOS C is the minimum operating standard for the segment of U.S. Highway 101 between Santa Barbara and Santa Maria.

Santa Barbara County

The County of Santa Barbara CEQA impact thresholds are also used to assess the project's potential to generate project-specific and/or cumulative traffic impacts. The County's thresholds are listed below.

- a. An impact is considered significant if the addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the following values:

Intersection Level of Service (Including Project)	Increase in V/C or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 Trips
LOS E	10 Trips
LOS F	5 Trips

- b. The project's access to a major road or arterial road would require a driveway that would create an unsafe situation, a new traffic signal or major revisions to an existing traffic signal.
- c. The project adds traffic to a roadway that has design features (e.g., narrow width, road-side ditches, sharp curves, poor sight distance, inadequate pavement structure) that would become a potential safety problem with the addition of project traffic.
- d. Project traffic would utilize a substantial portion of an intersections capacity where the intersection is currently operating at an acceptable LOS (A-C) but with cumulative traffic would degrade, or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate greater than 0.90.

1 **Congestion Management Program (CMP)**

2 The Santa Barbara County Association of Governments (SBCAG) has
3 developed a set of traffic impact thresholds to assess the impacts of land use
4 decisions made by local jurisdictions on regional transportation facilities located
5 within the CMP roadway system. U.S. Highway 101 is part of the CMP system.
6 According to CMP criteria, projects that generate less than 500 ADT and less
7 than 50 peak hour trips do not require detailed traffic analyses and are
8 considered compliant with CMP criteria.

9 4.9.2.2 Approved Tajiguas Landfill Expansion Project

10 01-EIR-05 for the Tajiguas Landfill Expansion Project (see Section 3.10.3)
11 identified the following traffic impacts:

- 12 1. The contribution of landfill-related traffic to total traffic volumes on U.S.
13 Highway 101 was considered less than significant (Class III);
- 14 2. Due to the schedule of landfill operations, landfill-related traffic was
15 identified as having a less than significant impact to the operation of
16 U.S. Highway 101 and the landfill access road intersection (Class III);
- 17 3. The traffic safety impact associated with landfill vehicles merging onto
18 U.S. Highway 101 from the landfill access road was considered
19 significant but mitigable (Class II) with implementation of measures
20 TRAF-1 (installation of a permanent stop sign and speed dots) and
21 TRAF-2 (“Caution – Trucks Entering the Highway” sign)¹ ;
- 22 4. Traffic safety impacts associated with stopping sight distance at the U.S.
23 Highway 101/access road intersection and traffic gaps were considered
24 less than significant (Class III) and further reduced by the
25 implementation of measures TRAF-1 and TRAF-2.

26 4.9.2.3 Approved Tajiguas Landfill Reconfiguration and Baron Ranch Restoration
27 Project

28 08EIR-00000-00007 determined that landfill reconfiguration would not modify
29 any permitted operational parameters (e.g., hours of operation, trips, maximum
30 daily tonnage, total waste disposal capacity) that would affect traffic volumes or
31 safety issues associated with the approved Expansion Project. Therefore, no
32 new or additional traffic impacts were identified as a result of landfill
33 reconfiguration.

¹ Measure TRAF-2 was subsequently determined to not be necessary by Caltrans (Letter to Mark Schleich dated November 14, 2003).

4.9.2.4 Proposed Tajiguas Resource Recovery Project

Construction Impacts

Construction of the Tajiguas Resource Recovery Project is anticipated to begin in summer 2015 and end in approximately December 2016. Construction is proposed 8 hours per day, 5 days per week. Preliminary information indicates there would be up to 70 employees required and up to 60-70 trucks for import of materials and equipment on peak days when concrete is poured (employee and truck levels would be lower on other days). The following impact analysis is based on peak day construction traffic. Table 4.9-7 provides estimated trip generation rates for peak construction days. As shown, construction traffic would peak with a total of 252 ADT, with 18 trips occurring during the a.m. peak hour and 6 trips occurring during the p.m. peak hour.

Table 4.9-7. Trip Generation: Project Construction

Component	Number	Shift	AVO	Trip Generation ¹		
				ADT	a.m. Peak ²	p.m. Peak ²
Employees	70	7:00 a.m.-3:30 p.m.	1.25	112	6(6/0)	6(0/6)
Trucks	70		NA	140	12(6/6)	0(0/0)
Total				252	18(12/6)	6(0/6)

¹ Trip generation based on construction information provided by A.J. Diani Construction.

² Total trips (inbound/outbound)

Traffic generated on peak construction days was distributed onto the study area street network assuming 70 percent of employee traffic would be to/from the north and 30 percent to/from the south. The distribution pattern for trucks assumes that 100 percent of the truck trips would be to/from the south.

Impact TRRP T-1: Implementation of the proposed project would generate construction-related traffic which could result in an adverse but less than significant impact to traffic operations on U.S. Highway 101 and the U.S. Highway 101/landfill access road – Class III Impact.

Levels of service were calculated for U.S. Highway 101 and for the U.S. Highway 101/landfill access road intersection assuming the Existing + Construction traffic volumes. As indicated by Tables 4.9-8 and 4.9-9, the construction phase of the Resource Recovery Project would not significantly impact U.S. Highway 101 or the U.S. Highway 101/landfill access road intersection.

1

Table 4.9-8. U.S. Highway 101: Existing + Construction Traffic

Time Period	Direction	LOS	Project Added Trips	Impact?
U.S. Highway 101 North of Landfill Access Road				
a.m. Peak	Northbound	LOS A	0	No
	Southbound	LOS B	0	No
p.m. Peak	Northbound	LOS B	4	No
	Southbound	LOS A	0	No
U.S. Highway 101 South of Landfill Access Road				
a.m. Peak	Northbound	LOS A	8	No
	Southbound	LOS B	6	No
p.m. Peak	Northbound	LOS B	0	No
	Southbound	LOS A	2	No

2

3

Table 4.9-9. U.S. Highway 101/Landfill Access Road: Existing + Construction Traffic

Movement	a.m. Peak			p.m. Peak		
	LOS ¹	Project Added Trips	Impact?	LOS ¹	Project Added Trips	Impact?
Inbound left turn	9.4 Sec./LOS A	4	No	17.2 Sec./LOS C	0	No
Inbound right turn	0.0 Sec./LOS A	8	No	0.0 Sec./LOS A	0	No
Outbound left & right turns ²	13.3 Sec./LOS B	6	No	21.1 Sec./LOS C	6	No

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

² Single lane approach. Average delay for combined left + right turns.

4

Project Trip Generation

5

Trip generation estimates were calculated for the project based on the number of employees and trucks required to operate the MRF and AD Facility (see Table 4.9-10). The following text describes the number of new employees and trucks assumed in the trip generation analysis. Note that trip generation associated with existing landfill facilities to be relocated as part of the project (maintenance building, operations trailers) was considered part of the baseline.

