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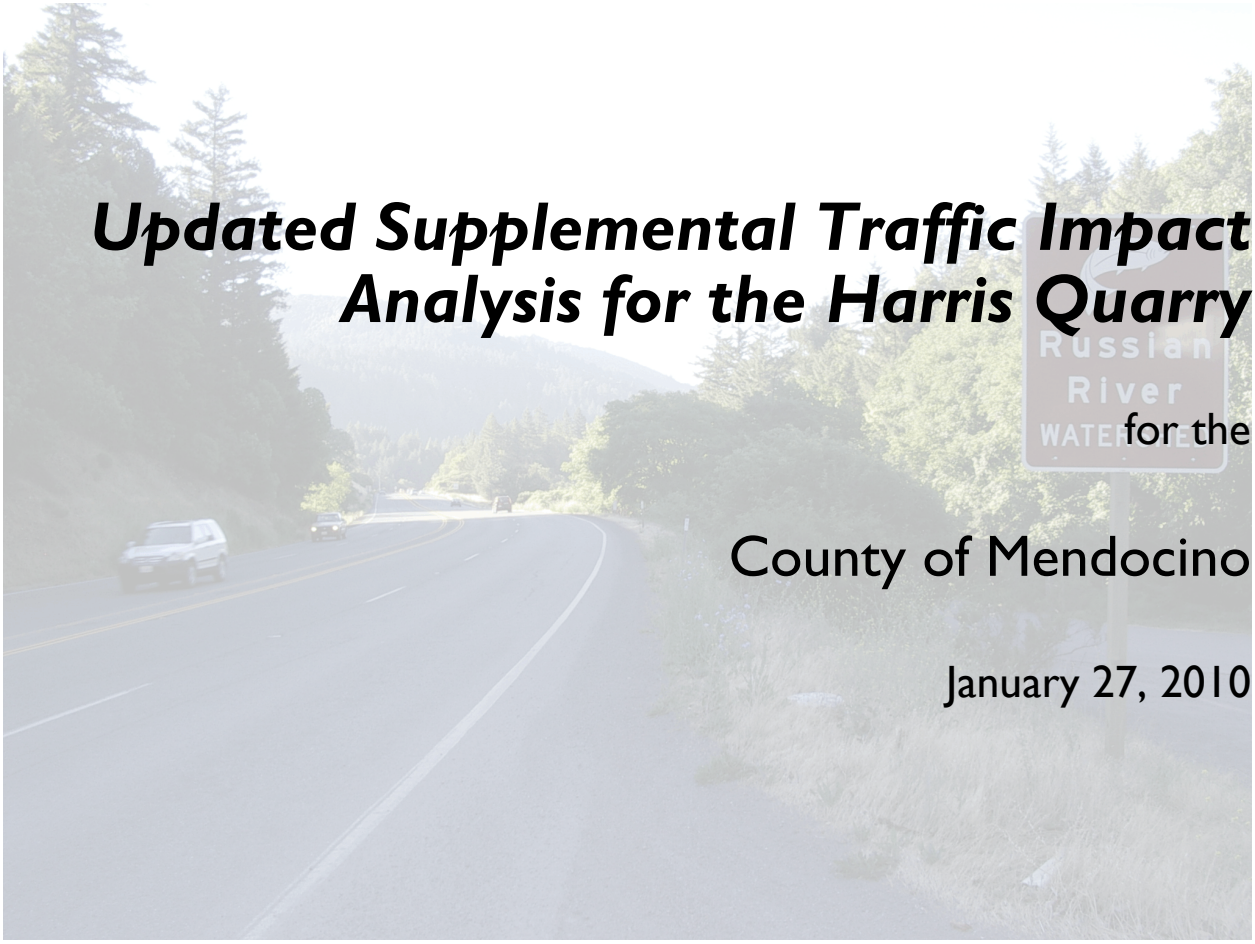


Updated Supplemental Traffic Impact Analysis for the Harris Quarry

for the

County of Mendocino

January 27, 2010

Table of Contents

Introduction and Setting

Introduction

This report provides an analysis of the impacts on the circulation system associated with the proposed project at Harris Quarry which is located in Mendocino County south of the City of Willits. This analysis is an update to a report that supplements the Draft Environmental Impact Report (DEIR) for the Harris Quarry Use Permit and reflects conditions with the continuation of existing aggregate hauling activities from the Quarry for the horizon years of 2010, 2014 (both with and without the US 101 Willits bypass construction project in progress), 2030 and 2040. For each horizon year project traffic impacts have been determined for peak production activity in July and October respectively. Impacts have been evaluated for the peak traffic hours on US 101 (Redwood Highway) for the time periods of 9:00 to 10:00 a.m., 11:00 a.m. to noon, 1:15 to 2:15 p.m. and 4:45 to 5:45 p.m. Harris Quarry currently operates on weekdays with no regular operations projected for week nights or weekends. On rare occasions there may be overnight or weekend operations, but this would only occur when there is an emergency need for aggregate. Measures have been identified to mitigate significant impacts of the proposed project. New information provided in this update includes analysis for the horizon years of 2030 and 2040 as well as conditions that would be expected to occur if the quarry production was limited to currently permitted levels, regardless of actual historical production levels, and without the asphalt concrete (AC) plant which is part of the proposed project. Additionally, an analysis of vehicle miles traveled was completed and included. The traffic study was completed in accordance with criteria established by the County and the State, and is consistent with standard traffic engineering techniques. Issues such as intersection level of service, sight distance and safety were evaluated.

Setting

Quarry Location and Access

Harris Quarry is located on the west side of US 101 approximately 500 feet south of Black Bart Drive, south of the City of Willits in Mendocino County. Access to the Quarry is currently provided via a single access drive on the west side of US 101. There are no intersection controls along US 101, with stop sign controls on the side streets. The project site and study intersections are shown on Figure 1.

US 101 in the project vicinity has two travel lanes in each direction. It is an expressway and has at-grade intersections with some local roads and major driveways. US 101 is classified as "rural – other principal arterial" in the Federal Highway Administration (FHWA) functional classification system and is shown in the California Department of Transportation (Caltrans) "California Roads System Maps." The posted speed limit in the project area is 65 miles per hour (mph). US 101 has a moderate extended uphill grade south to north as it climbs out of the Ukiah Valley. It crests the mountain ridge separating the Russian River and Eel River watersheds just north of the intersection with Black Bart Drive. Northbound US 101 traffic is climbing an uphill grade through both the Harris Quarry and Black Bart Drive intersections, while southbound traffic is on a downhill grade through both intersections. No left or right turn deceleration or acceleration lanes currently exist on the US 101 approaches to the Harris Quarry entrance.

Black Bart Drive is a two-lane rural road extending to the west of US 101. It has a moderate east-to-west uphill grade, numerous horizontal curves and lacks shoulders in most locations. Black Bart Drive is stop-sign controlled on its single lane approach to US 101, and flares out at the intersection to permit a right turning

MEX047.ai 12/09

Updated Supplemental Traffic Impact Analysis for the Harris Quarry

County of Mendocino

Figure 1

Study Area and Lane Configurations

motorist to bypass vehicles making left turns. Left and right turn deceleration lanes are provided on both US 101 approaches to the Black Bart Drive intersection, where all turn movements are also allowed; however, left and right turn acceleration lanes are not provided leaving Black Bart Drive. Land use along Black Bart Drive consists of single family residences. Although traffic from the Quarry is not expected to travel on Black Bart Drive, the street was included in the analysis due to its proximity to the Quarry entrance and the fact that accelerating or decelerating trucks will interact with vehicles entering or exiting Black Bart Drive.

Planned Improvements

There are currently no planned improvements to Black Bart Drive or the US 101/Black Bart Drive intersection by the Mendocino County Department of Transportation or Caltrans. The nearest planned and funded project is the Willits bypass which will start approximately three miles to the north of the Harris Quarry Driveway. This project has an estimated construction start date of January 2011 and is expected completion in 2015. This is relevant because if Harris Quarry is selected to provide the aggregate for the project, the distribution of truck trips entering or exiting the Quarry is expected to shift, with more trucks traveling north to the bypass project site. This project is not expected to alter the total number of trucks entering and exiting the Quarry.

Segment Speed

The prevailing speed of traffic on US 101 is an essential factor in determining the level of improvements needed at an intersection. The posted speed limit on US 101 is 65 miles per hour in the vicinity of the Harris Quarry access. Vehicle speeds were sampled on US 101 southerly of Black Bart Drive on March 11, 2008, during which time data were collected in both directions, northbound and southbound, as well as by inside, number one, and outside, number two, lanes. Table 1 summarizes statistics of the vehicle speeds measured, and speed survey spreadsheets are provided in Appendix A.

Table 1
Summary of Vehicle Speeds on US 101

	Northbound		Southbound	
	Inside	**Outside**	**Inside**	**Outside**
Average Speed	66	61	65	60
85th Percentile Speed	70	65	70	66
Pace Speed	60-69	57-66	60-69	58-67
Number Observed	28	67	35	64

Note: All speeds in miles per hour (mph)

As can be seen in Table 1, the inside, or number one, lane had recorded vehicle speeds approximately five miles per hour faster than those observed in the outside, or number two, lane. This is expected as slower traffic is required to drive in the outer lane. The 85th percentile of observed speeds is often used to establish the speed limit; however, due to the type of facility, the California Vehicle Code (CVC) limits the speed limit to be not more than 65 miles per hour (CVC §22349). The speed sample was obtained at the

location of the Quarry driveway because in some situations the free flow speed of a roadway may exceed the speed limit defined by the CVC. For the purposes of this evaluation, a free flow speed of 65 miles per hour was deemed appropriate for evaluating the need for speed change lanes.

Collision History

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated for the one-mile segment of US 101 extending one-half mile in either direction from Black Bart Drive based on the most recent records available from the California Highway Patrol and published in their Statewide Integrated Traffic Records System (SWITRS) reports (January 2004 through December 2008). For the five-year study period, the corridor experienced 16 collisions, translating to a calculated collision rate of 0.52 collisions per million vehicle miles (c/mvm). This is less than the statewide average of 1.65 c/mvm for similar facilities statewide, as indicated in *2007 Accident Data on California State Highways*, California Department of Transportation. One collision, or 6.3 percent of all reported collisions, resulted in a fatality, which is greater than the statewide average of 2.2 percent for similar facilities. However, the 31.3 percent of collisions that resulted in one or more injuries is less than the statewide average of 38.4 percent for similar facilities. Details of the collision data are provided in Appendix B.

The collision data was further examined to determine which collisions, if any, can be attributed to turning movements at the Harris Quarry Driveway. None of the collisions within the study segment were identified as involving large trucks or trucks with trailers. Additionally, none of the collisions during the five-year period were associated with a turning movement at the project driveway.

Base Permit Traffic Volumes

Base turning movement counts at Black Bart Drive and the Harris Quarry access road were taken from the *Draft Environmental Impact Report for the Proposed Harris Quarry Use Permit and Reclamation Plan*, Leonard Charles and Associates (DEIR).

The primary factor related to the number of truck trips into and out of a quarry facility is the demand for aggregate and AC, which is highly influenced by the season and the level of construction activity. Demand will vary not only monthly, but also from day to day and hour to hour. To determine the seasonal truck trip generation from the site production estimates for each product were obtained from the quarry operator. Recently published environmental impact reports for the Canyon Rock and Blue Rock Quarries in Sonoma County were also reviewed. From the EIRs for the Canyon Rock and Blue Rock Quarries seasonal, weekly, peak daily and hourly production information was obtained. Table 2 summarizes the projected monthly production as a percent of the total annual production. As can be seen in Table 2, October has the highest level of production.

Table 2
Monthly Production

Month	Percentage for Year		Month	Percentage for Year	
	Aggregates	AC		Aggregates	AC
January	5.5%	2.0%	July	9.4%	12.0%
February	5.4%	2.0%	August	9.4%	17.0%
March	7.5%	2.0%	September	9.2%	17.0%
April	5.6%	3.0%	October	12.2%	17.0%
May	10.6%	3.0%	November	12.1%	15.0%
June	9.3%	6.0%	December	3.8%	4.0%

An important factor to be considered when determining potential traffic impacts of land uses with seasonal variations is the traffic volume on the adjacent street network. Caltrans maintains permanent volume count stations on various routes throughout the state and these figures are published monthly. The nearest count station location on US 101 is in Humboldt County, and the monthly variations in volumes are summarized in Table 3.

Table 3
Summary of Monthly Traffic Volumes at Count Station 109

Month	Average ADT	% of Average Annual ADT	Month	Average ADT	% of Average Annual ADT
January	2826	78.60%	July	4678	130.11%
February	2888	80.30%	August	4514	125.55%
March	3133	87.10%	September	4078	113.42%
April	3458	96.00%	October	3593	99.93%
May	3957	110.10%	November	3139	87.31%
June	4255	118.30%	December	2626	73.04%

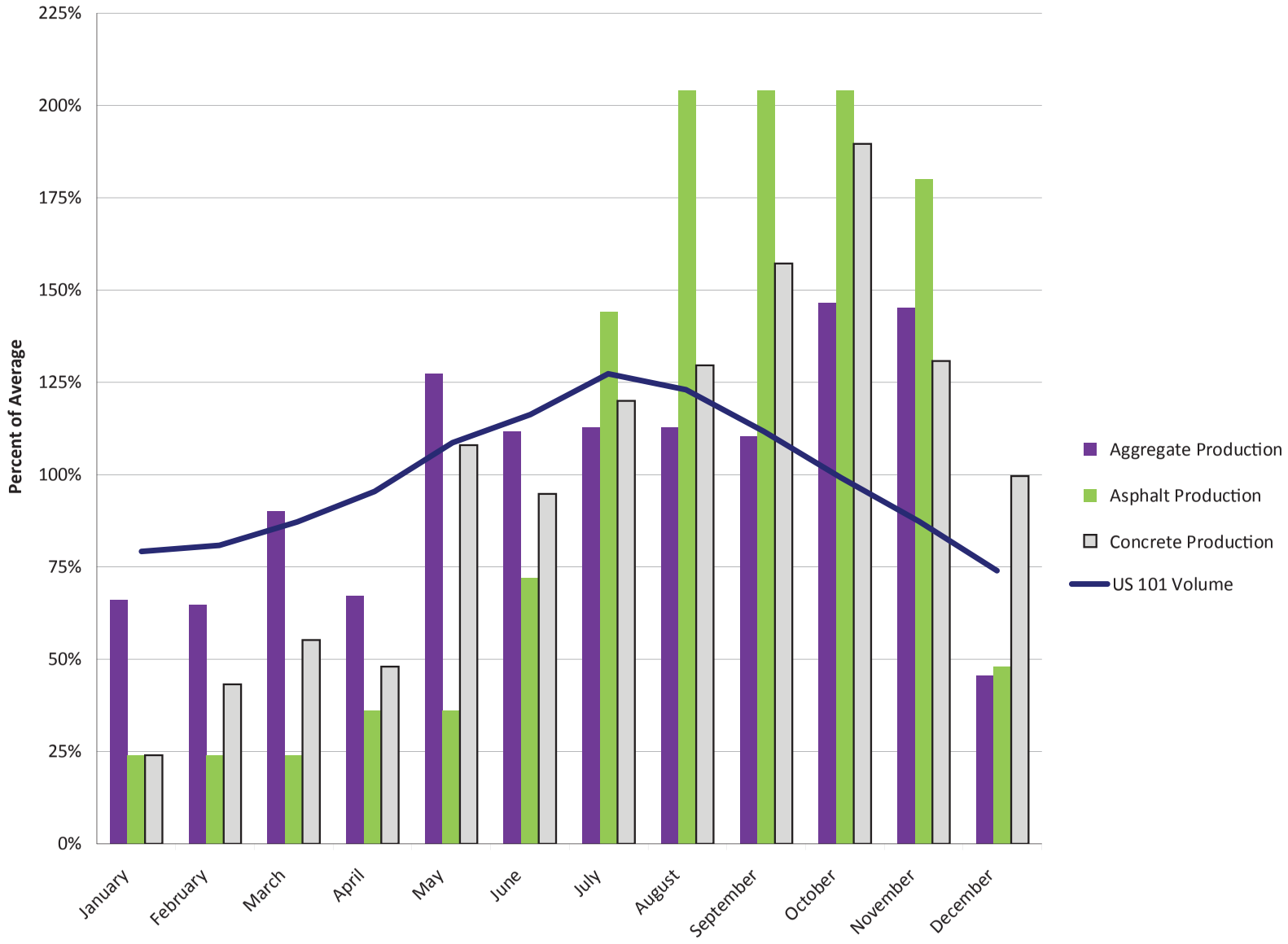
Note: ADT = Average Daily Traffic

As seen in Table 3, the month of July has the highest percentage of annual average traffic volumes. The relationship between the data presented in Tables 2 and 3 are shown graphically in Figure 2 and indicates the annual variation in production of the Quarry together with the variations in traffic volumes on US 101 as a percentage of average production and volume. Using these relationships, traffic volumes for July and October were developed based on traffic volume counts conducted near the Quarry entrance. Although these counts were obtained some distance north of the project area, the annual distribution of the trips is expected to be similar, making this data appropriate for the purpose of developing these ratios.