6

7

8

9

10

11

Employees

12

The MRF would be staffed by 7 administration employees working one shift per day; 24 full-time employees per 8-hour shift with 2 shifts per day; and 7 maintenance/cleaning employees working one shift per day. The AD Facility would be operated by 4 employees working 1 shift per day.

13

14

15

16

1 For the MRF, the applicant has set the shift for the administration staff and the
2 first employee group at 7:00 a.m. to 3:30 p.m.; and the second employee shift
3 at 3:00 p.m. to 11:30 p.m. Therefore, those employees would arrive and depart
4 the site outside of the a.m. and p.m. peak commuter periods (a.m. peak
5 commuter period = 7-9 a.m. and p.m. peak commuter period = 4-6 p.m.). The
6 shift schedule for the 7 maintenance/cleaning employees is from 11:00 p.m. to
7 7:30 a.m. Therefore, those employees would arrive outside of the peak
8 periods, but would depart during the a.m. peak period.

9 For the AD Facility, the shift schedule is 7:00 a.m. to 3:30 p.m. Therefore,
10 those employees would arrive and depart the site outside of the a.m. and p.m.
11 peak commuter periods. The project would also result in the elimination of 6
12 existing employees at the Tajiguas Landfill due to the reduced volume of waste
13 to be buried at the landfill. These employees work 6:30 a.m. to 4:00 p.m., and
14 arrive and depart outside of the a.m. and p.m. peak periods.

15 The County's proposed vendor (~~Mustang~~) is proposing to implement a vanpool
16 program for the new employees working at the MRF and AD Facility (excluding
17 the administrative staff) to reduce traffic generation as well as provide an
18 employment incentive. The location of the site is well suited for ridesharing,
19 given its isolation and distance from the population centers where employees
20 live. Employee surveys were used at the existing landfill to ascertain the
21 current level of ridesharing as well as where employees live. The surveys show
22 that most employees carpool to and from work; and that most employees live
23 north of the site (Buellton, Lompoc, Santa Maria).

24 The Average Vehicle Occupancy (AVO) for the existing employees was
25 measured at 1.6 employees per vehicle when commuting to and from work.²
26 The surveys also show that most employees do not leave the site during the
27 day; whereas employees in work places within population centers typically
28 leave during their shift to run errands, visit the doctor, etc. Therefore, the
29 existing employee commute information shows that a successful vanpool
30 program could be developed for the new employees. The proposed vanpool
31 program is anticipated to achieve an AVO of 2.5 (average of 2.5 employees per
32 vehicle) for the MRF and AD Facility employees (excluding the administrative
33 staff). The trip generation analysis assumes full implementation of the
34 proposed vanpool program.

² Note: This vehicle occupancy rate occurs without a formal vanpool program.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32

Export Trucks

The project would not result in additional trucks for import of waste materials since the waste to be processed would be delivered to the site without the proposed project. The project would, however, result in an additional 17 trucks per day for export of processed materials from the MRF (13 trucks) and AD Facility (4 trucks) to market. The truck schedules for export of materials would be controlled such that trucks would depart to market and return to the site outside of the a.m. and p.m. peak periods. Table 4.9-10 provides trip generation estimates for the Resource Recovery Project, within and without the CSSR Option.

Table 4.9-10 indicates the project would result in a net increase of 84 ADT, with 3 trips occurring during the a.m. peak hour and 0 trips during the p.m. peak hour. The CSSR option would increase ADT by 40, and add one a.m. and one p.m. peak hour trip. The proposed vanpool program and scheduling employee shifts and trucking outside of the a.m. and p.m. peak hours would reduce traffic additions to the project-area street network during the a.m. and p.m. peak commuter periods.

Project Trip Distribution

It is assumed that project traffic would be distributed onto the project-area street network based on the percentages shown in Table 4.9-11. The trip distribution pattern for employees is based on a survey of the existing employees at the landfill. That survey shows that about 90 percent of the employees commute from the north (Buellton-Santa Ynez, Lompoc, and Santa Maria); and the remaining 10 percent commute from the south (Santa Barbara-Goleta). The trip distribution pattern for trucks exporting material to market is based on the market destination. Recovered recyclables from the MRF are anticipated to be exported by truck to the Port of Los Angeles and finished compost from the AD Facility is anticipated to be exported to the Santa Ynez Valley, Lompoc and Santa Maria. Figure 4.9-2 illustrates the distribution and assignment of project-generated traffic.

1

Table 4.9-10. Project Trip Generation

Component	Number	Shift	AVO	Trip Generation ¹		
				ADT	a.m. Peak	p.m. Peak
Project w/o CSSR Option						
MRF						
Administrative staff	7	7:00 a.m.-3:30 p.m.	1.6	8	0(0/0)	0(0/0)
Employees	24	7:00 a.m.-3:30 p.m.	2.5	20	0(0/0)	0(0/0)
Employees	24	3:00 p.m.-11:30 p.m.	2.5	20	0(0/0)	0(0/0)
Employees	7	11:00 p.m.-7:30 a.m.	2.5	6	3(0/3)	0(0/0)
Trucks	13	NA	NA	26	0(0/0)	0(0/0)
Subtotal	75			80	3(0/3)	0(0/0)
AD Facility						
Employees	4	7:00 a.m.-3:30 p.m.	2.5	4	0(0/0)	0(0/0)
Trucks	4	NA	NA	8	0(0/0)	0(0/0)
Subtotal	8			12	0(0/0)	0(0/0)
Existing Landfill						
Employees	-6	6:30 a.m.-4:00 p.m.	1.6	-8	0(0/0)	0(0/0)
Total Project				84	3(0/3)	0(0/0)
CSSR Option						
Employees	20		2.5	16	0(0/0)	0(0/0)
Trucks (import)	7	7 a.m.-1:30 p.m.	NA	14	1(1/0)	1(0/1)
Trucks (export)	5		NA	10	0(0/0)	0(0/0)
Subtotal	32			40	1(1/0)	1(0/1)
Total Project + CSSR Option				124	4(1/3)	1(0/1)

¹ ADT = 1 inbound and 1 outbound trip for each employee vehicle and each truck. a.m. and p.m. peak hour trips also show inbound/outbound splits (inbound/outbound).

2

Table 4.9-11. Project Trip Distribution

Origin/Destination	Direction	Project w/o CSSR Option	CSSR Option
Employee Trips			
U.S. Highway 101	North	90%	90%
U.S. Highway 101	South	10%	10%
Truck Trips			
U.S. Highway 101	North	24%	0%
U.S. Highway 101	South	76%	100%

3

4

Impact TRRP T-2: Operation of the proposed project would generate additional traffic which could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (level of service) – Class III Impact.

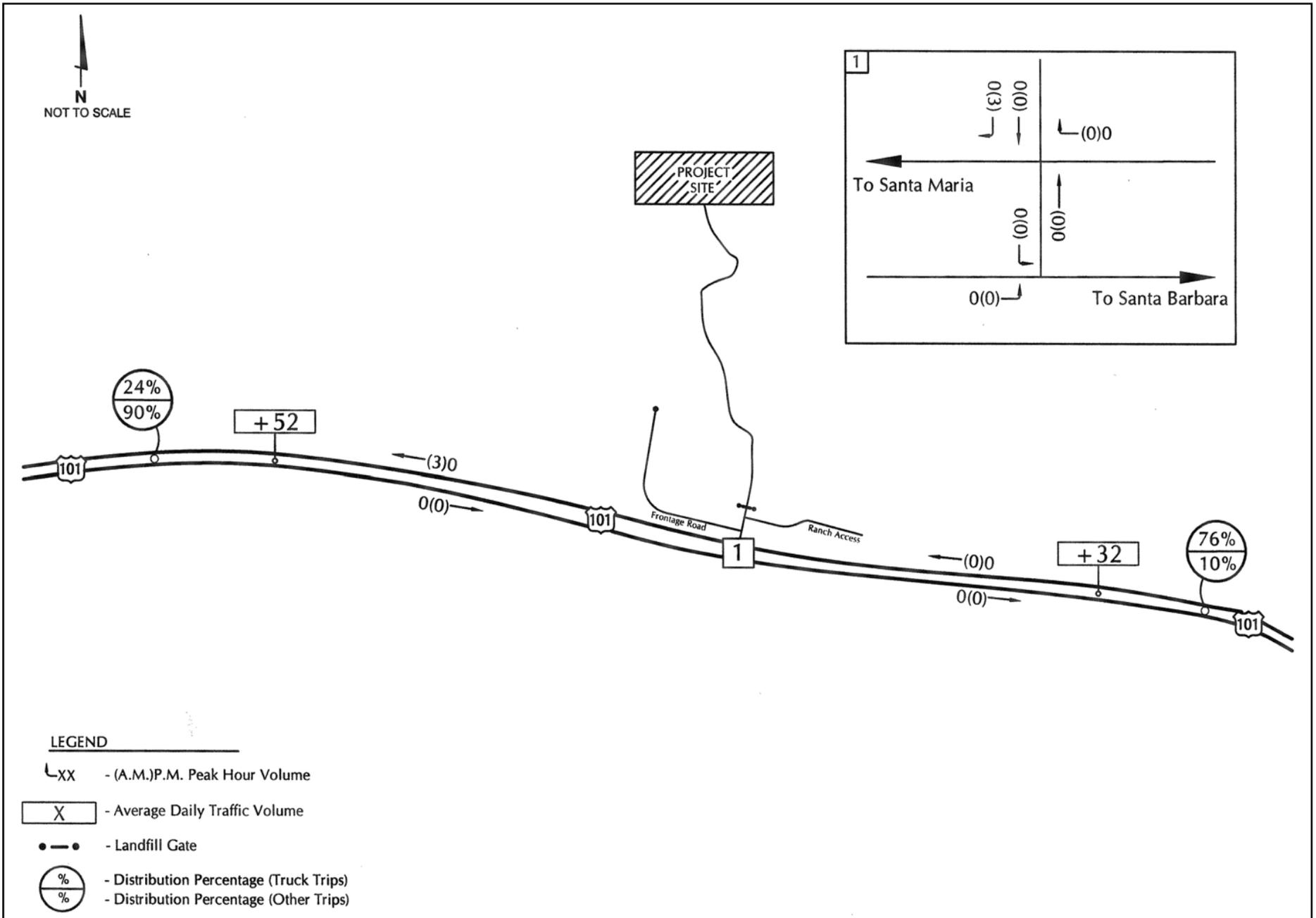
Levels of service were calculated for U.S. Highway 101 using the Baseline + Project volumes shown on Figure 4.9-3. Table 4.9-12 shows the Baseline + Project (with and without the CSSR Option) LOS forecasts along with the significance of project-added traffic based on Caltrans and County criteria. As shown, U.S. Highway 101 is forecast to operate at LOS A-B adjacent to the project site during the a.m. and p.m. peak hour periods with Baseline + Project traffic, which meets both Caltrans and County standards. The Resource Recovery Project (with or without the CSSR Option) would not generate significant impacts to U.S. Highway 101 operations.

Table 4.9-12. U.S. Highway 101: Baseline + Project Levels of Service

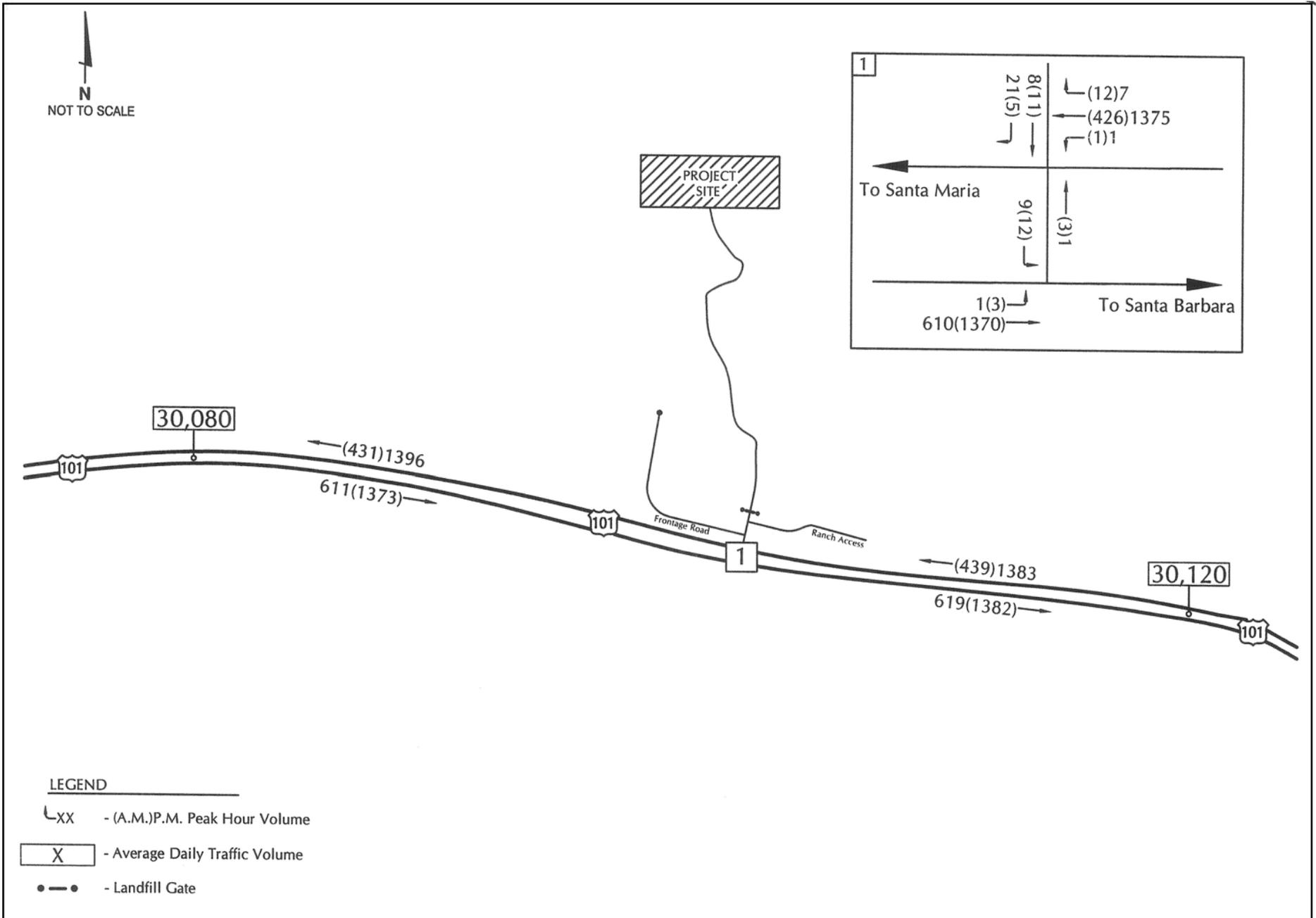
Time Period	Direction	LOS	Project		Project + CSSR	
			Added Trips	Impact?	Added Trips	Impact?
U.S. Highway 101 North of Landfill Access Road						
a.m. Peak	Northbound	LOS A	3	No	3	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	0	No
U.S. Highway 101 South of Landfill Access Road						
a.m. Peak	Northbound	LOS A	0	No	1	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	1	No