Base Assumptions

Several factors were considered when projecting truck trips to and from the Harris Quarry. A primary factor is the bulking that occurs when material is mined. For example, a solid cubic yard block of material when processed yields a larger volume of gravel because when the gravel is processed, it is not nearly as compact as a solid rock and contains many air voids, causing the same weight of material to occupy a larger volume. When the gravel is processed, it increases in volume by a factor of approximately 1.24 compared to solid rock. This factor was derived by dividing a typical unit weight of processed gravel by a typical unit weight of mined material.

The capacity of the truck will determine the number of trucks needed to haul a given quantity of material. Truck capacity was based upon a standard truck size of 20 cubic yards; however, due to varying truck size and/or varying demand for transporting gravel or AC it was assumed that not all loads would be 20 cubic yards, so an average of 16 cubic yards per truck was used for analysis purposes. Since aggregate transferred to Willits for concrete production is expected to be much more consistent, it was assumed that the entire truck capacity of 20 cubic yards would be utilized. The relationships between the data presented in Tables 2 and 3 are shown in Figure 2 and indicate the annual variation in production of the Quarry together with the variations in traffic volumes on US 101 as a percentage of average production and volume. Using the relationship between average production and peak Quarry production as shown on Page 7 of the DEIR it was determined that there is a 147 percent variance in production between average and peak conditions, or nearly 50 percent higher production during the peak month than on average. This ratio is consistent with expected typical traffic patterns experienced by various types of developments, therefore it is reasonable to conclude that during peak construction periods there will be times when the production of the Quarry



MEX047.ai 12/09

Updated Supplemental Traffic Impact Analysis for the Harris Quarry

County of Mendocino

Figure 2

Monthly Variations

will be increased by approximately 50 percent to meet these demands. Additionally, it was assumed that 25 percent of weekly traffic occurs on a peak day and that there is an average of 4.15 weeks per month after deducting eleven non-working days a year to account for holidays, inclement weather or closures for other reasons. These factors were based upon data published in EIRs for the Canyon Rock and Blue Rock Quarries in Sonoma County. Summarized in Table 4 are the factors used to project truck trips.

Table 4
Production Conversion Factors

Unit	Unit Factor
Unit Weight of Mined Material	4,185 lbs/cy or 0.48 cy/ton
Unit Weight of Processed Gravel	3,375 lbs/cy or 0.59 cy/ton
Bulking Factor (Row 1/Row 2)	1.24
Average Truck Capacity Gravel-AC	16 cy/truck
Average Truck Capacity Concrete Aggregate	20 cy/truck
Peak Production Level	1.47 x Average

Notes: cy = cubic yards, lbs = pounds, ton = 2,000 lbs

Existing Permit Conditions

For the Quarry to continue operating at its current levels of production, a permit renewal is necessary. To evaluate current production levels a Base Permit Conditions scenario was prepared to assess the impacts and mitigation measures needed under existing permitted aggregate production levels. The Harris Quarry currently operates under a permit allowing extraction of 75,000 cubic yards of material annually, resulting in 93,000 cubic yards per year of material hauled from the site after taking into account changes in volume associated with crushing the rock. Generally, the anticipated trip generation for proposed projects is estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation*, 8th Edition, 2008. However, the publication does not contain information for quarries or similar developments, so assumptions were developed for use in determining average daily and peak daily truck volumes. These assumptions were based on the projected Quarry production for the months of July, which experiences 130.11 percent of the average traffic volume on US 101 and October, during which the highway experiences average traffic flows. Within each of these months, peak production for the Quarry was assumed to be 147 percent of the average. Since the Quarry is not expected to operate on weekends and will be occasionally closed for holidays or due to inclement weather, operation was based on 21 operating days per month. Average truck capacities of 16 cubic yards for aggregate and AC were used for the analysis. Details of the assumptions applied and copies of the calculation are provided in Appendix C.

Based upon this production level and the monthly production factors presented in Table 2, hourly truck trips into and out of the Harris Quarry site were projected for the average and peak July and October periods. These truck trips were determined by calculating the total production in a day, and distributing that amount throughout the day in a logical manner based on normal construction activity and demand for aggregate. During peak production one trip from each resource, such as fuel and asphalt oil, as well as delivery services such as the Postal Service, UPS and FedEx can be expected on any given day and as many a two deliveries could arrive during a single hour. To ensure a conservative analysis, one inbound and one

outbound truck trip were added to each hour between 7:00 a.m. and 4:00 p.m. Truck trips on an hourly basis under Existing Permit Conditions are indicated in Appendix D and turning movements at the project access are shown in Appendix E. As shown in Table 5, it is projected that the Harris Quarry currently generates 84 truck trips on an average day in July and 114 truck trips during a peak day in July. In October, Harris generates an average of 104 truck trips per day, with 150 truck trips on a peak day. The base permit levels were used to analyze traffic impacts that would be expected if the quarry production was limited to the permit amount, rather than using historical actual quarry production.

Table 5
Truck Trips for Permitted Production (75,000 cy Mined)

Time	July				October			
	Average Day		Peak Day		Average Day		Peak Day	
	In	Out	In	Out	In	Out	In	Out
6:00 – 7:00 AM	0	0	1	0	1	0	1	0
7:00 – 8:00 AM	4	4	5	6	5	6	7	8
8:00 – 9:00 AM	5	5	7	7	6	6	9	9
9:00 – 10:00 AM	5	5	7	7	6	6	9	9
10:00 – 11:00 AM	5	5	7	7	6	6	9	9
11:00 AM – Noon	5	5	7	7	6	6	9	9
Noon – 1:00 PM	4	4	6	6	5	5	8	8
1:00 – 2:00 PM	4	4	5	5	5	5	7	7
2:00 – 3:00 PM	4	4	5	5	5	5	7	7
3:00 – 4:00 PM	4	4	5	5	5	5	7	7
4:00 – 5:00 PM	2	2	2	2	2	2	2	2
5:00 – 6:00 PM	0	0	0	0	0	0	0	0
Total Trips	**42**	**42**	**57**	**57**	**52**	**52**	**75**	**75**

Employees are generally expected to arrive at approximately 7:00 a.m. and leave at approximately 5:00 p.m. Under existing operations, the quarry employs eight people. Due to the relatively long distance from commercial areas, it is expected that few employees will leave the site for a lunch break; however, to provide a conservative analysis, it was assumed that up to half of the employees leave and return during the noon hour for a lunch break. This is consistent with standard employee trip generation estimates of three trips per employee per day. Since employees are expected to arrive outside of a peak analysis period, their inbound trips in the morning and two-way lunch break trips were not included in the analysis, but employees are expected to leave during the 4:45 p.m. to 5:45 p.m. analysis period, so a total of eight outbound personal vehicle trips were added to that analysis period.

Project Trip Generation

The Harris Quarry project would allow the permitted annual extraction to increase to 200,000 cubic yards and adds an AC batch plant capable of producing 150,000 tons annually. The project proposal also includes the importation of 10,000 cubic yards of concrete and AC annually for recycling. While the project proposal includes importation of 10,000 *tons* of material for recycling, the analysis was based on importation of 10,000 *cubic yards*. Since 10,000 tons of material for recycling is expected to yield approximately 5,000 to 6,000 cubic yards of material, the analysis was based on a considerably higher volume of recycling material, so provides conservative results of the project's truck trip generation and actual potential impacts. Additionally, while it is anticipated that the imported material will be brought in on trucks that will be used to export other material, therefore resulting in no additional trips, to provide a conservative analysis it was assumed that the recycle material imported will come in on trucks that will then leave the site empty. Once processed, the recycled material will be exported as part of the aggregate for sale. Additional assumptions specific to each product type and the two peak months are shown in Table 6.

Table 6
Trip Generation Assumptions with Proposed Project

Source	Annual Production	Percent of Annual in:	
		July	October
Material Mined	200,000 cy	n/a	n/a
Recycle Material Imported	10,000 cy	9.4%	12.2%
Aggregate Production For Sale	162,520 cy	9.4%	12.2%
Aggregate transferred to Willits for PCC	37,200 cy	10.0%	15.8%
AC Production	58,280 cy	12.0%	17.0%
Total Production	**258,000 cy**		

In addition, the Quarry will generate truck trips for deliveries as well as clients or other quarry visitors who will arrive by personal vehicle. As with the Base Permit conditions, one inbound and one outbound truck trip was added to each hour between 7:00 a.m. and 4:00 p.m. to account for delivery of goods or other services. This is expected to provide a conservative analysis as it would result in a greater number of delivery trucks than would be expected in a typical month. Using the assumptions indicated, trips on the average weekday and monthly peak day were derived for the months of July and October. An average of 214 truck trips and a peak of 310 daily truck trips are expected during the month of July. For October, 286 truck trips are expected on average, while 412 truck trips would be expected on a peak day.

Construction activities typically begin in the morning between 7:00 and 8:00 a.m., reaching peak activity near 9:00 a.m. This peak continues until about noon, then reduces slightly until 3:30 or 4:00 p.m. Limited quarry activity occurs after 4:00 p.m. and none after 5:00 p.m. Using the hourly trend data from the EIRs for the Canyon Rock and Blue Rock Quarries in Sonoma County, hourly truck trips were projected for the average and peak days in July and October. Table 7 summarizes the projected truck trips entering and leaving the Harris Quarry during these peak months. Project Conditions truck trips by hour are provided in Appendix D and turning movements at the project access are provided in Appendix E. On occasion, the quarry operates overnight or on weekends due to an urgent need for AC or aggregate, usually due to a natural

disaster, or to satisfy the need for AC or aggregate for overnight road work as requested by Caltrans or other governmental agency. Since overnight and weekend operations are rare and do not represent typical operations, they were not included in this analysis. Details of the assumptions applied and the calculation are located in Appendix C.

Table 7
Projected Truck Trips for Project Production (200,000 cy Mined)

Time	Aggregate				AC				Transfer to Willits				Other Trucks			
	Average Day		Peak Day		Average Day		Peak Day		Average Day		Peak Day		Average Day		Peak Day	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
July																
6:00 – 7:00 AM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
7:00 – 8:00 AM	6	6	8	9	4	3	4	3	2	1	2	1	1	1	1	1
8:00 – 9:00 AM	7	7	11	11	3	3	5	4	2	1	2	1	1	1	1	1
9:00 – 10:00 AM	7	7	11	11	3	3	5	5	1	1	2	2	1	1	1	1
10:00 – 11:00 AM	7	7	11	11	3	3	5	5	1	1	2	2	1	1	1	1
11:00 AM – Noon	7	7	11	11	3	3	5	5	1	1	2	2	1	1	1	1
Noon – 1:00 PM	6	6	10	10	3	3	4	4	1	1	2	2	1	1	1	1
1:00 – 2:00 PM	6	6	8	8	2	2	4	4	1	1	2	2	1	1	1	1
2:00 – 3:00 PM	6	6	8	8	2	2	3	4	1	1	2	2	1	1	1	1
3:00 – 4:00 PM	6	6	8	8	2	2	3	4	1	2	1	2	1	1	1	1
4:00 – 5:00 PM	2	3	3	3	1	2	0	1	0	1	0	1	0	0	0	0
5:00 – 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total July Trips	**61**	**61**	**90**	**90**	**26**	**26**	**39**	**39**	**11**	**11**	**17**	**17**	**9**	**9**	**9**	**9**
October																
6:00 – 7:00 AM	1	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0
7:00 – 8:00 AM	7	8	11	11	4	4	5	5	2	1	3	3	1	1	1	1
8:00 – 9:00 AM	10	10	14	14	5	4	7	6	2	2	4	3	1	1	1	1
9:00 – 10:00 AM	10	10	14	14	4	4	7	7	2	2	3	3	1	1	1	1
10:00 – 11:00 AM	10	10	14	14	4	4	7	7	2	2	3	3	1	1	1	1
11:00 AM – Noon	10	10	14	14	4	4	7	7	2	2	3	3	1	1	1	1
Noon – 1:00 PM	8	8	12	12	4	4	6	6	2	2	3	3	1	1	1	1
1:00 – 2:00 PM	7	7	11	11	3	3	5	5	2	2	2	2	1	1	1	1
2:00 – 3:00 PM	7	7	11	11	3	4	5	5	2	2	2	2	1	1	1	1
3:00 – 4:00 PM	7	7	10	11	3	4	4	5	2	2	2	2	1	1	1	1
4:00 – 5:00 PM	2	2	3	4	1	2	1	2	0	1	1	2	0	0	0	0
5:00 – 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total October Trips	**79**	**79**	**116**	**116**	**37**	**37**	**55**	**55**	**18**	**18**	**26**	**26**	**9**	**9**	**9**	**9**

As with existing conditions, employees are generally expected to arrive at approximately 7:00 a.m. and leave at approximately 5:00 p.m. Under the proposed expansion, the quarry is expected to employ eleven people during typical operations. As was assumed for Base Permit conditions, though most employees are not expected to leave the site for a lunch break it was conservatively assumed that half of the employees will leave and return during the noon hour. Since employees are expected to arrive and take lunch breaks outside of an analysis period their inbound trips in the morning and round trips at lunch time were not included in the analysis. Employees are expected to leave during the 4:45 p.m. to 5:45 p.m. analysis period, so a total of eleven outbound personal vehicle trips was added during that interval. Any non-standard employee trips during the day can be accounted for in the conservative delivery truck projections.

Projected Traffic Volumes

Caltrans District 1 has projected that volumes on US 101 in the project vicinity will grow by 50 percent over the 20-year period from 2006 to 2025. Likewise, County of Mendocino Planning staff has directed that volumes on Black Bart Drive should be projected to grow at the same rate for analysis purposes. The 50 percent growth in traffic was projected to occur by 2025, while year 2010 and 2014 volumes were developed using a straight line growth projection between current and projected 2025 volumes.

Typically, travel demand forecasting is completed for about a 20-year horizon. In the case of US 101 within the study area, the most recent forecasting for both Caltrans and the County of Mendocino was completed in 2006, meaning that current projections extend to 2025. The 2030 and 2040 horizon years are therefore beyond current Caltrans and County of Mendocino forecasting and beyond the typical 20-year forecasting horizon. In order to project traffic volumes for 2030 and 2040, the same annual growth rate was applied that was used to project the 2010 and 2014 volumes. It should be noted that since this is beyond the typical forecasting horizon, the reliability of these projected traffic volumes is unknown and may vary based on changes in area demographics and travel patterns that cannot be accounted for at this time.

Vehicle Miles Traveled

Vehicle miles traveled (VMT) is the measure of the total miles traveled by residents, costumers, employees and delivery of goods from a source location, and is typically calculated on an annual basis. VMT also serves as a measure of the broader potential impacts of vehicle travel on an area wide circulation system and correspondingly relates to fuel consumption and vehicle emissions, including greenhouse gases.

The demand for aggregates is a function of population and will increase with population; this relationship is recognized in Section 8.3 of the *Mendocino County General Plan Update Background Report*. From day to day, month to month and year to year there will be variations in project trips depending upon locations of major construction projects, and over time the demand for aggregates will follow population patterns in the County. The demand for aggregates will be met by a combination of quarries and mines currently operating within Mendocino County and neighboring Humboldt, Lake and Sonoma Counties.

Using the Mendocino County General Plan Update Growth Projections for incorporated cities and adjacent environs, population centers or sub-areas were identified and the distance from the operating quarries to the center of each sub-area was determined. Standard gravitational model theory indicates that the portion of total project trips to a sub-area is proportional to the population of the sub-area and inversely proportional to the square of the total trip distance. Based on this theory quarries would be expected to provide more aggregate to population centers that are closer to the quarry and correspondingly fewer trips

to population centers of equal size that are further away. Likewise larger population sub-areas will have a greater demand potential than smaller sub-areas and will attract more trips. For analysis purposes, it was necessary to hold demand equal over all scenarios to provide a common point of comparison. Applying this theory, the number of trips and VMT from each quarry and AC plant to each population center fulfilling the demand for aggregate and AC within the County was calculated. In the case of VMT for AC distribution the addition of a third AC plant in the County significantly changes the dynamics of AC related VMT. The VMT gravity model was conducted for aggregate and AC production only and not for concrete production. Calculations are provided in Appendix F.

It is projected for Base Permit conditions that all supplying quarries will make a combined total of approximately 38,900 truck haul trips per year with a combined total of approximately 2.45 million miles traveled to provide aggregate within Mendocino County. With the increased production potential of the Harris Quarry to 200,000 cubic yards of material mined, assuming that the demand for aggregate remains constant, it is projected that the total of truck hauls made countywide by all supplying quarries will remain constant at approximately 38,900 truck haul trips per year. There is a slight difference of four truck trips per year between the two scenarios which is attributed to rounding in the calculations and accounts for about one-hundredth of one percent of all trips, so for the purpose of analysis these values are considered to be equal. The increased production of the Harris Quarry project will not reduce the number of haul trips but will result in approximately 2.42 million vehicle miles traveled annually from all quarries and will result in 30,490 fewer VMT by aggregate haul trucks. Although the number of aggregate haul trips is equivalent, the total VMT decreases because the Harris Quarry is closer to major population centers and geographical centers of the County, resulting in shorter trip lengths and correspondingly fewer vehicle miles traveled to transport the same amount of aggregate.

The AC plant portion of the project will also increase the number of trips and vehicle miles traveled from the project site, but would decrease the VMT countywide from all supplying AC plants. The annual trips made countywide by all supplying quarries is expected to remain constant at approximately 11,720 trips per year, with Harris Quarry accounting for 5,622 trips. As with the aggregate production, the model produced a slight difference in the total number of trips projected under the two scenarios, but they were considered to be equal for analysis purposes. Countywide a total of 801,200 VMT are expected under Base Permit conditions; thisi would decrease to 648,100 VMT under project conditions which is a decease of approximately 153,000 VMT per year. It is expected that Harris Quarry would account for about 85,600 of the annual VMT associated with AC production. As noted for the quarry operation, an AC plant at the Harris Quarry site will increase the number of trips to and from the site but will reduce the total number of VMT in the County overall as the trip lengths are typically shorter than those made by out-of-County sources. The project has the potential to decrease the total VMT associated with hauling aggregate and AC within Mendocino County by approximately 183,500 VMT annually. These results are summarized in Table 8.

Table 8
Vehicle Miles Traveled Summary

Quarry Aggregate VMT	Base Permit		Project		
	Annual Trips	Annual VMT	Annual Trips	Annual VMT	Change In VMT
Harris	3,719	98,761	7,550	225,263	126,502
Davis Pit	3,721	322,636	3,579	318,899	-3,737
Keithly Ranch	4,959	415,506	4,747	401,631	-13,875
DNA River	1,240	145,695	1,209	144,970	-725
Cooks Humboldt	992	133,202	973	129,297	-3,905
Ford Gravel	9,920	287,671	8,096	236,262	-51,409
Ten Mile	2,480	75,480	2,018	58,816	-16,664
Pieta	2,481	109,033	2,058	89,771	-19,262
Layton Rock	2,480	69,650	2,088	47,997	-21,653
Cooks Valley	2,480	329,488	2,420	319,171	-10,317
Wisley Ranch	744	25,178	591	19,419	-5,759
Coal Mine	1,241	108,060	1,199	104,864	-3,196
Syar Healdsburg	2,449	326,041	2,412	319,551	-6,490
Total	***38,936***	***2,446,401***	***38,940***	***2,415,911***	***-30,490***
Plant AC VMT					
Harris	0	0	2,644	85,621	85,621
Granite	7,499	284,767	5,444	183,063	-101,704
Baxman	1,718	71,146	1,815	61,089	-10,057
Bodean/Syar (Santa Rosa)	2,501	445,239	1,816	318,347	-126,892
Total	***11,718***	***801,152***	***11,719***	***648,120***	***-153,032***
Project Total	**50,654**	**3,247,553**	**50,659**	**3,064,031**	**-183,522**

Note: VMT = Vehicle miles traveled

It is anticipated that VMT related to aggregate demand will increase in the future as population and demand for aggregate increases in Mendocino County. The relationships developed based upon 2000 population data will remain valid in the future. As the demand for aggregate and AC increases, while production levels within the Mendocino County remain constant, the shortfall will be filled by out-of-County sources. Trips made from out-of-County sources have greater travel distances and result in higher VMT overall. Conversely, the expansion of the Harris Quarry together with AC production will result in fewer VMT in

the future as a greater portion of the total demand will be met by quarries and AC plants within Mendocino County and less by out-of-County sources.

The increased aggregate production and a new AC plant associated with the Harris Quarry project will reduce the need to import aggregates and AC into the County as more of the demand will be met by local sources. However, the Harris Quarry project is not expected to eliminate the need to import aggregate and AC to meet current and future demand, and importation of aggregate and AC will remain a significant component in fulfilling the need for these products in Mendocino County.

Trip Distribution

The projected distribution of trips to and from the Harris Quarry under current aggregate production levels was tested and compared to driveway turning movements obtained in the summer of 2006. The VMT gravity model described earlier projects a trip distribution of 45 percent to/from the north and 55 percent to/from the south on US 101, which is consistent with measured driveway volumes.

The increased production potential of the Harris Quarry will cause the redistribution of trips from all quarries and will result in a different distribution of trips to and from the Harris Quarry along US 101. With the project and associated increase in production the distribution of trips is projected to shift to 35 percent of trips to/from the north and 65 percent to/from the south. Trips destined for the concrete plant in Willits were all assumed to be traveling to/from the north. Additionally, since employment does not necessarily match the gravity model, it was assumed that an equal number of employees will be coming from and return to the north and south.

If Harris Quarry is selected to provide aggregate and/or AC for the Willits Bypass construction, it is expected that a greater portion of quarry generated traffic will be destined to the north. For this condition it is estimated that 75 percent of trips will be to/from the north with the remaining 25 percent going to/from the south for base permit conditions and 60 percent to/from the north and 40 percent to/from the south for project conditions. These trip distribution assumptions are summarized in Table 9.

Table 9
Trip Distribution

Condition	Percent North	Percent South
Base	45	55
Base w/By-pass Construction	75	25
Project	35	65
Project w/ By-pass Construction	60	40
Aggregate to Concrete Plant in Willits	100	0

Study Scenarios

For consistency with the DEIR, the following weekday peak traffic hours were evaluated.

- 9:00 – 10:00 a.m.
- 11:00 a.m. – 12:00 Noon
- 1:15 – 2:15 p.m.
- 4:45 – 5:45 p.m.

To evaluate the highest impact situations, traffic generated by the Quarry was evaluated for July, when traffic on US 101 is at its highest, and October, when Quarry production peaks.

Conditions were evaluated for the following ten scenarios.

2010 Base Permit: This scenario is an analysis of operating conditions under projected 2010 traffic volumes together with operation of the Harris Quarry at current permitted levels.

2010 Project: Conditions with the Harris Quarry project added to projected 2010 traffic volumes are evaluated in this scenario.

2014 Base Permit with Willits Bypass Construction: This scenario indicates operating conditions under projected 2014 traffic volumes together with the operation of the Harris Quarry at current permitted levels, assuming that Harris Quarry is selected to supply material for the Willits Bypass project.

2014 Project with Willits Bypass Construction: Operating conditions under projected 2014 traffic volumes together with the Harris Quarry project, assuming that Harris Quarry is selected to supply material for the Willits Bypass project, are indicated by this scenario.

2014 Base Permit without Willits Bypass Construction: This scenario indicates operating conditions under projected 2014 traffic volumes together with the operation of the Harris Quarry at current permitted levels, assuming that Harris Quarry is not selected to supply material for the Willits Bypass project.

2014 Project with Willits Bypass Construction: Operating conditions under projected 2014 traffic volumes together with the Harris Quarry project assuming that Harris Quarry is not selected to supply material for the Willits Bypass project are indicated by this scenario.

2030 Base Permit: This scenario is an evaluation of operating conditions under projected 2030 traffic volumes with operation of the Harris Quarry at current permitted levels.

2030 Project: This scenario reflects operating conditions under projected 2030 traffic volumes together with the Harris Quarry project.

2040 Base Permit: This scenario is an evaluation of operating conditions under projected 2040 traffic volumes with operation of the Harris Quarry at current permitted levels.

2040 Project: The final scenario is an evaluation of operating conditions under projected 2040 traffic volumes together with the proposed Harris Quarry project.

Passenger Car Equivalent

Level of service calculations are based upon predominantly passenger vehicles, while the Quarry trip generation is primarily large trucks. Truck trips were factored to a passenger car equivalent (PCE) at a ratio of one truck being equivalent to four passenger vehicles. The purpose of the PCE is to account for the fact that a truck is considerably larger, slower and less maneuverable than a standard passenger car. The passenger car equivalent volumes were used in the evaluation of potential project impacts. PCE ratios were applied only to trucks entering or exiting the Quarry and not to preexisting truck traffic on US 101 that does not interact with the Quarry.

Speed Change Lane Warrants

The need for turn acceleration and/or deceleration speed change lanes on US 101 was evaluated based on recommendations of Larson and Mannering for the Washington State Transportation Center (TRAC), as contained in their report, "Method for Prioritizing Intersection Improvements" (1997). The authors performed analysis and review of several differing methodologies and found that the 1991 "Modified Harmelink" model developed by Kikuchi and Chakroborty yielded the most reliable and appropriate recommendations. These calculations are based upon passenger vehicles, which make up the vast majority of vehicles on the roadway; for trucks turning at the project driveway the above-described passenger car equivalents were used. The need for speed change acceleration lanes was determined using the same warrant methodology.

Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

Intersection

The intersection of US 101/Black Bart Drive was evaluated using the two-way stop-controlled intersection capacity method from the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000. Since it is not subject to the influence of intersection control, the through movements on the main street, US 101, are assumed to operate at free flow and a Level of Service A. The level of service for each minor turning movement is based on the estimated average delay. Average delay for the intersection overall is also determined. The ranges of delay associated with the various levels of service are indicated in Table 10.

Table 10
Two-Way Stop-Controlled Intersection Level of Service Criteria

LOS A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.
LOS B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.
LOS C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.
LOS D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.
LOS E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.
LOS F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.

Reference: *Highway Capacity Manual*, Transportation Research Board, 2000

Grade Separated Access

For evaluation of the conversion of the intersection of the Quarry Access with US 101 to a grade-separated interchange, the grade-separated ramp capacity method from the HCM was used. The level of service for each ramp merge and diverge area is based upon the through volume on the main line as well as the volume of traffic entering or exiting the main line. The capacity of the ramp is expressed as a density of passenger cars per mile per lane. The ranges of density associated with the various levels of service are indicated in Table 11.

Table 11
Ramp Level of Service Criteria

	Density (passenger cars/mile/lane)
LOS A	≤ 10
LOS B	> 10-20
LOS C	> 20-28
LOS D	> 28-35
LOS E	> 35
LOS F	Demand exceeds capacity

Reference: *Highway Capacity Manual*, Transportation Research Board, 2000

Minimum Acceptable Standards

In the *Guide for the Preparation of Traffic Impact Studies*, Caltrans indicates that they endeavor to maintain operation at the transition from LOS C to LOS D; however, where operation is already below LOS C, the existing measure of effectiveness should be maintained. For intersections, this means that the existing

control delay should be maintained. Under this criteria, any increase in delay would therefore result in a significant impact. Since this approach results in impacts that are deemed significant for even a small change in operating conditions, staff at Caltrans was consulted. The issue of applying this standard was discussed with Mr. Marc Birnbaum, the Statewide Advisor for Local Development and Traffic Impact Studies. Mr. Birnbaum indicated that for intersections, the standard is to be applied to the overall average intersection delay, not that associated with any single movement or approach. These criteria do not apply for private road intersections, such as the entrance to the Harris Quarry, but were applied to the intersection of US 101/Black Bart Drive.

In its *General Plan*, Mendocino County establishes Policy DE-121 that states that, "New discretionary development will be required to demonstrate that basic infrastructure is available and has adequate capacity to serve the project without degrading existing level of service standards." The General Plan does not, however, establish thresholds for what level of degradation is considered to constitute a significant impact. For this reason, the above described Caltrans level of significance was applied to the study intersection. To provide a conservative analysis, in addition to the Caltrans standard for overall intersection operation, LOS D was considered to be the worst acceptable LOS for any single movement. This is consistent with standards established by many other jurisdictions throughout California. As with Caltrans standards, there are no applicable standards for private road intersections such as the Harris Quarry access road connection to US 101.

While Caltrans standards apply to the study intersection of US 101/Black Bart Drive, both the overall average intersection delay and the delay on the worst approach were considered to provide a conservative analysis. Additionally, the approach with the highest delay was used as a metric to determine the effectiveness of proposed turn-lane mitigating measures.

Base Permit Operations

Since renewal of the Quarry's permit to continue current operations is one of the options possible under this environmental review, the need for improvements under Base Permit conditions was evaluated. The evaluation takes into account the traffic volumes on the major roadway, US 101, as well as turning movements into and out of the minor street or access roadway and the speed of travel on the major roadway.

Speed Change Lanes

The need for speed change lanes was evaluated based on projected traffic volumes on both US 101 and the project access for peak day conditions. A northbound left turn lane and southbound right turn taper are warranted for all analysis years, with the exception of 2014 with the Willits Bypass construction; for this scenario the northbound left turn lane is not warranted. This exception is due to the fact that the Willits Bypass construction is expected to reduce quarry traffic to the north to the point that not enough vehicles will make the northbound left turn movement to warrant the lane; however, since the lane is warranted without the bypass construction and is warranted in 2010, the installation of the northbound left turn lane is recommended for continued operation at currently permitted levels.

A southbound right turn lane is not warranted under any project scenario; however, since a right turn taper is warranted, and due to the proximity to Black Bart Drive, it is recommended that a full right-turn

deceleration lane be installed. This will also operate as an acceleration lane for vehicles turning right out of Black Bart Drive.

A northbound left-turn acceleration lane is warranted immediately for continued Quarry operation. This lane would provide refuge for vehicles turning left out of the Quarry Access driveway onto Northbound US 101. This acceleration lane would provide space for turning vehicles to reach or at least approach free-flow speeds on US 101, therefore reducing the impact on through traffic and increasing the frequency of acceptable gaps for turning. This acceleration lane should be at least 1,410 feet in length, which would extend beyond Black Bart Drive and have a secondary benefit of providing refuge for vehicles turning out of Black Bart Drive. Since this lane would overlap with the northbound left-turn lane at Black Bart Drive, there is a possibility of a vehicle needing to use the lane to decelerate while another driver needs to use the lane to accelerate; however, it was determined that this is likely to be a rare occurrence. Therefore, no additional action is recommended.

Additionally, a southbound right-turn acceleration taper is warranted by 2030. This taper would give trucks an opportunity to accelerate before entering traffic.

Turn lane warrant results are summarized in Table 12 for each year; if a turn lane is warranted for one or more analysis time periods, it is considered to be warranted for that analysis year. Turn lane warrants were calculated for all analysis time periods for both July and October peak months and details are provided in Appendix G.

Table 12
Speed Change Lane Warrants for Base Permit Conditions

Year	Northbound Left Turn		Southbound Right Turn	
	Deceleration Lane	Acceleration Lane	Deceleration Taper	Acceleration Taper
2010	Warranted	Warranted	Warranted	Not Warranted
2014 w/o Willits Bypass	Warranted	Warranted	Warranted	Not Warranted
2014 w/Willits Bypass	Not Warranted	Warranted	Warranted	Not Warranted
2030	Warranted	Warranted	Warranted	Warranted
2040	Warranted	Warranted	Warranted	Warranted

Base Permit Intersection Level of Service

The Base Permit Conditions scenario indicates operation under projected traffic volumes at US 101/Black Bart Drive for the four study time periods during the July and October peak periods.

Under Base Permit conditions, the intersection of US 101/Black Bart Drive is expected to operate acceptably during all peak hours. The level of service results representing the movement with the highest delay for the July and October peak production periods are summarized in Table 12 for US 101/Harris Quarry Access and Table 13 for US 101/Black Bart Drive. Although not reported in Tables 13 and 14, the overall delay at both intersections was studied and was determined to be LOS A at all times with no more

than 3.2 seconds of average delay. Detailed LOS calculations for average and peak production levels are provided in Appendix H.