Impact TRRP T-3: Implementation of the proposed project would generate additional traffic which could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection level of service – Class III Impact.

Levels of service were calculated for the U.S. Highway 101/landfill access road intersection using the Baseline + Project peak period volumes shown on Figure 4.9-3. Table 4.9-13 shows the Baseline + Project (with and without the CSSR Option) LOS forecasts along with the significance of project-added traffic based on Caltrans and County criteria.



SOURCE: Associated Transportation Engineers



SOURCE: Associated Transportation Engineers

**Table 4.9-13. U.S. Highway 101/Landfill Access Road
 Baseline + Project Levels of Service**

Movement	Project				Project + CSSR			
	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact
Inbound left turn	10.0/A	No	19.9/C	No	10.0/A	No	19.9/C	No
Inbound right turn	0.0/A	No	0.0/A	No	0.0/A	No	0.0/A	No
Outbound left & right turns ²	12.0/B	No	23.3/C	No	12.0/B	No	24.6/C	No

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

² Single lane approach.

As shown, the Baseline + Project delays for traffic entering and exiting the landfill access road during the a.m. peak period equate to LOS A-B and the delays during the p.m. peak period equate to LOS A-C, which meet both Caltrans and County standards. The Resource Recovery Project (with or without the CSSR Option) would not significantly impact traffic operations at the U.S. Highway 101/landfill access road intersection.

Impact TRRP T-4: Implementation of the proposed project would generate additional traffic at the existing U.S. Highway 101/landfill access road intersection which could result in adverse but less than significant traffic safety impacts – Class III Impact.

As noted above, trucks/vehicles exiting the landfill to go southbound on U.S. Highway 101 or trucks/vehicles entering the landfill from southbound U.S. Highway 101 must use the existing at-grade intersection, and cross highway traffic lanes. As noted previously, Caltrans accident data show that the rate of accidents at the intersection is well below the statewide average for similar intersections and none of the accidents within the 10-year period involved landfill vehicles. Based on the results of the traffic analysis (Appendix K), there are adequate traffic gaps and sight distances for the additional project-generated traffic. In addition, the existing intersection contains turn lanes for all movements, which although less than Caltrans recommended lengths, are beneficial to the safety and efficiency of the intersections. Therefore, the Resource Recovery Project would not significantly impact traffic safety at the U.S. Highway 101/landfill access road at-grade intersection.

Solid Waste Facility Permit Traffic Volumes

The existing Solid Waste Facility Permit for the landfill allows for 184 trucks per day and 50 other vehicles per day (234 total vehicles). As discussed above, to date, the landfill has generated less traffic than originally analyzed and permitted. Historical data (see Table 4.9-5) shows that landfill traffic peaked in 2008 when there were a total of 132 trucks per day recorded and 35 other vehicles per day (167 total vehicles). The 167 total vehicles represents the generally existing landfill traffic conditions (baseline) against which project changes were measured. From a permitting standpoint, traffic generated under the Resource Recovery Project + CSSR Option scenario (229 total vehicles), which includes the generally existing landfill traffic volumes, would be essentially the same volume of traffic that is allowed under the existing permit. Table 4.9-14 compares the permitted trip generation with the trip generation estimates for the Resource Recovery Project + CSSR Option scenario.

Table 4.9-14. Permitted Traffic Levels

Scenario	Vehicles Per Day			ADT ¹
	Trucks	Other	Total	
Existing Solid Waste Facility Permit	184	50	234	468
Landfill Baseline + Proposed Project + CSSR Option	161	68	229	458

¹ ADT = 1 inbound and 1 outbound trip for each truck and each other vehicle.

As shown, the existing permit allows for 234 vehicles per day (184 trucks + 50 others) and the proposed project (Resource Recovery Project + CSSR Option) would result in 229 vehicles per day (161 trucks + 68 others). Therefore, traffic levels (234 vehicles per day) allowed under the existing permit would be essentially the same as those analyzed under the Landfill Baseline + Resource Recovery Project + CSSR Option.

However, the number of truck trips anticipated to be generated under the Resource Recovery Project + CSSR Option would be less than allowed under the existing permit and the number of other vehicles would be higher. Therefore, the mix of traffic generated at the landfill would include fewer trucks and more other vehicles than what is included in landfill's existing Solid Waste Facility Permit.

1 **Circulation Changes due to Potential Future U.S. Highway 101 Median**
2 **Closure**

3 Caltrans is considering closing at-grade intersections along the Gaviota Coast
4 including the median at the U.S. Highway 101/landfill access road intersection,
5 which would eliminate left turns into and out of the landfill. Median closure
6 would prevent landfill traffic from crossing U.S. Highway 101 traffic lanes,
7 reduce the potential for collisions and improve traffic safety. It is unknown if,
8 and when, these improvements would occur; however, extending the landfill life
9 would increase the potential for median closure to occur during the active life of
10 the landfill. Median closure would require inbound landfill traffic from the north
11 to utilize the Refugio State Beach interchange, and outbound traffic to the south
12 to utilize the Mariposa Reina interchange. These interchanges are anticipated
13 to operate at LOS A under existing and future conditions, and landfill traffic
14 circulation changes associated with median closure would not substantially
15 reduce LOS.

16 4.9.2.5 Proposed Tajiguas Resource Recovery Project with Optional Comingled
17 Source Separated Recyclables (CSSR) Component

18 The optional CSSR element would add an additional 10,000 square feet of
19 sorting facilities to the proposed MRF building (see Figure 3-8). All other
20 project facilities would be the same. Additionally, the number of employees on
21 the site would increase by 20 during the day and there would be additional
22 deliveries of recyclable materials and transport of sorted materials off-site after
23 processing. As indicated in Tables 4.9-12, 4.9-13, 4.9-15, 4.9-16 and 4.9-17,
24 the addition of the CSSR Option would have a minimal effect on project traffic
25 impacts, and would not alter the significance of these operational impacts.

26 4.9.2.6 Extension of Landfill Life Impacts

27 **Impact TRRP T-5: Project-related extension of the life of the Tajiguas**
28 **Landfill would extend the duration of less than significant traffic level of**
29 **service and safety impacts at the U.S. Highway 101/landfill access road**
30 **intersection associated with landfill operations – Class III Impact.**

31 The proposed Tajiguas Resource Recovery Project is expected to extend the
32 life of the landfill by approximately 10 years. Impacts associated with extension
33 of life do not represent new impacts, but represent impacts that would be
34 extended further in time. As discussed below, the proposed Tajiguas Resource
35 Recovery Project would not significantly impact the project-area street network
36 in the Year 2036 cumulative scenario. Therefore, the proposed Tajiguas
37 Resource Recovery Project would extend the duration of time over which the
38 insignificant (Class III) traffic impacts would occur.

1 4.9.2.7 Decommissioning Impacts

2 **Impact TRRP T-6: Decommissioning activities would generate traffic**
3 **which could result in an adverse but less than significant impact to traffic**
4 **operations on U.S. Highway 101 and the U.S. Highway 101/landfill access**
5 **road – Class III Impact.**

6 Similar to project construction activities (see Impact TRRP T-1), dismantling
7 and removing project facilities would generate vehicle traffic associated with
8 transporting workers, equipment and materials. However, the intensity and
9 total amount of decommissioning activity would be less than associated with
10 construction, such that peak hour traffic volumes would likely be less. As
11 shown in Tables 4.9-17 and 4.9-18, future (2036) levels of service near the
12 Landfill would remain acceptable. Therefore, similar to construction, traffic
13 impacts associated with decommissioning are considered less than significant.

14 4.9.2.8 Cumulative Impacts of Tajiguas Resource Recovery Project

15 Two cumulative scenarios are analyzed for the proposed project. The first
16 scenario, termed "Cumulative", includes traffic generated by approved and
17 pending projects in the region (see Section 3.6), which represents a short-term
18 scenario that coincides with the time period when the project would become
19 operational (~2017). The second cumulative scenario, termed "Year 2036",
20 includes the traffic generated by approved and pending projects plus
21 background growth to the year 2036, which represents conditions near the end
22 of life for the proposed project.

23 **Cumulative Traffic Forecasts**

24 Cumulative traffic volumes were forecast for the project-area facilities assuming
25 traffic generated by approved and pending projects (see Section 3.6) plus
26 application of a 1/2 percent per year background growth factor. The
27 background growth factor was applied to the existing traffic counts to account
28 for traffic growth not generated by the cumulative projects, since U.S. Highway
29 101 is a regional route that is affected by growth beyond the Gaviota coast
30 area.

31 Historical counts show that U.S. Highway 101 traffic has increased at a rate of
32 less than 1/2 percent per year adjacent to the project site over the past 20
33 years. A 1/2 percent per year background growth factor was selected to
34 provide a conservative analysis. Cumulative and Cumulative + Project traffic
35 forecasts are shown on Figures 4.9-4 and 4.9-5.

Year 2036 Traffic Forecasts

Year 2036 traffic volumes were forecast for the project-area facilities assuming the cumulative traffic forecasts plus application of a 1/2 percent per year background growth factor to the year 2036. Traffic volumes estimated for Year 2036 and Year 2036 + Project conditions are provided in Figures 4.9-6 and 4.9-7.

Impact TRRP T-CUM-1: Traffic generated as a result of implementation of the proposed project combined with traffic generated by the cumulative projects and background growth could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (level of service) - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).

LOS was calculated for U.S. Highway 101 using the Cumulative and Cumulative + Project volumes shown on Figures 4.9-4 and 4.9-5. Table 4.9-15 provides LOS forecasts for the project with and without the CSSR Option, along with the significance of project-added traffic based on Caltrans and County criteria.

As shown, U.S. Highway 101 is forecast to operate at LOS A to B adjacent to the project site during the a.m. and p.m. peak periods under Cumulative and Cumulative + Project conditions (with and without the CSSR Option), which meets both Caltrans and County standards. The cumulative impact on U.S. Highway 101 roadway operations would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts on U.S. Highway 101 roadway operations would not be considerable.

Table 4.9-15. U.S. Highway 101: Cumulative + Project Levels of Service

Time Period	Direction	LOS	Cumulative + Project		Cumulative + Project + CSSR	
			Added Trips	Impact?	Added Trips	Impact?
U.S. Highway 101 North of Landfill Access Road						
a.m. Peak	Northbound	LOS A	3	No	3	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	0	No
U.S. Highway 101 South of Landfill Access Road						
a.m. Peak	Northbound	LOS A	0	No	1	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	1	No

Impact TRRP T-CUM-2: Traffic generated as a result of implementation of the proposed project combined with traffic generated by the cumulative projects and background growth could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).

LOS was calculated for the U.S. Highway 101/landfill access road intersection using the Cumulative and Cumulative + Project peak hour volumes shown on Figures 4.9-4 and 4.9-5. The LOS forecasts for the a.m. and p.m. peak periods are provided in Table 4.9-16, along with the significance of project-added traffic based on Caltrans and County criteria. The cumulative impact on the landfill access road/U.S. Highway 101 intersection would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts at the landfill access road/U.S. Highway 101 intersection would not be considerable.

**Table 4.9-16. U.S. Highway 101/Landfill Access Road
 Cumulative + Project Peak Levels of Service**

Movement	Cumulative + Project				Cumulative + Project + CSSR			
	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact
Inbound left turn	10.2/B	No	20.9/C	No	10.2/B	No	20.9/C	No
Inbound right turn	0.0/A	No	0.0/A	No	0.0/A	No	0.0/A	No
Outbound left & right turns ²	12.3/B	No	24.8/C	No	12.3/B	No	26.1/D	No

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

² Single lane approach.