Table 13
US 101/Harris Quarry Access Base Permit Level of Service Calculations – Peak Production

Condition	Production Period	9-10 AM		11 AM-noon		1:15-2:15 PM		4:45-5:45 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
2010 Base Permit	July	15.6	C	21.7	C	23.5	C	20.7	C
Mitigated (turn lanes)	*July*	*13.0*	*B*	*15.3*	*C*	*15.7*	*C*	*14.7*	*B*
	October	13.9	B	17.6	C	17.2	C	15.5	C
Mitigated (turn lanes)	*October*	*12.2*	*B*	*13.8*	*B*	*13.5*	*B*	*12.7*	*B*
2014 Base Permit	July	16.6	C	24.11	C	26.5	D	23.0	C
Mitigated (turn lanes)	*July*	*13.5*	*B*	*16.1*	*C*	*16.6*	*C*	*15.4*	*C*
	October	14.5	B	19.0	C	19.0	C	18.6	C
Mitigated (turn lanes)	*October*	*12.5*	*B*	*14.4*	*B*	*14.0*	*B*	*13.2*	*B*
2014 Base Permit w/Bypass	July	19.4	C	30.5	D	31.6	D	23.0	C
Mitigated (turn lanes)	*July*	*14.9*	*B*	*18.3*	*C*	*18.3*	*C*	*15.4*	*C*
	October	15.4	C	20.9	C	22.4	C	16.6	C
Mitigated (turn lanes)	*October*	*13.1*	*B*	*15.2*	*C*	*15.7*	*C*	*13.2*	*B*
2030 Base Permit	July	22.0	C	**39.6**	**E**	**45.4**	**E**	**36.8**	**E**
Mitigated (turn lanes)	*July*	*15.6*	*C*	*19.9*	*C*	*20.7*	*C*	*18.8*	*C*
	October	17.7	C	26.7	D	26.2	D	22.3	C
Mitigated (turn lanes)	*October*	*14.0*	*B*	*17.0*	*C*	*16.5*	*C*	*15.2*	*C*
2040 Base Permit	July	26.9	D	**57.7**	**F**	**67.9**	**F**	**51.7**	**F**
Mitigated (turn lanes)	*July*	*17.2*	*C*	*23.1*	*C*	*24.1*	*C*	*21.5*	*C*
	October	20.4	C	34.3	D	33.7	D	27.6	D
Mitigated (turn lanes)	*October*	*15.1*	*C*	*19.0*	*C*	*18.3*	*C*	*16.7*	*C*

Notes: Delay is in average number of seconds per vehicle; LOS = Level of Service; **Bold** = deficient operation

Table 14
US 101/Black Bart Drive Base Permit Level of Service Calculations – Peak Production

Condition	Production Period	9-10 AM		11 AM-noon		1:15-2:15 PM		4:45-5:45 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
2010 Base Permit	July	15.8	C	25.5	D	20.0	C	19.9	C
Mitigated (turn lanes)	*July*	*13.1*	*B*	*17.0*	*C*	*14.4*	*B*	*14.3*	*B*
	October	13.3	B	18.9	C	20.4	C	15.0	B
Mitigated (turn lanes)	*October*	*11.9*	*B*	*14.4*	*B*	*14.8*	*B*	*12.5*	*B*
2014 Base Permit	July	16.8	C	31.2	D	22.6	C	22.5	C
Mitigated (turn lanes)	*July*	*13.6*	*B*	*18.3*	*C*	*15.3*	*C*	*15.1*	*C*
	October	13.9	B	20.9	C	22.8	C	16.2	C
Mitigated (turn lanes)	*October*	*12.2*	*B*	*15.2*	*C*	*15.7*	*C*	*13.0*	*B*
2014 Base Permit w/Bypass	July	17.0	C	31.8	D	22.7	C	22.5	C
Mitigated (turn lanes)	*July*	*13.7*	*B*	*18.4*	*C*	*15.3*	*C*	*15.11*	*C*
	October	14.0	B	21.2	C	23.2	C	16.2	C
Mitigated (turn lanes)	*October*	*12.3*	*B*	*15.3*	*C*	*13.0*	*B*	*13.6*	*B*
2030 Base Permit	July	23.1	C	**68.6**	**F**	**40.9**	**E**	**40.4**	**E**
Mitigated (turn lanes)	*July*	*16.0*	*C*	*24.6*	*C*	*19.3*	*C*	*19.0*	*C*
	October	17.0	C	32.7	D	38.3	E	22.6	C
Mitigated (turn lanes)	*October*	*13.7*	*B*	*18.6*	*C*	*19.5*	*C*	*15.1*	*C*
2040 Base Permit	July	29.8	D	**	**F**	**69.2**	**F**	**68.6**	**F**
Mitigated (turn lanes)	*July*	*18.0*	*C*	*30.6*	*D*	*22.8*	*C*	*22.4*	*C*
	October	19.9	C	**47.5**	**E**	**59.9**	**F**	29.6	D
Mitigated (turn lanes)	*October*	*14.9*	*B*	*21.5*	*C*	*22.9*	*C*	*16.9*	*C*

Notes: Delay is in average number of seconds per vehicle; LOS = Level of Service; **Bold** = deficient operation
** = greater than 120 seconds of average delay

Base Permit Conditions

Analysis Years

Project impacts were analyzed for the horizon years of 2010, 2014, 2030 and 2040. Year 2014 conditions were evaluated both with and without the Willits bypass under construction. While this construction would alter distribution of project trips, it would not be expected to change background traffic volumes on US 101 in the vicinity of Black Bart Drive and the Harris Quarry.

Base Permit Intersection Operation

Intersection Level of Service was determined for both US 101/Black Bart Drive and US 101/Quarry Access Driveway based upon the existing lane configuration. The intersection of US 101/Harris Quarry Access is provided for informational purposes. Since LOS criteria do not apply to private driveways, only the intersection of US 101/Black Bart Drive is discussed in further detail.

Year 2010

The intersection of US 101/Black Bart Drive is expected to operate at LOS A overall and the stop-controlled eastbound approach is expected to operate at LOS D or better during all time periods.

Year 2014 (No Willits Bypass)

Under the projected 2014 Base Permit conditions the intersection of US 101/Black Bart Drive is expected to operate acceptably at LOS A overall with the eastbound approach operating at LOS D or better during all time periods analyzed.

Year 2014 (During Willits Bypass Construction)

With the change in distribution that would be expected if Harris Quarry is selected to provide material for the construction of the Willits Bypass, US 101/ Black Bart Drive is expected to operate at LOS A overall with all individual movements operating at LOS D or better during all peak hours analyzed.

Year 2030

Under the projected year 2030 volumes with production at permitted levels, US 101/Black Bart Drive is expected to operate overall acceptably at LOS A; however as indicated in Table 9, the eastbound approach is expected to operate deficiently at LOS E during the 11:00-noon time period and LOS F during the 1:15-2:15 p.m. and 4:45-5:45 p.m. time periods in July, though acceptable operating conditions of LOS D or better are projected for the 9:00-10:00 a.m. peak hour during July and during all four time periods analyzed in October.

Year 2040

As shown in Table 9, under the projected year 2040 volumes and with production at levels consistent with the existing permit, the eastbound movement at US 101/Black Bart Drive is expected to operate deficiently at LOS F during the11:00-noon, 1:00-2:00 p.m. and 4:45-5:45 p.m. time periods in July as well as LOS E in 11:00-noon and LOS F in 1:15-2:15 p.m. time periods in October. For the 9:00-10:00 a.m. time period in July and for the 9:00-10:00 a.m. and 4:45-5:45 p.m. time periods in October, the eastbound movement is projected to operate acceptably at LOS D or better. Overall, the intersection is expected to operate acceptably at LOS A during all time periods.

Base Permit Mitigated Intersection Operations

Year 2010

Based upon intersection LOS, no mitigating measures are necessary; however, with the installation of the speed change and turn lanes that are currently warranted, the LOS does slightly improve.

Year 2014 (Without Willits Bypass Construction)

Based upon intersection LOS, no mitigating measures are necessary; however, with the installation of all warranted speed change and turn lanes, the LOS does slightly improve.

Year 2014 (With Willits Bypass Construction)

Based upon intersection LOS, no mitigating measures are necessary. As with other scenarios, the installation of all warranted speed change and turn lanes improves the LOS slightly.

Year 2030

With the existing lane configuration, the intersection of US 101/Black Bart Drive would be expected to operate deficiently in 2030; however, with the addition of the above discussed speed change and turn lanes, all movements at US 101/Black Bart Drive are expected to operate acceptably at LOS D or better during all time periods.

Year 2040

Without any improvements the intersection of US 101/Black Bart Drive is expected would continue to operate deficiently in 2040. However, acceptable operation of LOS D or better would be expected during all time periods with the addition of the above discussed improvements.

Driveway Operation

Although there are no LOS standards for a private driveway, if there is excessive delay for drivers turning to or from the driveway they may be willing to turn in an adequate gap in traffic, therefore creating a potential safety issue. For this reason, operation of the Quarry Access Driveway was studied and it was determined that with the installation of all recommended turn lanes, the driveway would operate acceptably at all times with, on average, no more than 24.1 seconds of delay for exiting traffic. This greatly reduces the possibility of drivers attempting to make turns without an adequate gap in traffic.

Project Conditions

Speed Change Lanes

As with the Base Permit conditions, the need for speed change lanes was evaluated based on projected traffic volumes on both US 101 and the project turning movements for peak day conditions. The northbound left turn lane and southbound right turn taper are warranted for all analysis years. Although a southbound right-turn lane is not warranted, it is recommended that one be installed due to the

driveway's proximity to Black Bart Drive. Additionally a northbound left-turn acceleration lane is warranted that would provide refuge for vehicles turning left out of the Quarry Access driveway onto Northbound US 101. As with the Base Permit condition, this acceleration lane should be at least 1,410 feet in length, which would extend beyond Black Bart Drive and have a secondary benefit of providing refuge for vehicles turning out of Black Bart Drive. A southbound right-turn acceleration taper is already warranted and a full acceleration lane is warranted by 2040. Turn lane warrant results are summarized in Table 15 for each year; if a turn lane is warranted for one or more analysis time periods, it is considered to be warranted for that analysis year. Turn lane warrants were calculated for all analysis time periods for both July and October peak months and details are provided in Appendix G.

Table 15
Speed Change Lane Warrants for Project Conditions

Year	Northbound Left Turn		Southbound Right Turn	
	Deceleration Lane	Acceleration Lane	Deceleration Taper	Acceleration Taper
2010	Warranted	Warranted	Warranted	Warranted
2014 w/o Willits Bypass	Warranted	Warranted	Warranted	Warranted
2014 w/Willits Bypass	Warranted	Warranted	Warranted	Warranted
2030	Warranted	Warranted	Warranted	Warranted
2040	Warranted	Warranted	Warranted	Warranted (full acceleration lane)

Project Intersection Level of Service

The Project Conditions scenario indicates operation under projected traffic volumes at US 101/Black Bart Drive for the four study time periods during the July and October peak periods. Tables 16 and 17 summarize Levels of Service for US Harris Quarry Access and US 101/Black Bart Drive, respectively. Although not reported in Tables 16 and 17, the overall average delay at both intersections was studied and determined to be in the LOS A range at all times at 3.3 seconds or less. Detailed LOS calculations for average and peak production levels are provided in Appendix H.

Table 16
US 101/Harris Quarry Access Project Level of Service Calculations – Peak Production

Condition	Production Period	9-10 AM		11 AM-noon		1:15-2:15 PM		4:45-5:45 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
2010 Project	July	16.8	C	24.5	C	26.2	C	21.0	C
Mitigated (turn lanes)	*July*	*13.6*	*B*	*16.1*	*C*	*16.4*	*C*	*14.8*	*B*
	October	15.0	C	19.7	C	18.6	C	15.7	C
Mitigated (turn lanes)	*October*	*12.8*	*B*	*14.7*	*B*	*14.1*	*B*	*12.8*	*B*
2014 Project	July	18.0	C	28.0	D	30.3	D	23.4	C
Mitigated (turn lanes)	*July*	*14.1*	*B*	*17.0*	*C*	*17.4*	*C*	*15.5*	*C*
	October	15.8	C	21.6	C	20.3	C	16.8	C
Mitigated (turn lanes)	*October*	*13.2*	*B*	*15.3*	*B*	*14.7*	*B*	*13.2*	*B*
2014 Project w/Bypass	July	21.1	C	**36.9**	**E**	**39.3**	**E**	23.4	C
Mitigated (turn lanes)	*July*	*15.4*	*C*	*19.4*	*C*	*19.6*	*C*	*15.5*	*C*
	October	17.7	C	26.0	D	24.8	C	16.8	C
Mitigated (turn lanes)	*October*	*14.2*	*B*	*16.9*	*C*	*16.3*	*C*	*13.2*	*B*
2030 Project	July	25.0	D	**55.4**	**F**	**63.0**	**F**	**38.0**	**E**
Mitigated (turn lanes)	*July*	*16.5*	*C*	*21.7*	*C*	*22.3*	*C*	*19.1*	*C*
	October	20.0	C	33.8	D	30.9	D	22.7	C
Mitigated (turn lanes)	*October*	*14.9*	*B*	*18.4*	*C*	*17.5*	*C*	*15.3*	*C*
2040 Project	July	32.3	D	**100.6**	**F**	**118.0**	**F**	**54.2**	**F**
Mitigated (turn lanes)	*July*	*18.4*	*C*	*25.8*	*D*	*26.5*	*D*	*21.8*	*C*
	October	23.8	C	**49.1**	**E**	**43.5**	**E**	28.2	D
Mitigated (turn lanes)	*October*	*16.2*	*C*	*20.9*	*C*	*19.7*	*C*	*16.9*	*C*

Notes: Delay is in average number of seconds per vehicle; LOS = Level of Service; **Bold** = deficient operation

Table 17
US 101/Black Bart Drive Project Level of Service Calculations – Peak Production

Condition	Production Period	9-10 AM		11 AM-noon		1:15-2:15 PM		4:45-5:45 PM	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
2010 Project	July	16.2	C	27.6	D	20.5	C	19.7	C
Mitigated (turn lanes)	*July*	*13.3*	*B*	*17.3*	*C*	*14.6*	*B*	*14.3*	*B*
	October	13.7	B	19.6	C	21.0	C	15.0	B
Mitigated (turn lanes)	*October*	*12.1*	*B*	*14.7*	*B*	*15.1*	*C*	*12.5*	*B*
2014 Project	July	17.2	C	32.4	D	23.2	C	21.8	C
Mitigated (turn lanes)	*July*	*13.9*	*B*	*18.6*	*C*	*15.4*	*C*	*15.1*	*C*
	October	14.2	B	21.7	C	20.6	C	16.2	C
Mitigated (turn lanes)	*October*	*12.4*	*B*	*15.4*	*C*	*15.9*	*C*	*13.0*	*B*
2014 Project w/Bypass	July	17.7	C	33.6	D	23.7	C	22.5	C
Mitigated (turn lanes)	*July*	*14.0*	*B*	*18.9*	*C*	*15.6*	*C*	*15.1*	*14.0*
	October	14.6	B	22.5	C	24.3	C	16.2	C
Mitigated (turn lanes)	*October*	*12.6*	*B*	*15.7*	*C*	*16.2*	*C*	*13.0*	*B*
2030 Project	July	23.8	C	**72.6**	**F**	**42.9**	**E**	**40.5**	**E**
Mitigated (turn lanes)	*July*	*16.3*	*C*	*25.1*	*D*	*19.6*	*C*	*19.6*	*C*
	October	17.6	C	34.4	D	40.0	E	22.6	C
Mitigated (turn lanes)	*October*	*13.9*	*B*	*19.0*	*C*	*19.9*	*C*	*15.2*	*C*
2040 Project	July	30.9	D	**	**F**	**73.0**	**F**	**68.7**	**F**
Mitigated (turn lanes)	*July*	*18.3*	*C*	*31.4*	*D*	*23.2*	*C*	*22.4*	*C*
	October	20.6	C	**50.6**	**E**	**63.4**	**F**	29.6	D
Mitigated (turn lanes)	*October*	*15.1*	*C*	*22.1*	*C*	*23.3*	*C*	*16.9*	*C*

Notes: Delay is in average number of seconds per vehicle;, LOS = Level of Service; **Bold** = deficient operation
** = greater than 120 seconds of average delay

Project Conditions

Turning movements at the Quarry were calculated using the project trip generation values and trips to and from the north added as through movements at Black Bart Drive. These volumes were used to evaluate need for turn lanes as well as intersection operation. Results for the driveway are provided for informational purposes as LOS criteria do not apply to private driveways. Only the intersection of US 101/ Black Bart Drive is therefore discussed in further detail.

Project Intersection Operation

Year 2010

With the addition of project generated traffic and no changes to the existing configuration, the intersection of US 101/Black Bart Drive is expected to operate overall acceptably at LOS A with the eastbound approach operating acceptably at LOS D or better during all time periods studied.

Year 2014 (No Willits Bypass)

As shown in Table 9, with project-generated traffic added to 2014 volumes acceptable operation of LOS C or better on all individual US 101/Black Bart Drive approaches and LOS A overall operation is expected.

Year 2014 (During Willits Bypass Construction)

Conditions with the Bypass construction are nearly identical to those without it. US 101/Black Bart Drive would operate acceptably during all periods evaluated.

Year 2030

In the year 2030 the intersection of US 101/Black Bart Drive is expected to operate overall at LOS A; however, the eastbound left turn movement would be expected to operate unacceptably at LOS E or F during the 11 a.m.-12 noon, 1:15 to 2:15 p.m. and 4:45 to 5:45 p.m. time periods in July under the existing configuration.

Year 2040

Under projected 2040 volumes, US 101/Black Bart Drive is expected to operate at LOS A overall; however, the eastbound left turn movement is expected to operate unacceptably at LOS E or F during the 11 a.m.-12 noon, 1:15 to 2:15 p.m. and 4:45 to 5:45 p.m. time periods in July and the 11 a.m.-12 noon and 1:15 to 2:15 p.m. time periods in October.

Project Mitigated Conditions

Year 2010

Based upon intersection LOS, no mitigating measures are necessary; however, with the installation of all warranted speed change and turn lanes, the LOS does improve slightly.

Year 2014 (Without Willits Bypass Construction)

No mitigating measures are necessary to address operation; however, installation of speed change and turn lanes would be expected to reduce delay slightly.

Year 2014 (During Willits Bypass Construction)

Again, no mitigation is warranted based upon intersection LOS, but operation would improve slightly with

installation of turn and speed change lanes.

Year 2030

With the addition of the previously described improvements, all movements at US 101/Black Bart Drive would be expected to operate acceptably during all time periods.

Year 2040

Continued acceptable operation is expected at US 101/Black Bart Drive in 2040 with the improvements noted above.

Driveway Operation

As with the Base Permit conditions, operation of the quarry driveway was studied to determine average delays experienced by drivers exiting the site. With the installation of all recommended speed change and turn lanes, the driveway would operate acceptably at all times with and average delay of 23.3 seconds or less for exiting traffic.