18
 19
 20
 21

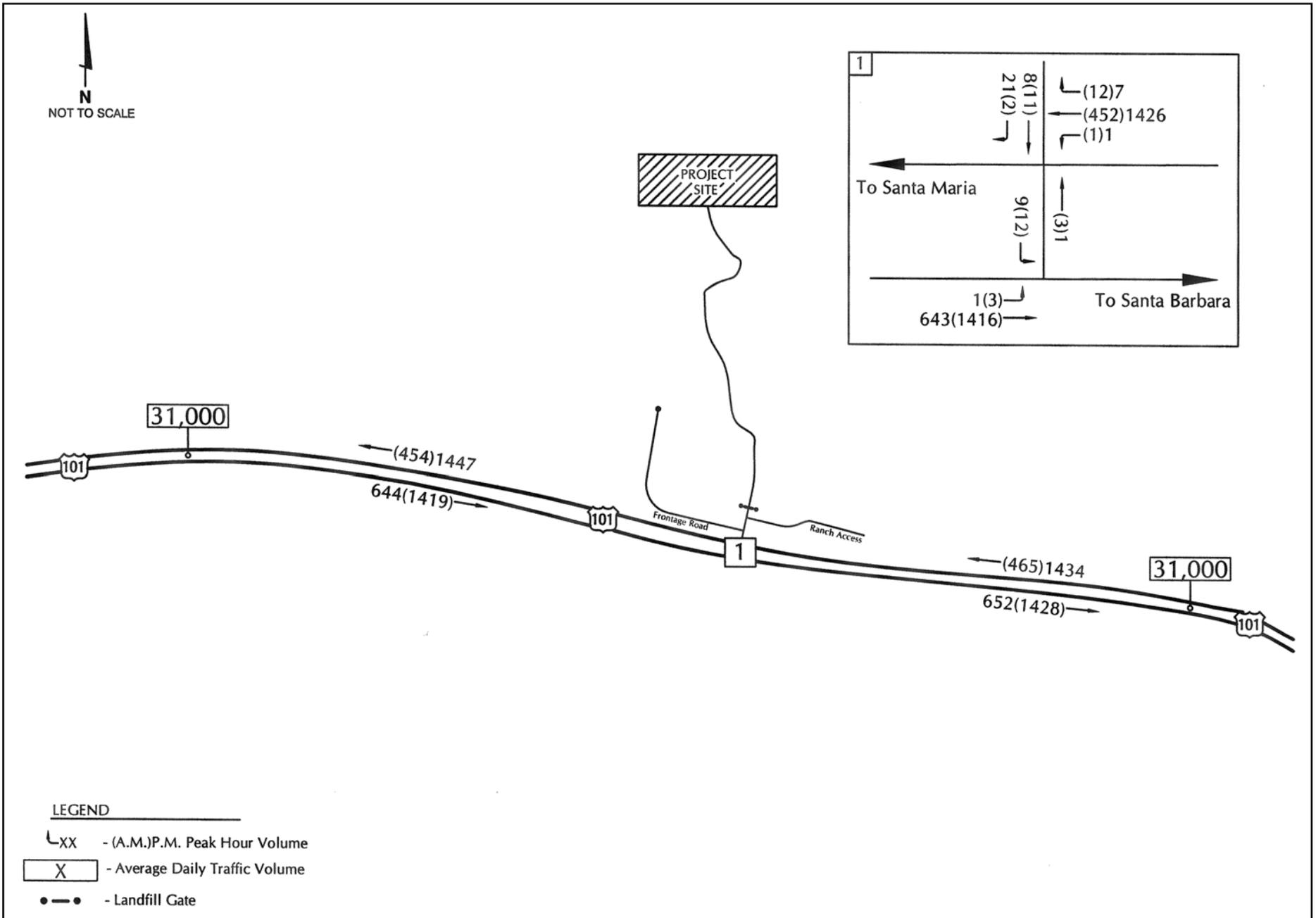
Impact TRRP T-CUM-3: Traffic generated as a result of implementation of the proposed project combined with traffic generated by long-term growth (2036) could result in an adverse but less than significant impact on U.S. Highway 101 traffic operations (roadway level of service) - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).

Table 4.9-17 provides LOS forecasts for Year 2036 + Project conditions (with and without the CSSR Option), along with the significance of project-added traffic based on Caltrans and County criteria. As shown, U.S. Highway 101 is forecast to operate at LOS A to B adjacent to the project site during the a.m. and p.m. peak periods under Year 2036 and Year 2036 + Project conditions (with or without the CSSR Option), which meets both Caltrans and County standards. The cumulative impact on the U.S. Highway 101 operations would be less than significant and the incremental contribution of the Resource Recovery Project to cumulative traffic impacts on U.S. Highway 101 roadway operations would not be considerable.

Table 4.9-17. U.S. Highway 101: Year 2036 + Project Levels of Service

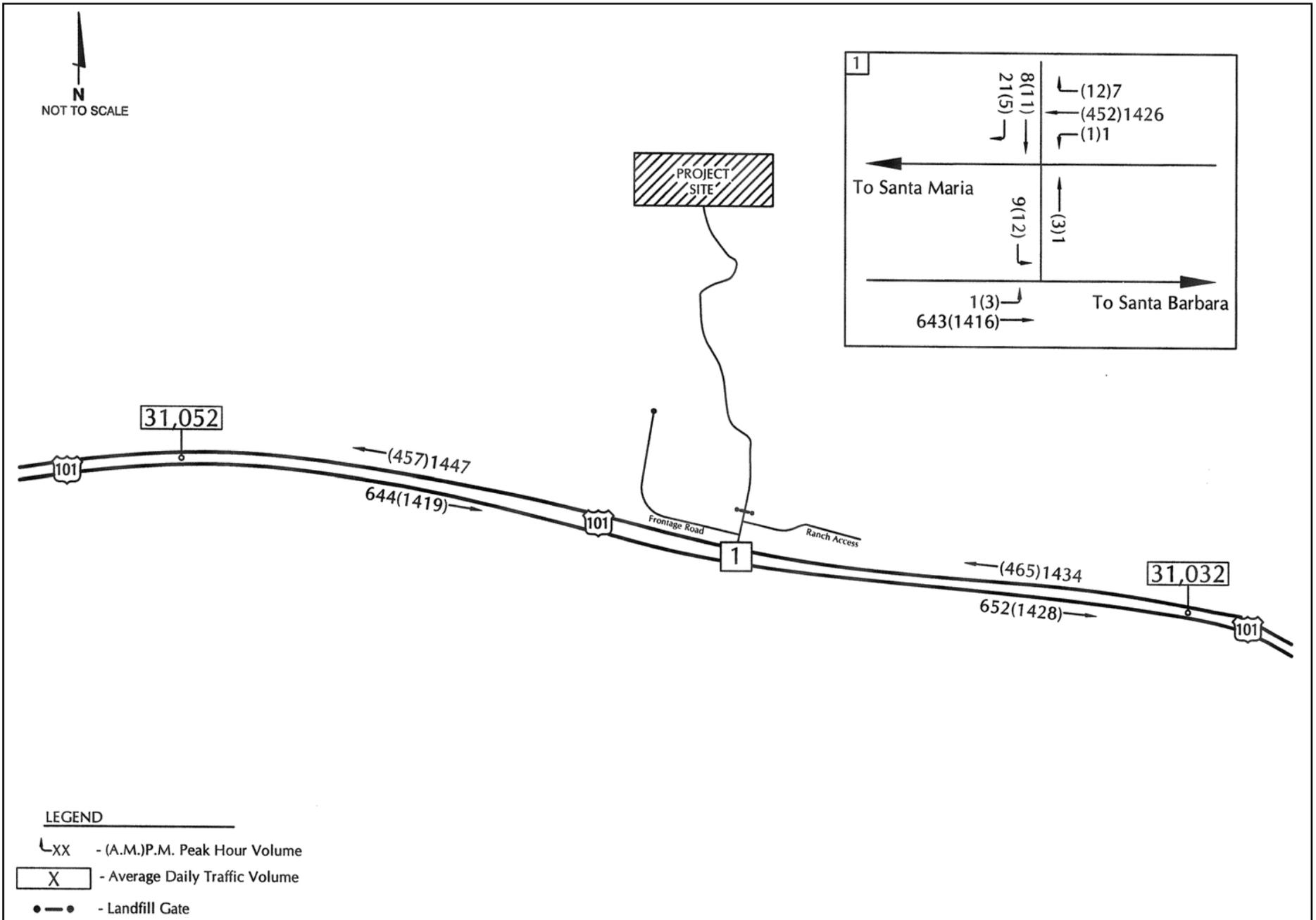
Time Period	Direction	LOS	2036 + Project		2036 + Project + CSSR	
			Added Trips	Impact?	Added Trips	Impact?
U.S. Highway 101 North of Landfill Access Road						
a.m. Peak	Northbound	LOS A	3	No	3	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	0	No
U.S. Highway 101 South of Landfill Access Road						
a.m. Peak	Northbound	LOS A	0	No	1	No
	Southbound	LOS B	0	No	0	No
p.m. Peak	Northbound	LOS B	0	No	0	No
	Southbound	LOS A	0	No	1	No

17



SOURCE: Associated Transportation Engineers

CUMULATIVE TRAFFIC VOLUMES
 FIGURE 4.9-4



SOURCE: Associated Transportation Engineers

Impact TRRP T-CUM-4: Traffic generated as a result of implementation of the proposed project combined with traffic generated by long-term growth (2036) could result in an adverse but less than significant impact on the landfill access road/U.S. Highway 101 intersection - Class III Cumulative Impact; Project Contribution – Not Considerable (Class III).

LOS was calculated for U.S. Highway 101/landfill access road intersection using the Year 2036 and Year 2036 + Project peak volumes shown on Figures 4.9-6 and 4.9-7. LOS forecasts for the a.m. and p.m. peak periods are shown in Table 4.9-18, along with the significance of project-added traffic based on Caltrans and County criteria.

**Table 4.9-18. U.S. Highway 101/Landfill Access Road
 Year 2036 + Project Peak Levels of Service**

Movement	2036 + Project				2036 + Project + CSSR			
	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact	Seconds delay/ LOS ¹ a.m.	Impact?	Seconds delay/ LOS ¹ p.m.	Impact
Inbound left turn	10.4/B	No	24.0/C	No	10.4/B	No	24.0/C	No
Inbound right turn	0.0/A	No	0.0/A	No	0.0/A	No	0.0/A	No
Outbound left & right turns ²	12.8/B	No	29.9/D	No	12.8/B	No	31.8/D	No

¹ LOS based on average number of seconds of delay per vehicle pursuant to the Highway Capacity Manual.

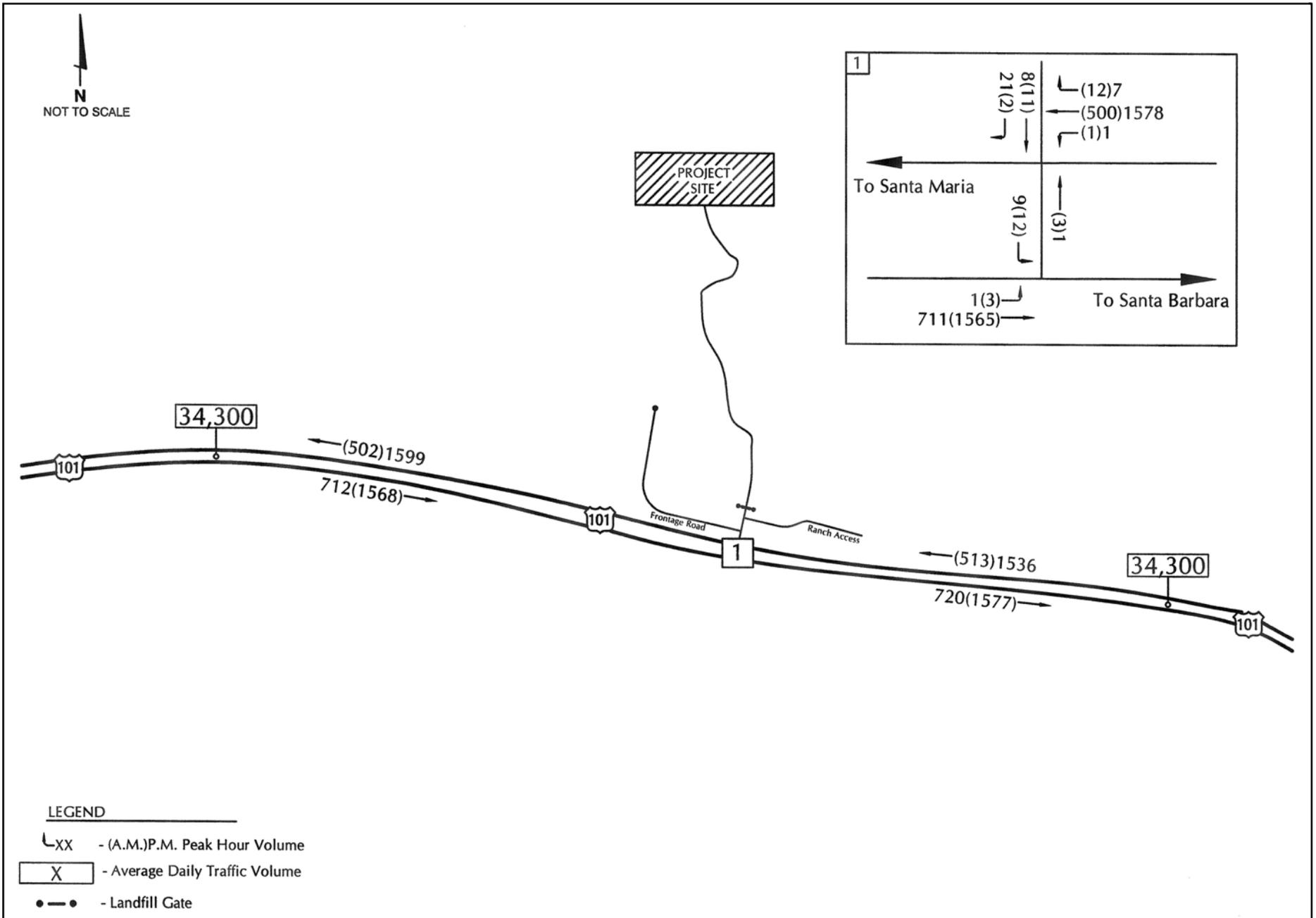
² Single lane approach.