Turn Lane Lengths

The minimum length of the left-turn lane has previously been determined by the California Department of Transportation (Caltrans) as communicated in a letter dated September 18, 2006, from Mr. Jesse Robertson. Based upon application of standards in the *Highway Design Manual*, 6th Edition, Caltrans staff have indicated that it is acceptable to assume that turning vehicles will slow to 43.5 mph in the through lane with the remaining deceleration occurring in the turn lane, resulting in a deceleration length of 371 feet. Additionally, Caltrans is requiring vehicle storage of 98 feet for a total turn lane length of 469 feet. A copy of this letter is provided in Appendix I.

The lengths of the left-turn and right-turn acceleration lanes were determined using Exhibit 10-70 from American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on the Geometric Design of Highways and Streets*. The length needed to achieve a merging speed of 50 mph on a highway with a 65-mph design speed is 1,410 feet. To assess the impacts on the acceleration length of trucks the National Cooperative Highway Research Program (NCHRP) Report 505, *Review of Truck Characteristics in Roadway Design*, was consulted. Since the northbound acceleration lane would be below two-percent grade over the length of the acceleration lane, the acceleration distance of 1,410 feet remains appropriate for truck acceleration. However, since the southbound acceleration lane is at a two-percent down grade, Tables 64 and 65, "Maximum Weight-to-Power Ratios for Minimum Acceleration Length," in the NCHRP publication were consulted. For the down-grade, the weight-to-power ratio is decreased from 110 pounds per horsepower at a zero percent grade to 85 pounds per horsepower at two-percent grade. Applying this ration of 85 to 110, the length of the southbound acceleration lane is decreased from 1,410 feet to 1,090 feet A standard 300-foot transition taper will be needed at the terminus of the acceleration lane. The turn lane lengths are summarized in Table 18.

Table 18
Turn and Acceleration Lane Lengths (feet)

	Northbound Left-Turn Lane	Northbound Acceleration Lane	Southbound Acceleration Lane
Taper	120	300	300
Storage	98	N/A	N/A
Deceleration/Acceleration	251	1,410	1,090
Total	**469**	**1,710**	**1,390**

While a southbound right turn lane is not warranted, due to the proximity to Black Bart Drive and since a right turn deceleration taper is warranted, it is recommended that a short right turn lane of approximately 200 feet be installed for the Harris Quarry Entrance. The length of this turn lane is supported by Caltrans staff as communicated in a letter dated August 8, 2006, from Mr. Jesse Robertson; a copy of this letter is provided in Appendix I. To avoid potential conflicts with other movements, the southbound right turn lane for the Quarry Entrance should not extend the entire distance to Black Bart Drive so that southbound through movements destined for the Quarry do not enter the right-turn lane north of Black Bart Drive, causing confusion for drivers exiting Black Bart Drive.

Circulation Improvements

The following circulation improvements are recommended for both Base Permit and Project conditions:

Left Turns into Project Driveway From Northbound US 101

A left turn deceleration lane is needed on the northbound US 101 approach to the Quarry entrance. This would significantly reduce safety concerns associated with trucks slowing and turning left into the Quarry from the high speed left lane on the expressway, and would be a significant benefit.

Right Turns into Project Driveway from Southbound US 101

A right turn deceleration lane is needed on the Southbound US 101 approach to the Quarry entrance. This would allow vehicles turning right into the Quarry to slow outside of the through travel lane where speeds are often in excess of 60 miles per hour. Due to its proximity to the Quarry entrance, this right turn lane could also be used as a right turn acceleration lane by vehicles exiting Black Bart Drive. This would be a significant benefit.

Right Turns from Project Driveway to Southbound US 101

A southbound right turn acceleration taper was determined to be warranted for all but the 2040 conditions to allow loaded trucks leaving the quarry to enter the highway. Under the 2040 conditions an acceleration lane will be needed to allow trucks turning right from the quarry to get fully or partially up to prevailing travel speeds on US 101 before merging.

Left Turns from Project Driveway to Northbound US 101

A left turn acceleration lane is recommended for northbound US 101 north of the Quarry entrance. This lane would significantly improve safety for trucks turning left onto US 101 from the Quarry as they would no longer need to gain speed in the left travel lane of the expressway. This would be a significant benefit.

Alternative Quarry Access

As an alternative to the current quarry access driveway, installation of a partial grade-separated interchange was studied. This partial grade-separation would affect movements to and from northbound US 101 and eliminate the need for trucks to cross oncoming traffic while making left-turns into or out of the site. These movements would instead occur via on- and off-ramps on the east side of the existing expressway. Since drivers making the inbound and outbound right-turns do not have to cross oncoming traffic, these movements would still occur at an at-grade driveway. All right turn lanes and tapers warranted for the Base Permit or Project conditions would still be warranted with the partial grade-separated driveway.

Analysis of operating conditions for both ramps for all study time periods indicates that a grade separated access would be expected to operate acceptably at LOS B or better. Although a partial grade-separated driveway would operate at a better level of service than an at-grade driveway, this improvement is neither warranted nor recommended because acceptable operation can be achieved at the existing at-grade driveway through installation of turn and speed change lanes. Further, there is no documented historical safety issue based upon collision data that would indicate the need for grade separation. Detailed LOS calculations are provided in Appendix J.

Alternative Modes of Transportation

In addition to transportation by personal vehicle, transportation by pedestrians, bicyclists and transit users was considered. Since the majority of trips associated with Harris Quarry are truck haul trips, alternative modes of transportation are not feasible; however, alternative transportation was considered for employees or other Quarry users.

Pedestrian

Currently, no designated pedestrian facilities are provided on US 101 in the vicinity of the project site nor are there pedestrian facilities provided on Black Bart Drive. This is consistent with the rural and low density nature of surrounding land uses and the lack of pedestrian-oriented destinations. The proposed project is not expected to generate a need for pedestrian facilities and no additional facilities are recommended.

Bicycle

While no separated bicycle facilities are currently provided on US 101, bicyclists my utilize the existing shoulder. No separated bicycle facilities are provided along Black Bart Drive. As with pedestrian uses, this is consistent with the rural nature of the surrounding land uses. The proposed project is not expected to generate a need for bicycle facilities, so no additional facilities are recommended; however, when widening of US 101 is completed to add recommended turn lanes, shoulders should be built to applicable Caltrans standards so that they may continue to be utilized by bicyclists.

Transit

Mendocino Transit Authority (MTA) provides service to destinations within Mendocino County as well as some connections to adjacent counties. While MTA does operate fixed-route bus service along the US 101 corridor, there are no scheduled transit stops in the vicinity of the project. The proposed project is not expected to generate a need for additional transit services, so no modifications are recommended.

Driveway Safety

The effect of adverse weather conditions, especially fog, was considered as part of this analysis. While it is impossible to predict future safety conditions, historical data can indicate trends. As noted previously, during the five-year period reviewed there were no reported collisions at the project driveway and there were no collisions within one-half mile north or south of the project driveway involving large trucks with trailers. Since no historical safety issues are present, no mitigating measures are recommended.

Since the driveway is located along a high-speed expressway with highly dispersed intersections, advance warning signs should be placed on US 101 to the north and south of the project driveway. It is recommended "Slow Trucks," California MUTCD sign designation W51(CA), be installed together with flashing beacons programmed to be on during normal quarry operating hours.

Base Permit Conditions

Year 2010

Impact T-1: Trucks traveling northbound and making a left turn into the Quarry must do so from the inside, or fast, lane on US 101, effectively blocking northbound through traffic in this lane while waiting for an acceptable gap in southbound traffic to make the left turn. This creates a safety and operations risk. This is considered a Class II Impact – significant, but mitigable.

Mitigation T-1: Install a 469-foot left turn lane for northbound traffic at the Quarry entrance.

Impact T-2: Trucks turning left out of the Quarry site must accelerate to reach highway speeds while climbing, resulting in trucks that are moving slower than the surrounding traffic. This creates a safety and operations risk. This is considered a Class II Impact – significant, but mitigable.

Mitigation T-2: Install a northbound acceleration lane. A length of 1,710 feet is needed for the acceleration lane to serve project volumes, which exceeds the available distance between the Harris Quarry access and Black Bart Drive. A special lane designation to permit left-turns onto Black Bart Drive and acceleration for both left-turns from Black Bart Drive and acceleration from the Harris Quarry access to northbound US 101will need to be developed. The extension of the left turn acceleration lane through the intersection at Black Bart Drive can then be used for acceleration by drivers turning left from Black Bart Drive. The overlap of the left turn acceleration lane for trucks leaving the Quarry with the left turn deceleration lane for vehicles entering Black Bart Drive creates a possibility of conflict between a truck accelerating behind a vehicle decelerating. Using the left turn warrant method it was determined that this conflict will not occur in over 97 percent of turning movements; therefore, no further consideration is necessary.

Impact T-3: Trucks making a right turn into the Quarry from southbound US 101 must slow down in the outside travel lane on US 101. This creates a safety and operations risk. This is considered a Class II Impact – significant, but mitigable.

Mitigation T-3: Install a short right turn lane of approximately 200 feet in length for southbound traffic at the Quarry entrance. This lane should not extend to Black Bart Drive to avoid having drivers destined for the Quarry entering the right-turn lane north of Black Bart Drive.

Year 2014 (without Willits Bypass)

See Mitigation Measures T-1, T-2 and T-3; no new mitigation measures would be warranted.

Year 2014 (with Willits Bypass)

See Mitigation Measures T-1, T-2 and T-3; no new mitigation measures would be warranted.

Year 2030

See Mitigation Measures T-1, T-2 and T-3 in addition to the following new mitigation measure.
Impact T-4: Trucks turning right to US 101 southbound when exiting the Quarry must enter the outside travel lane after waiting for an acceptable gap in southbound traffic. Under projected volumes, gaps in traffic may not always be sufficient to allow for full acceleration in the travel lane. This is considered a Class II Impact – significant, but mitigable.

Mitigation T-4: Install an acceleration taper for trucks making the right turn onto US 101 southbound at the Quarry entrance to allow for some acceleration prior to entering the travel lane.

Year 2040

See Mitigation Measures T-1, T-2, T-3 and T-4; no new mitigation measures would be warranted.

Project Conditions

Year 2010

Impacts T-1 through T-4 would be expected by horizon year 2010, resulting in the need for Mitigation Measures T-1, T-2, T-3 and T-4.

Year 2025

See Mitigation Measures T-1, T-2, T-3 and T-4; no new mitigation measures would be warranted.

Year 2040

See Mitigation Measures T-1, T-2, T-3 and T-4 in addition to the following new mitigation measure.

Impact T-5: Under projected 2040 traffic volumes the right-turn acceleration taper indicated as Mitigation Measure T-4 would no longer be adequate and a full acceleration lane would be warranted. This is considered a Class II Impact – significant, but mitigable.

Mitigation T-5: Install a 1,390-foot-long speed change acceleration lane for trucks turning right onto US 101 southbound at the Quarry entrance to allow for full acceleration prior to entering the travel lane.

Conclusions

- During peak operating conditions, the project is expected to generate 310 truck trips in July and 412 truck trips in October. This is an increase of 196 and 262 truck trips from current operating conditions for July and October, respectively.

- During average operating conditions the project is expected to generate 215 truck trips in July and 286 truck trips in October. This is an increase of 131 and 182 truck trips from current operating conditions for July and October, respectively.

- The project has the potential to reduce vehicle miles traveled (VMT) associated with hauling aggregate and AC within the County by approximately 183,500 VMT annually.

- Northbound left turn deceleration and acceleration lanes are warranted in 2010 under Base Permit and Project conditions.

- A southbound right turn deceleration taper in warranted in 2010 under Base Permit and Project conditions; however, due to the proximity to Black Bart Drive, installation of a full deceleration lane that extends to Black Bart Drive would be beneficial.

- A southbound right turn acceleration taper is warranted in 2030 for continued operation of the quarry at its currently permitted levels.

- A southbound right turn acceleration taper is warranted in 2010 for Project Conditions. By the year 2040, a full right turn acceleration lane is warranted.

- Without the implementation of proposed mitigating measures, the intersection of US 101 and Black Bart Drive is expected to operate unacceptably in 2030 and 2040 with or without expansion of Quarry operations.

- With the implementation of recommended mitigating measures, the intersection of US 101 and Black Bart Drive is expected to continue to operate acceptably through the horizon year of 2040.

- The proposed project is not expected to generate a need for additional pedestrian, bicycle or transit facilities.

- Under the Project scenario and with the implementation of all recommended mitigating measures, the intersection of US 101 and Black Bart Drive is expected to operate at the same or better levels of service than without the project and associated mitigating measures for all scenarios and during all study periods, resulting in less average delay. This appears to be consistent with the Mendocino County General Plan policy DE-121.

- A partial grade-separated driveway would eliminate left-turning movements across oncoming traffic and would operate acceptably during all study time periods. However, based upon projected operations

of the at-grade intersection with the implementation of all recommended mitigating measures, a partial grade-separation is not warranted.

Recommendations

- Install a 469-foot long left-turn lane on US 101 North; this improvement is required regardless of whether the Quarry continues operation at the currently permitted levels or expands its operation.

- Install a 1,710-foot long acceleration lane on US 101 North; this improvement is required regardless of whether the Quarry continues operation at the currently permitted levels or expands its operation.

- Install a right turn lane of approximately 200 feet in length on US 101 South at the Harris Quarry Entrance; this improvement is required regardless of whether the Quarry continues operation at the currently permitted levels or expands its operation. This lane should be configured in a manner to prevent drivers destined for the Quarry from entering the lane north of Black Bart Drive as this may cause confusion for drivers on Black Bart Drive.

- Install a right turn acceleration taper on US 101 South; this is improvement is needed immediately for the project, but not until 2030 if operation continues at the currently permitted levels. This lane will need to be converted to a full acceleration lane 1,390 feet in length by 2040 to accommodate the Project.

- Since the Quarry Access Driveway is expected to operate acceptably during all study periods with the implementation of the recommended mitigating measures, and since there are no documented historical safety issues associated with trucks turning at the project driveway, the installation of the partial grade-separation is not recommended.

- Installation of "Slow Trucks" warning signs with flashing beacons is recommended for both the northbound and southbound approaches to the Quarry Access Driveway.

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Study Participants and References

Study Participants

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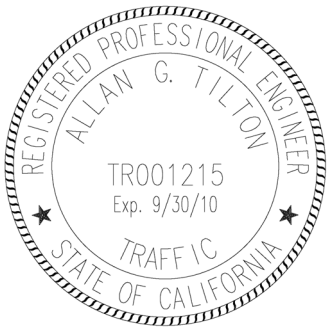

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Letter regarding the required minimum length of the left-turn lane, Mr. Jesse Robertson of California Department of Transportation, August 8, 2006

Letter regarding the required minimum length of the left-turn lane, Mr. Jesse Robertson of California Department of Transportation, September 28, 2006

MEX047

Appendix A

Speed Surveys

W-Trans
Engineering and Traffic Survey

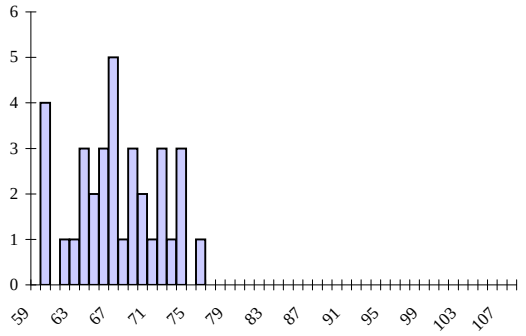
VEHICLE SPEED DATA

Location: **US 101 South of Black Bark**

Posted Limi **65**
Direction: **North #1** Recorder: **CS**
Date: **Mar 11-08** Day: **Tuesday**
Begin Time: **5:50 PM** End Time: **6:23 PM**
Weather: **Clear** Land Use: **Rural**

Summary Statistics

Total Observed	34
Speed Range	60 - 76
50th percentile speed	67
85th percentile speed	72
10 mph pace speed	63 - 72
% in pace speed	71
Skew	1.876



Speed	Number	Cumulative Percent	Speed	Number	Cumulative Percent
59	0	0	84	0	100
60	4	12	85	0	100
61	0	12	86	0	100
62	1	15	87	0	100
63	1	18	88	0	100
64	3	26	89	0	100
65	2	32	90	0	100
66	3	41	91	0	100
67	5	56	92	0	100
68	1	59	93	0	100
69	3	68	94	0	100
70	2	74	95	0	100
71	1	76	96	0	100
72	3	85	97	0	100
73	1	88	98	0	100
74	3	97	99	0	100
75	0	97	100	0	100
76	1	100	101	0	100
77	0	100	102	0	100
78	0	100	103	0	100
79	0	100	104	0	100
80	0	100	105	0	100
81	0	100	106	0	100
82	0	100	107	0	100
83	0	100	108	0	100
TOTAL				**34**	

W-Trans
Engineering and Traffic Survey

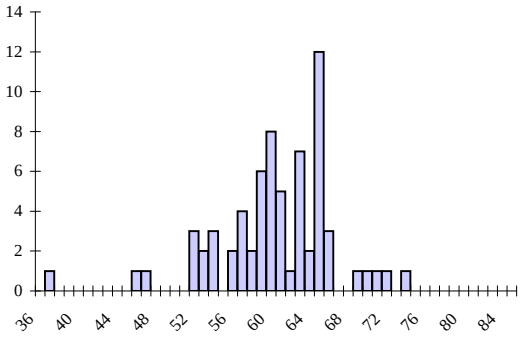
VEHICLE SPEED DATA

Location: **US 101 South of Black Bark**

Posted Limi **65**
Direction: **North #2** Recorder: **CS**
Date: **Mar 11-08** Day: **Tuesday**
Begin Time: **5:50 PM** End Time: **6:23 PM**
Weather: **Clear** Land Use: **Rural**

Summary Statistics

Total Observed	68
Speed Range	37 - 74
50th percentile speed	61
85th percentile speed	65
10 mph pace speed	57 - 66
% in pace speed	74
Skew	2.591



Speed	Number	Cumulative Percent	Speed	Number	Cumulative Percent
36	0	0	61	5	56
37	1	1	62	1	57
38	0	1	63	7	68
39	0	1	64	2	71
40	0	1	65	12	88
41	0	1	66	3	93
42	0	1	67	0	93
43	0	1	68	0	93
44	0	1	69	1	94
45	0	1	70	1	96
46	1	3	71	1	97
47	1	4	72	1	99
48	0	4	73	0	99
49	0	4	74	1	100
50	0	4	75	0	100
51	0	4	76	0	100
52	3	9	77	0	100
53	2	12	78	0	100
54	3	16	79	0	100
55	0	16	80	0	100
56	2	19	81	0	100
57	4	25	82	0	100
58	2	28	83	0	100
59	6	37	84	0	100
60	8	49	85	0	100
TOTAL				**68**	

W-Trans
Engineering and Traffic Survey

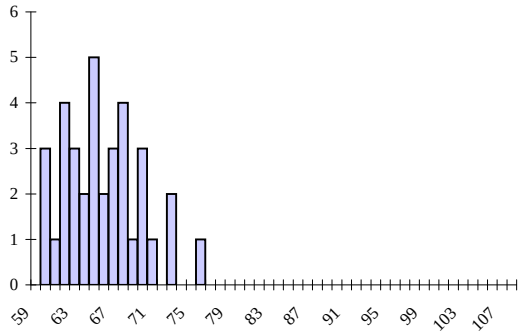
VEHICLE SPEED DATA

Location: **US 101 South of Black Bark**

Posted Limi **65**
Direction: **South #1** Recorder: **CS**
Date: **Mar 11-08** Day: **Tuesday**
Begin Time: **6:25 PM** End Time: **7:02 PM**
Weather: **Clear** Land Use: **Rural**

Summary Statistics

Total Observed	35
Speed Range	60 - 76
50th percentile speed	65
85th percentile speed	70
10 mph pace speed	60 - 69
% in pace speed	80
Skew	1.825



Speed	Number	Cumulative Percent	Speed	Number	Cumulative Percent
59	0	0	84	0	100
60	3	9	85	0	100
61	1	11	86	0	100
62	4	23	87	0	100
63	3	31	88	0	100
64	2	37	89	0	100
65	5	51	90	0	100
66	2	57	91	0	100
67	3	66	92	0	100
68	4	77	93	0	100
69	1	80	94	0	100
70	3	89	95	0	100
71	1	91	96	0	100
72	0	91	97	0	100
73	2	97	98	0	100
74	0	97	99	0	100
75	0	97	100	0	100
76	1	100	101	0	100
77	0	100	102	0	100
78	0	100	103	0	100
79	0	100	104	0	100
80	0	100	105	0	100
81	0	100	106	0	100
82	0	100	107	0	100
83	0	100	108	0	100
TOTAL				**35**	

W-Trans
Engineering and Traffic Survey

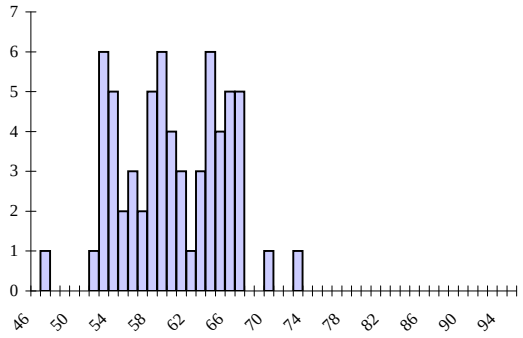
VEHICLE SPEED DATA

Location: **US 101 South of Black Bark**

Posted Limi **65**
Direction: **South #2** Recorder: **CS**
Date: **Mar 11-08** Day: **Tuesday**
Begin Time: **6:25 PM** End Time: **7:02 PM**
Weather: **Clear** Land Use: **Rural**

Summary Statistics

Total Observed	64
Speed Range	47 - 73
50th percentile speed	60
85th percentile speed	66
10 mph pace speed	58 - 67
% in pace speed	66
Skew	1.341



Speed	Number	Cumulative Percent	Speed	Number	Cumulative Percent
46	0	0	71	0	98
47	1	2	72	0	98
48	0	2	73	1	100
49	0	2	74	0	100
50	0	2	75	0	100
51	0	2	76	0	100
52	1	3	77	0	100
53	6	13	78	0	100
54	5	20	79	0	100
55	2	23	80	0	100
56	3	28	81	0	100
57	2	31	82	0	100
58	5	39	83	0	100
59	6	48	84	0	100
60	4	55	85	0	100
61	3	59	86	0	100
62	1	61	87	0	100
63	3	66	88	0	100
64	6	75	89	0	100
65	4	81	90	0	100
66	5	89	91	0	100
67	5	97	92	0	100
68	0	97	93	0	100
69	0	97	94	0	100
70	1	98	95	0	100
TOTAL				**64**	

Appendix B

Collision Data

SEGMENT COLLISION CALCULATIONS

County of Mendocino

Location: US 101 from one-half mile south of Black Bart Drive to one-half mile north of Black Bart Drive

AADT: 17,000

Number of Collisions: 16
Number of Injuries: 5
Number of Fatalities: 1
Start Date: January 1, 2004
End Date: December 31, 2008
Number of Years: 5

Highway Type: UNDIVIDED 4 LANES
Area: Rural

Segment Length: 1.0 miles
Direction: NORTH/SOUTH

$$\frac{\text{NUMBER OF COLLISIONS} \times 1\ \text{MILLION}}{\text{ADT} \times 365\ \text{DAYS PER YEAR} \times \text{SEGMENT LENGTH} \times \text{NUMBER OF YEARS}}$$

$$\frac{16 \times 1{,}000{,}000}{17{,}000 \times 365 \times 1 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Segment	**0.52 c/mvm**	**6.3%**	**31.3%**
Statewide Average*	**1.65 c/mvm**	**2.2%**	**38.4%**

ADT = average daily traffic volume (adjusted for seasonal & weekday changes)
c/mvm = collisions per million vehicle miles
* *2007 Collision Data on California State Highways* , Caltrans

Harris Quarry
US 101 at or near Black Bart Drive

Collision Report Summary

8/31/2009
Date Range Reported: 1/1/04 - 12/31/08
Total Number of Collisions: 16

Report#	Date	Time	Location	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Dir. of Travel 1	Movement Prec. Coll. 1	Dir. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil.	Ver.
1235134	1/11/04	13:45	Rt 101 & Black Bart Dr	866'	South	Hit Object	Fixed Object	South	Ran Off Road			Improper Turning	0	1	
1698994	10/24/04	22:19	Rt 101 & Black Bart Dr	317'	South	Rear-End	Other Motor Vehicle	South	Entering Traffic	South	Proceeding Straight	Auto R/W Violation	2	0	
1704587	10/30/04	15:35	Rt 101 & Black Bart Dr	389'	South	Hit Object	Animal	North	Proceeding Straight			Other Than Driver or Ped	0	0	
1787815	12/20/04	09:45	Rt 101 & Black Bart Dr	1637'	North	Hit Object	Fixed Object	North	Ran Off Road			Wrong Side of Road	1	0	
2005792	4/21/05	09:55	Rt 101 & Black Bart Dr	2112'	South	Hit Object	Fixed Object	North	Ran Off Road			Improper Turning	1	0	
2248593	9/18/05	20:00	Rt 101 & Black Bart Dr	110'	South	Not Stated	Animal	North	Proceeding Straight			Other Than Driver or Ped	0	0	
2379298	12/12/05	17:05	Rt 101 & Black Bart Dr	380'	South	Hit Object	Fixed Object	North	Ran Off Road			Other Than Driver or Ped	0	0	
2870021	11/1/06	06:25	Rt 101 & Black Bart Dr	1214'	South	Hit Object	Animal	South	Proceeding Straight			Other Than Driver or Ped	0	0	
2962979	12/21/06	08:48	Rt 101 & Black Bart Dr	1320'	North	Head-On	Not Stated	South	Proceeding Straight			Unsafe Speed	0	0	
2963038	12/22/06	06:10	Rt 101 & Black Bart Dr	2640'	South	Head-On	Not Stated	South	Proceeding Straight			Unsafe Speed	2	0	
2957604	12/22/06	06:15	Rt 101 & Black Bart Dr	2640'	South	Sideswipe	Other Motor Vehicle	South	Proceeding Straight	South	Stopped in Road	Other Than Driver or Ped	0	0	
3307284	8/1/07	08:40	Rt 101 & Black Bart Dr	1373'	South	Hit Object	Fixed Object	North	Ran Off Road			Unsafe Speed	0	0	
3398898	10/29/07	09:43	Rt 101 & Black Bart Dr	1584'	North	Hit Object	Fixed Object	North	Other Unsafe Turning			Improper Turning	1	0	

Report#	Date	Time	Location	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Dir. of Travel 1	Movement Prec. Coll. 1	Dir. of Travel 2	Movement Prec. Coll. 2	PCF	Inj.	Kil.	Ver.
3575132	1/8/08	16:00	Rt 101 & Black Bart Dr	686'	South	Hit Object	Fixed Object	North	Proceeding Straight			Unsafe Speed	0	0	
3710134	4/11/08	20:50	Rt 101 & Black Bart Dr	500'	North	Hit Object	Animal	South	Proceeding Straight			Other Than Driver or Ped	0	0	
3750801	5/25/08	07:47	Rt 101 & Black Bart Dr	1584'	North	Hit Object	Fixed Object	South	Ran Off Road			Unsafe Speed	0	0	

Appendix C

Truck Trip Calculations

Harris Quarry – Truck Trip Calculations

Calculation Assumptions

Production Peak Levels (percent of annual total production)

Aggregate Use	July	October
Aggregate for Sale (including Recycle Import)	9.4%	12.2%
Aggregate to Willits for PCC	10.0%	15.8%
Aggregate for On-Site Asphalt Production	12.0%	17.0%

- Average of 4.15 weeks per month which results in eleven non-working days to account for holidays, inclement weather or closures for other reasons.
- Peak day trips represent 25 percent of total weekly trips
- Average of nine additional delivery trucks per day (one per hour)
- Peak productions represents 146.7 percent of average monthly production
- Each truck generates two trip ends (one inbound and one outbound)

Production Levels

Bulking Factor

$$\frac{Unit\ Weight\ of\ Mined\ Material}{Unit\ Weight\ of\ Processed\ Material} = Bulking\ Factor$$

$$\frac{4{,}185\ \frac{pounds}{cubic\ yard}}{3{,}375\ \frac{pounds}{cubic\ yard}} = 1.24$$

Base Permit – Annual Production

$$(Annual\ Production) \times (Bulking\ Factor) = \ Adjusted\ Production$$

$$(75{,}000\ cubic\ yards) \times (1.24) = \ 93{,}000\ \frac{cubic\ yards}{year}$$

All Base Permit aggregate is sold offsite

Project – Annual Production

$$(Annual\ Production) \times (Bulking\ Factor) + \ Reycled\ Material = \ Adjusted\ Production$$

$$(200{,}000\ cubic\ yards) \times (1.24) + \ (Recycled\ Material) = \ 248{,}000\ \frac{cubic\ yards}{year}$$

Breakdown of use of aggregate

Aggregate Use	Production Level
Aggregate for Sale [1]	162,520 cy/year
Aggregate to Willits for PCC	37,200 cy/year
Aggregate for On-Site Asphalt Production	58.280 cy/year
Total Aggregate Produced	258,000 cy/year
Imported Recycle Material [2]	10,000 cy/year
Total Aggregate Transported	268,000 cy/year

Notes:

1. Includes sale of processed recycle material.
2. Although the Quarry expects that Imported Recycle Material will be brought in on trucks that will subsequently be refilled and used to export material, to provide a conservative analysis it was assumed that trucks that supply recycle material will then leave the site empty. Imported Recycle Material is assumed to generate traffic with the same peak period patterns as aggregate for sale.

Base Permit – July Average Production

July represents 9.4% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(93{,}000\ cubic\ yards/year) \times (0.094\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(16\ cubic\ yards/truck)} = 546.4\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{546.4\ trucks/month}{4.15\ weeks/month} = 131.7\frac{trucks}{week} \cong 132\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$132\frac{trucks}{week} \times 0.25 = 33\ trucks/day$$

Additional 9 delivery truck trips per day

$$Total\ Truck\ Trips = (Daily\ Truck\ Trips) + (Delivery\ Truck\ Trips)$$

$$33\frac{Trucks}{Day} + 9\ \frac{Delivery\ Truck\ Trips}{Day} = 42\frac{Trucks}{Day}$$

Base Permit – July Peak Production

July represents 9.4% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(93{,}000\ cubic\ yards/year) \times (0.094\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(16\ cubic\ yards/truck)} = 546.4\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{546.4\ trucks/month}{4.15\ weeks/month} = 131.7\frac{trucks}{week} \cong 132\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(132\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 193.64\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$193.64\frac{trucks}{week} \times 0.25 = 48.4 \cong 48\ peak\ trucks/day$$

Additional 9 delivery trucks per day

$$Total\ Truck\ Trips = (Daily\ Truck\ Trips) + (Delivery\ Truck\ Trips)$$

$$48\frac{Trucks}{Day} + 9\ \frac{Delivery\ Truck\ Trips}{Day} = 57\frac{Trucks}{Day}$$

Base Permit – October Average Production

October represents 12.2% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(93{,}000\ cubic\ yards/year) \times (0.122\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(16\ cubic\ yards/truck)} = 709.1\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{709.1\ trucks/month}{4.15\ weeks/month} = 170.87\frac{trucks}{week} \cong 171\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$171\frac{trucks}{week} \times 0.25 = 42.75 \cong 43\ trucks/day$$

Additional 9 delivery truck trips per day

$$Total\ Truck\ Trips = (Daily\ Truck\ Trips) + (Delivery\ Truck\ Trips)$$

$$43\frac{Trucks}{Day} + 9\ \frac{Delivery\ Truck\ Trips}{Day} = 52\frac{Trucks}{Day}$$

Base Permit – October Peak Production

October represents 12.2% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(93{,}000\ cubic\ yards/year) \times (0.122\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(16\ cubic\ yards/truck)} = 709.1\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{709.1\ trucks/month}{4.15\ weeks/month} = 170.8\frac{trucks}{week} \cong 171\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(171\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 250.9\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$250.9\ \frac{trucks}{week} \times 0.25 = 62.7 \cong 63\ peak\ trucks/day$$

Additional 9 delivery trucks per day

$$Total\ Truck\ Trips = (Daily\ Truck\ Trips) + (Delivery\ Truck\ Trips)$$

$$63\ \frac{Trucks}{Day} + 9\ \frac{Delivery\ Truck\ Trips}{Day} = 72\frac{Trucks}{Day}$$

Project – July Average Production
Aggregate for Sale and Recycle Import

July represents 9.4% of annual production

$$Monthly\ Truck = \frac{(Adjusted\ Production + Recycle\ Import) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(162{,}520 + 10{,}000\ cy/year) \times (0.094\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(16\ cubic\ yards/truck)} = 1013.6\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{1013.6\ trucks/month}{4.15\ weeks/month} = 244.2\frac{trucks}{week} \cong 244\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$244\frac{trucks}{week} \times 0.25 = 61\ trucks/day$$

Aggregate to Willits for PCC

July represents 10% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(37{,}200\ cubic\ yards/year) \times (0.10\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(20\ cubic\ yards/truck)} = 186\ trucks/month$$

An average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{186\ trucks/month}{4.15\ weeks/month} = 44.8\frac{trucks}{week} \cong 45\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$45\frac{trucks}{week} \times 0.25 = 11.25 \cong 11\ trucks/day$$

Project – July Average Production (continued)
Aggregate for On-Site Asphalt Production

July represents 12% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{\left(58{,}280\ cubic\frac{yards}{year}\right) \times \left(0.12\ \frac{cubic\frac{yards}{month}}{cubic\frac{yards}{year}}\right)}{\left(16\ cubic\frac{yards}{truck}\right)} = 437.1\frac{trucks}{month}$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{437.1\ trucks/month}{4.15\ weeks/month} = 105.3\frac{trucks}{week} \cong 105\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$105\frac{trucks}{week} \times 0.25 = 26.25 \cong 26\ trucks/day$$

Total Truck Trips

Additional 9 delivery truck trips per day

$$Total\ Truck\ Trips = (Gravel\ Sale\ \&\ Recycle\ Import\ ) + (PCC\ Production) + (On\ Site\ Aasphalt\ Production) + (Deliveries)$$

$$61\frac{trucks}{day} + 11\frac{trucks}{day} + 26\frac{trucks}{day} + 9\frac{trucks}{day} = 107\frac{trucks}{day}$$