As shown, the Year 2036 and Year 2036 + Project delays for traffic entering and exiting the landfill access road during the a.m. peak period equate to LOS A to B, which meets both Caltrans and County standards (with or without the CSSR Option). Delays for inbound traffic during the p.m. peak period equate to LOS A-C and delays for outbound traffic during the p.m. peak period equate to LOS D. While LOS D exceeds the Caltrans and County LOS C standard, the impact is considered less than significant because the project's traffic additions would not exceed the adopted significance thresholds (see Section 4.9.2.1).

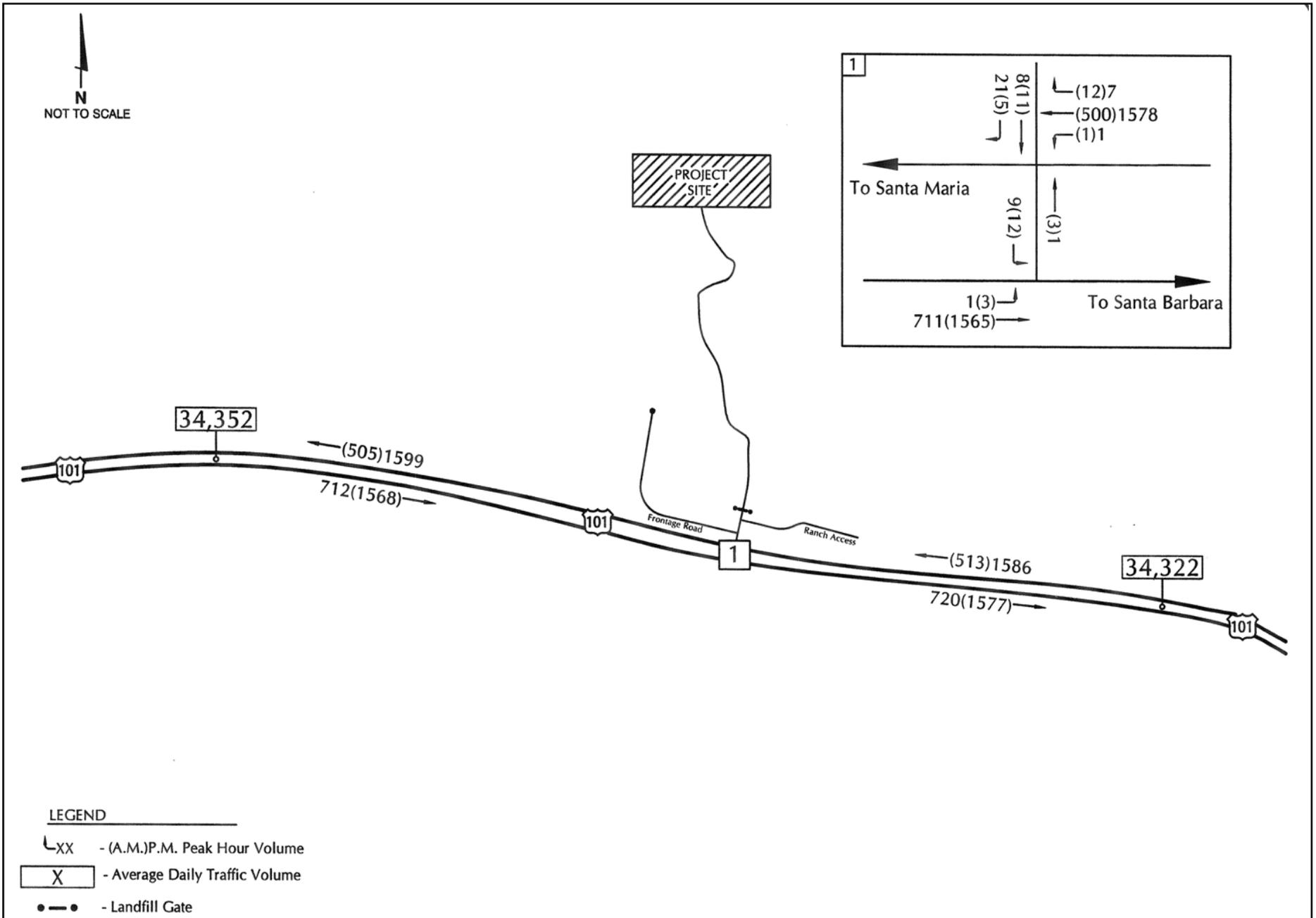
1 The County's Environmental Thresholds and Guidelines Manual defines a
2 significant cumulative impact (see d. in Section 4.9.2.1) as one that uses a
3 substantial portion of an intersection's capacity for intersections that are
4 forecast to operate at LOS D or worse. The impact of project traffic for
5 intersections forecast to operate at LOS D is a change in the V/C ratio of 0.02
6 (or more). The Resource Recovery Project would add 0 trips to the intersection
7 during the p.m. peak period and therefore would not contribute to significant
8 impacts at the intersection in Year 2036. The Project + CSSR Option would
9 also not exceed the County Threshold. The Project + CSSR Option would add
10 1 outbound trip from the landfill access road during the p.m. peak period, which
11 would change the V/C ratio by less than 0.02.

12 It is also noted that the delays for outbound movements would be experienced
13 predominately by landfill traffic (note that there is a proposed residence on the
14 Hart parcel and access to Canada de la Huerta) and that traffic would not
15 impede other flows at the intersection. The average delay of 29.9 seconds per
16 vehicle (31.8 seconds per vehicle with the CSSR Option) is not significant given
17 the intersection's configuration and environment (adequate gaps, provision of
18 turn lanes and good sight distances). Therefore, the cumulative impact to the
19 landfill access road/U.S. Highway 101 intersection would be less than
20 significant and the incremental contribution of the Resource Recovery Project to
21 cumulative traffic impacts on the landfill access road/U.S. Highway 101
22 intersection would not be considerable.

23



SOURCE: Associated Transportation Engineers



SOURCE: Associated Transportation Engineers