Project – July Peak Production
Aggregate for Sale and Recycle Import

July represents 9.4% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{\left(162{,}520\,\frac{cy}{year} + \ 10{,}000\,\frac{cy}{year}\right) \times (0.094\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 1013.6\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{1013.6\ trucks/month}{4.15\ weeks/month} = 244.2\,\frac{trucks}{week} \cong 244\,\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(244\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 357.9\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$357.9\,\frac{trucks}{week} \times 0.25 = 89.5 \ \cong 90\ trucks/day$$

Aggregate to Willits for PCC

July represents 10% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{\left(37{,}200\,\frac{cy}{year}\right) \times (0.10\ \frac{cy/month}{cy/year})}{(20\ cy/truck)} = 186\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{186\ trucks/month}{4.15\ weeks/month} = 44.8\,\frac{trucks}{week} \cong 45\,\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(44.8\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 66\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$66\,\frac{trucks}{week} \times 0.25 = 16.5 \ \cong 17\ trucks/day$$

Project – July Peak Production (continued)
Aggregate for On-Site Asphalt Production

July represents 12% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(58{,}280\ cy/year) \times (0.12\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 437.1\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{437.1\ trucks/month}{4.15\ weeks/month} = 105.3\frac{trucks}{week} \cong 105\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(105\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 154\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$154\ \frac{trucks}{week} \times 0.25 = 38.5\ \cong 39\ trucks/day$$

Total Truck Trips

Additional 9 delivery truck trips per day

$$Total\ Truck\ Trips = (Gravel\ Sale\ \&\ Recycle\ Import\ ) + (PCC\ Production) + (On\ Site\ Aasphalt\ Production) + (Deliveries)$$

$$90\frac{trucks}{day} + 17\frac{trucks}{day} + 39\frac{trucks}{day} + 9\frac{trucks}{day} = 155\frac{trucks}{day}$$

Project – October Average Production
Aggregate for Sale and Recycle Import

Assume October represents 12.2% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{\left(162{,}520\,\frac{cy}{year} + \ 10{,}000\,\frac{cy}{year}\right) \times (0.122\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 1315.5\ trucks/month$$

Assume an average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{1315.5\ trucks/month}{4.15\ weeks/month} = 317\,\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$317\,\frac{trucks}{week} \times 0.25 = 79.3 \cong 79\ trucks/day$$

Aggregate to Willits for PCC

October represents 15.8% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(37{,}200\ cy/year) \times (0.158\ \frac{cy/month}{cy/year})}{(20\ cy/truck)} = 293.9\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{293.9\ trucks/month}{4.15\ weeks/month} = 70.8\,\frac{trucks}{week} \ \cong 71\,\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$71\,\frac{trucks}{week} \times 0.25 = 17.8 \ \cong 18\ trucks/day$$

Project – October Average Production (continued)
Aggregate for On-Site Asphalt Production

October represents 17% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(58{,}280\ cy/year) \times (0.17\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 619.2\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{619.2\ trucks/month}{4.15\ weeks/month} = 149.2\frac{trucks}{week} \cong 149\frac{trucks}{week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$149\frac{trucks}{week} \times 0.25 = 37.3 \cong 37\ trucks/day$$

Total Truck Trips

Additional 9 delivery truck trips per day

$$Total\ Truck\ Trips = (Gravel\ Sale\ \&\ Recycle\ Import\ ) + (PCC\ Production) + (On\ Site\ Aasphalt\ Production) + (Deliveries)$$

$$79\frac{trucks}{day} + 18\frac{trucks}{day} + 37\frac{trucks}{day} + 9\frac{trucks}{day} = 143\frac{trucks}{day}$$

Project – October Peak Production
Gravel for Sale

October represents 12.2% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{\left(162{,}520\,\frac{cy}{year} + \ 10{,}000\,\frac{cy}{year}\right) \times (0.122\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 1315.5\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{1315.5\ trucks/month}{4.15\ weeks/month} = 317\,\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(317\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 465\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$465\,\frac{trucks}{week} \times 0.25 = 116.3\ \cong 116\ trucks/day$$

Aggregate to Willits for PCC

July represents 15.8% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(37{,}200\ cubic\ yards/year) \times (0.158\ \frac{cubic\ yards/month}{cubic\ yards/year})}{(20\ cubic\ yards/truck)} = 293.9\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{293.9\ trucks/month}{4.15\ weeks/month} = 70.8\,\frac{trucks}{week}\ \cong 71\,\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(71\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 104.2\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$104.2\ \frac{trucks}{week} \times 0.25 = 26.1\ \cong 26\ trucks/day$$

Project – October Peak Production (continued)
Aggregate for On-Site Asphalt Production

October represents 17% of annual production

$$Monthly\ Trucks = \frac{(Adjusted\ Production) \times (Monthly\ Factor)}{(Truck\ Capacity)}$$

$$\frac{(58{,}280\ cy/year) \times (0.17\ \frac{cy/month}{cy/year})}{(16\ cy/truck)} = 619.2\ trucks/month$$

Average of 4.15 weeks per month

$$Weekly\ Trucks = \frac{Monthly\ Trucks}{Weeks\ per\ Month}$$

$$\frac{619.3\ trucks/month}{4.15\ weeks/month} = 149.2\frac{trucks}{week} \cong 149\frac{trucks}{week}$$

Peak Production is 146.7% of average monthly production

$$Peak\ Weekly\ Trips = (Average\ Weekly\ Trips) \times (Peak\ Factor)$$

$$\left(149\ \frac{Average\ Trucks}{week}\right) \times 1.467 = 218.6\ \frac{Peak\ Trucks}{Week}$$

Peak day represents 25% of the weekly trips

$$Daily\ Truck\ Trips = (Weekly\ Truck\ Trips) \times (Daily\ Factor)$$

$$218.6\ \frac{trucks}{week} \times 0.25 = 54.7 \cong 55\ trucks/day$$

Total Truck Trips

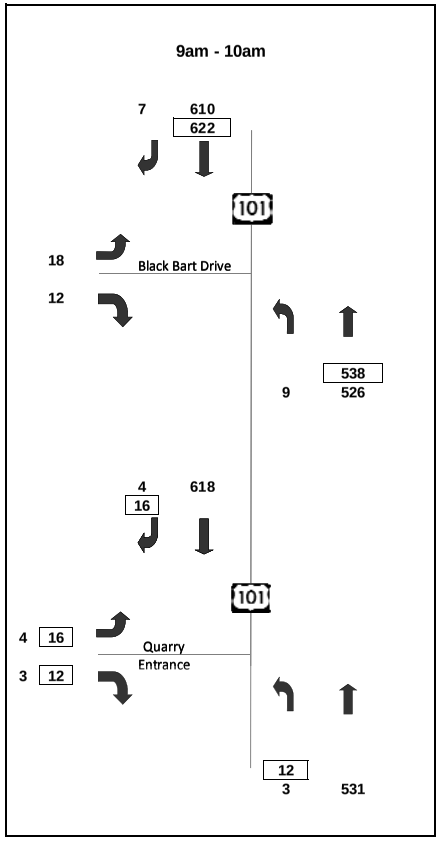
Additional 9 delivery truck trips per day

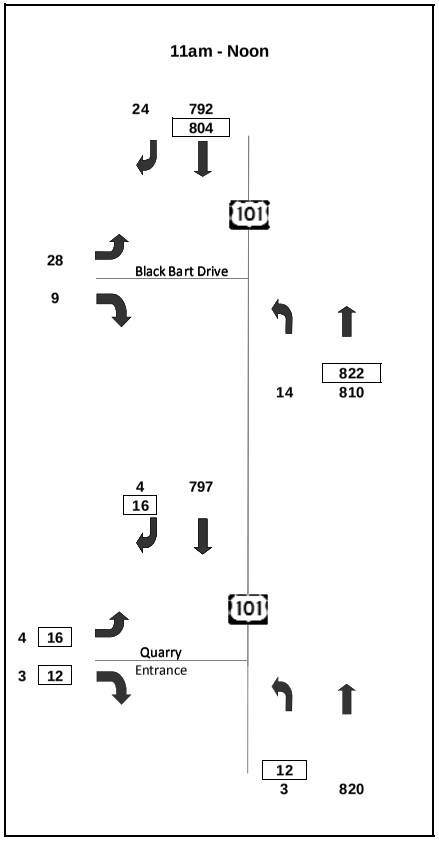
$$Total\ Truck\ Trips = (Off\ Site\ Sale\ ) + (PCC\ Production) + (On\ Site\ Aasphalt\ Production) + (Deliveries)$$

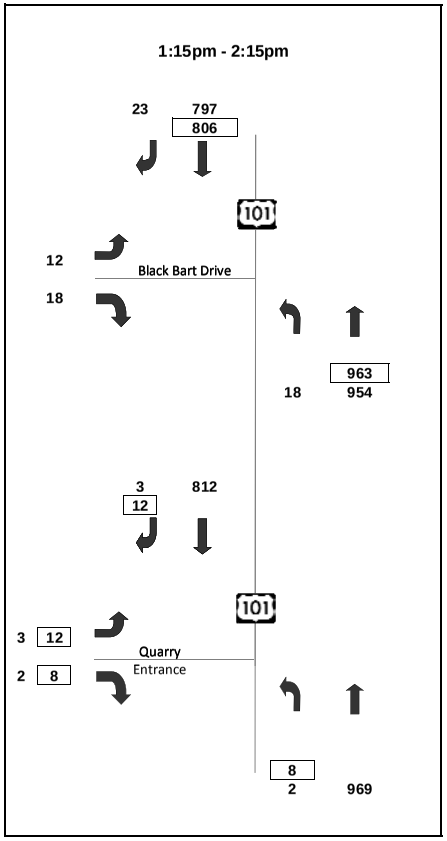
$$116\frac{trucks}{day} + 26\frac{trucks}{day} + 55\frac{trucks}{day} + 9\frac{trucks}{day} = 206\frac{trucks}{day}$$

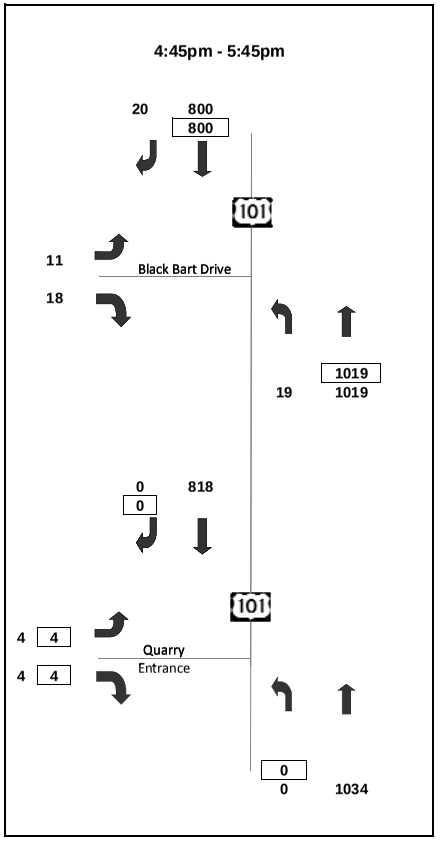
Appendix D

July and October Truck Volumes by Hour









Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

Reference North

No Scale

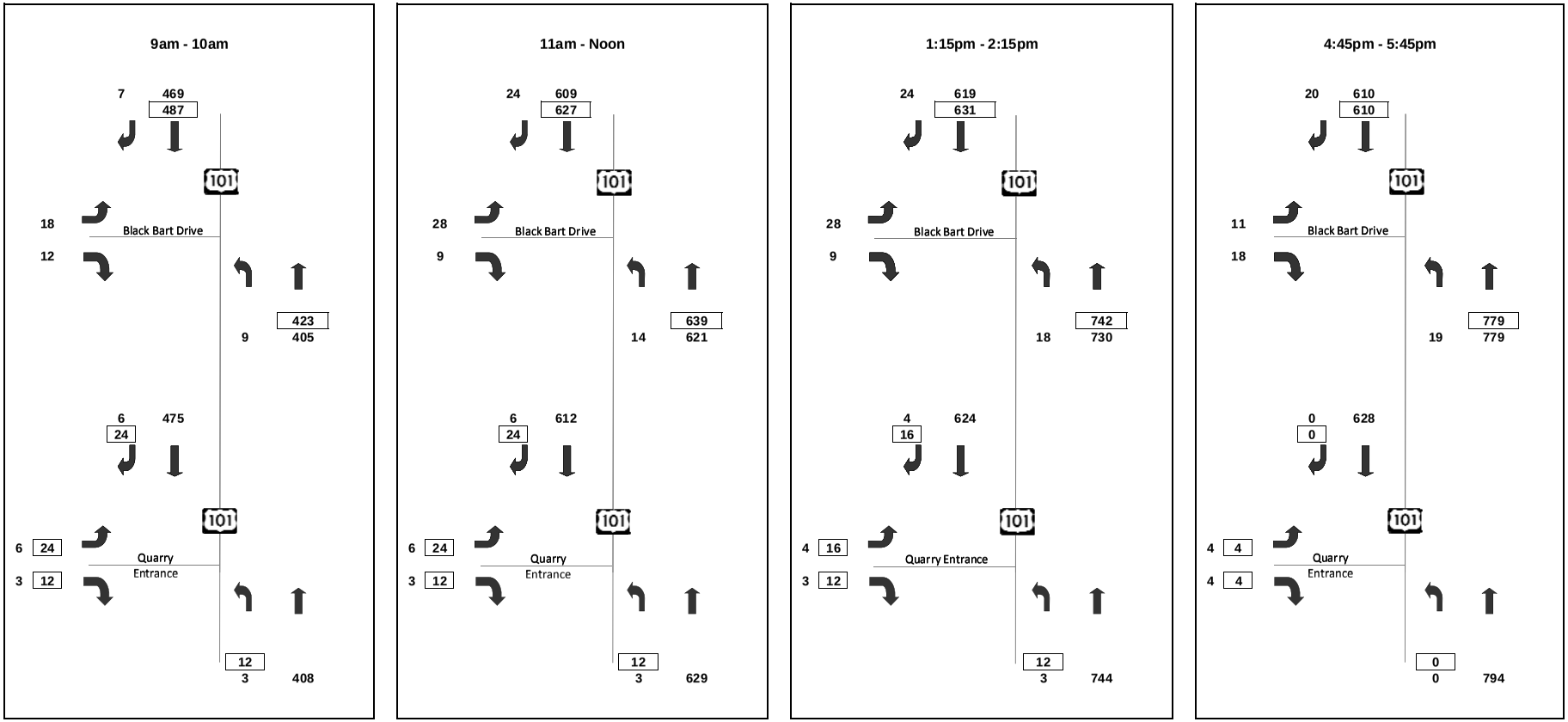
HARRIS QUARRY - TURN MOVEMENTS

2010

BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:

JULY PEAK



Note:

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Where:

1 Truck = 4 Passenger Car Equivalents

N

Reference North

No Scale

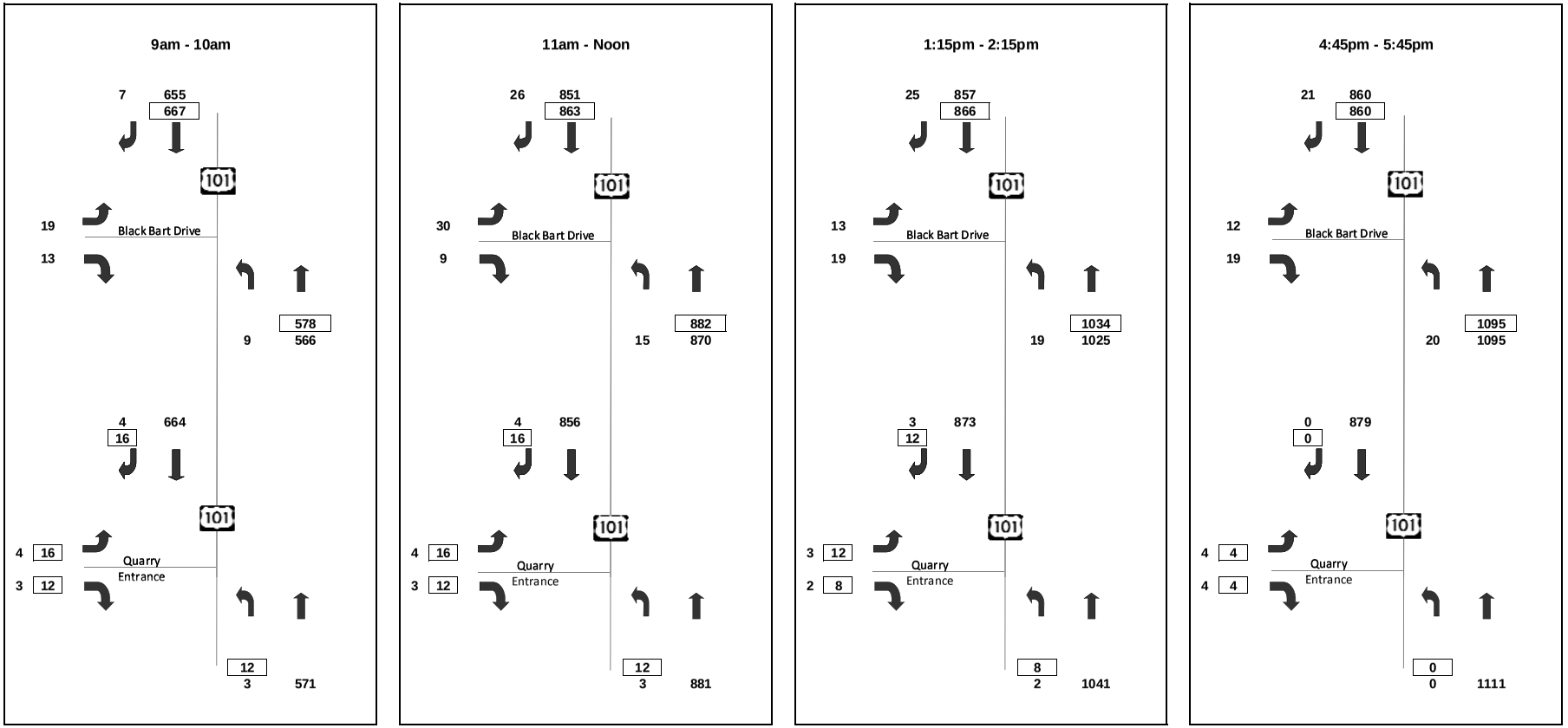
HARRIS QUARRY - TURN MOVEMENTS

2010

BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:

OCTOBER PEAK



Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

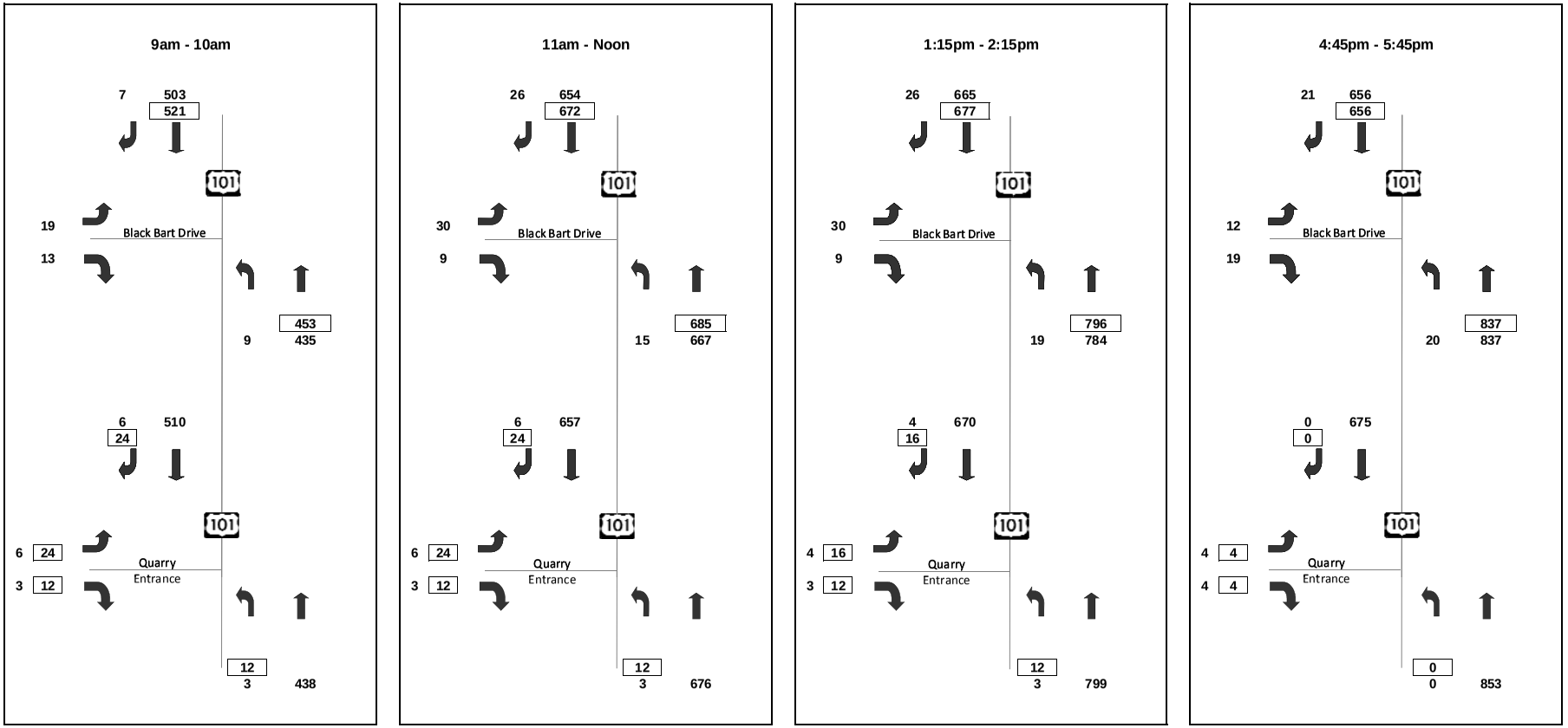
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:
JULY PEAK



Note:

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Where:

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N

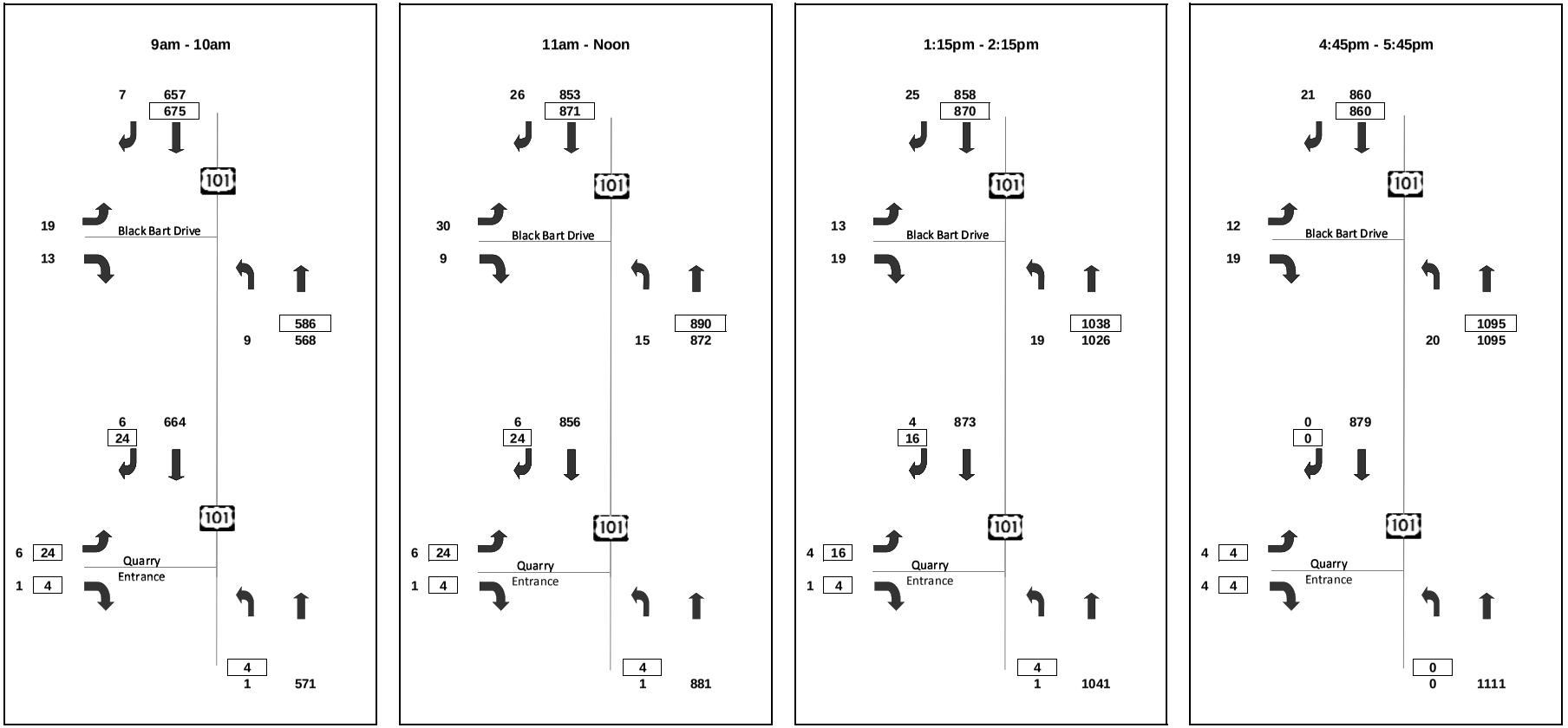
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK



Note:

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Where:

1 Truck = 4 Passenger Car Equivalents

N

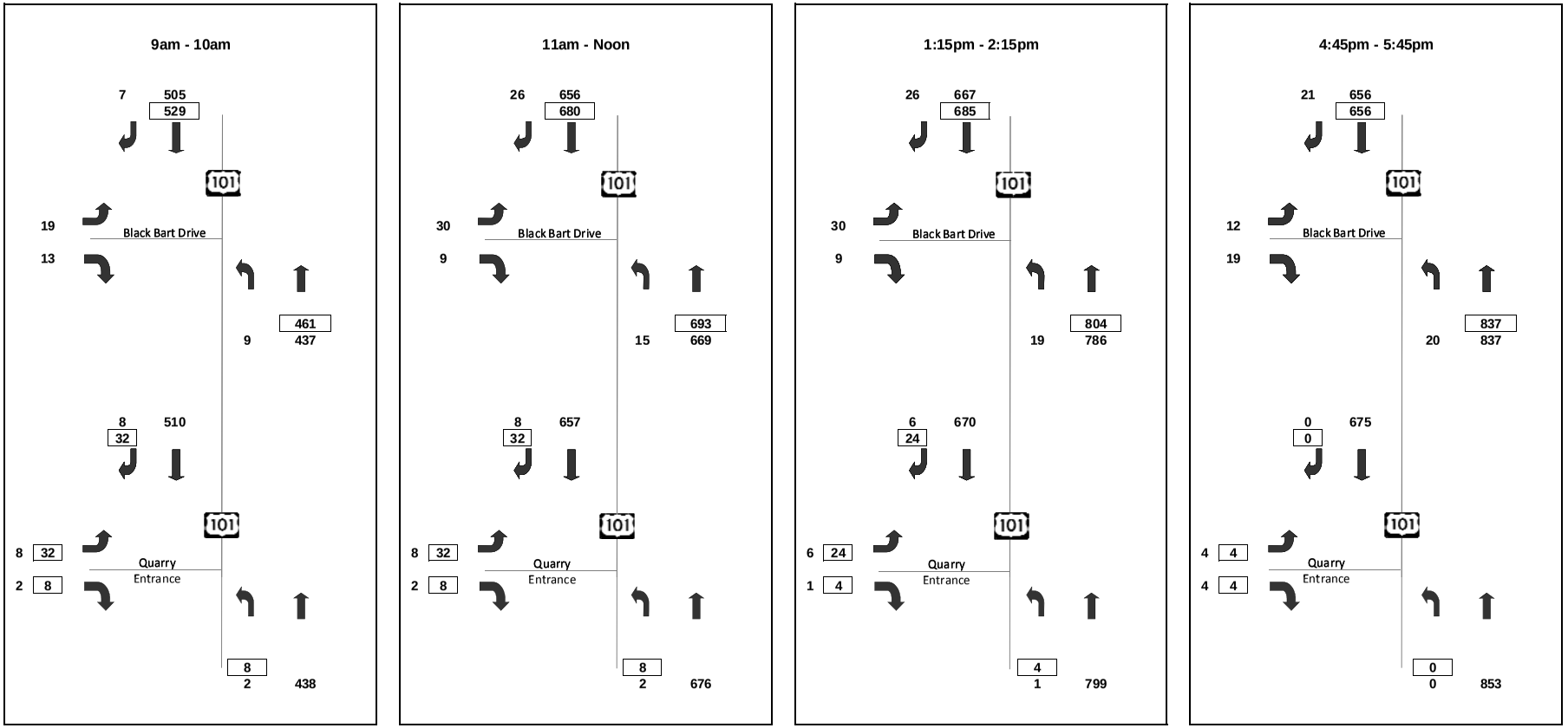
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:
JULY PEAK



Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

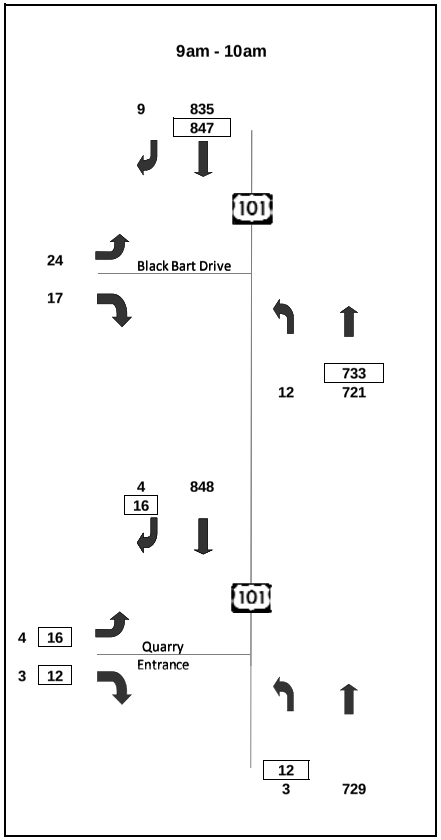
Reference North

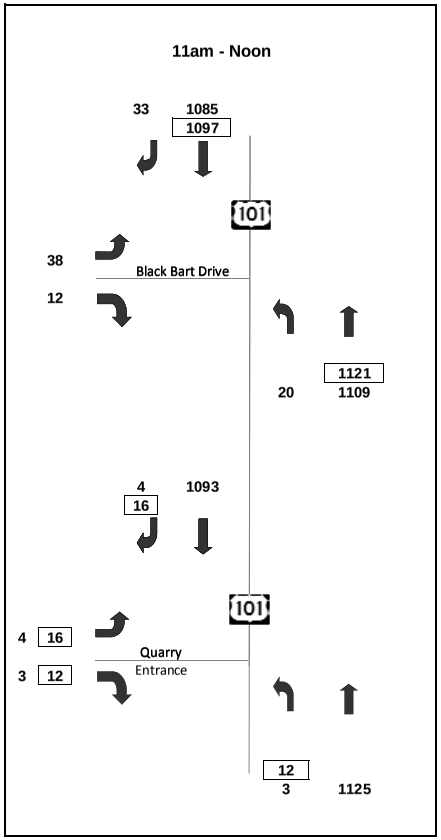
No Scale

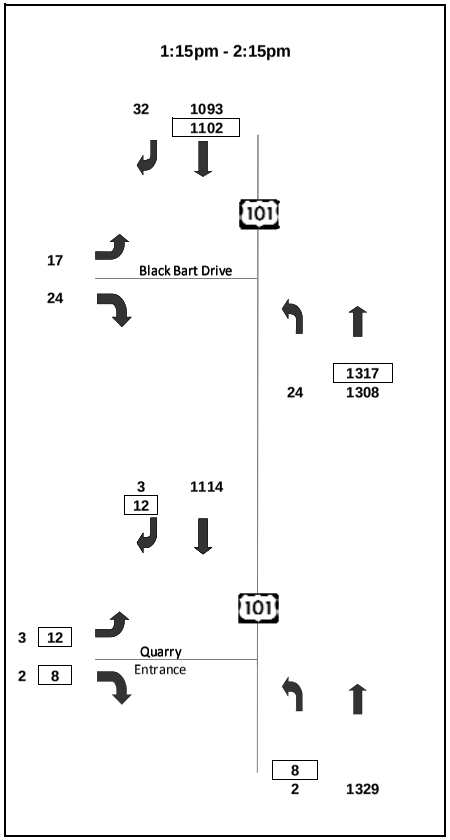
HARRIS QUARRY - TURN MOVEMENTS

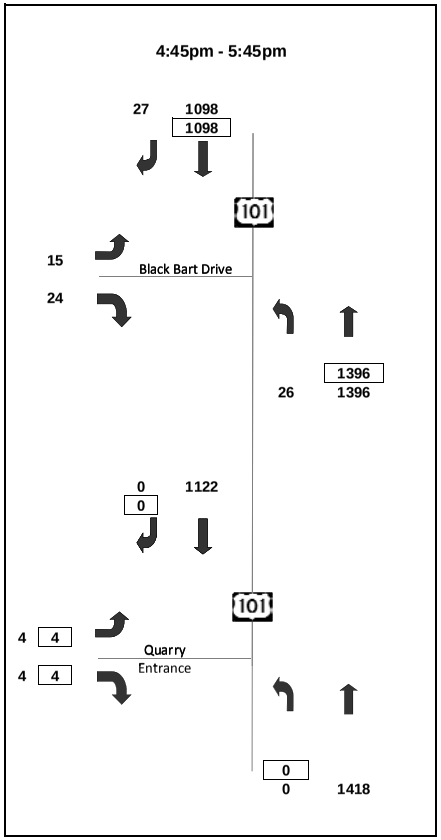
2014 WITH WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK









Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

Reference North

No Scale

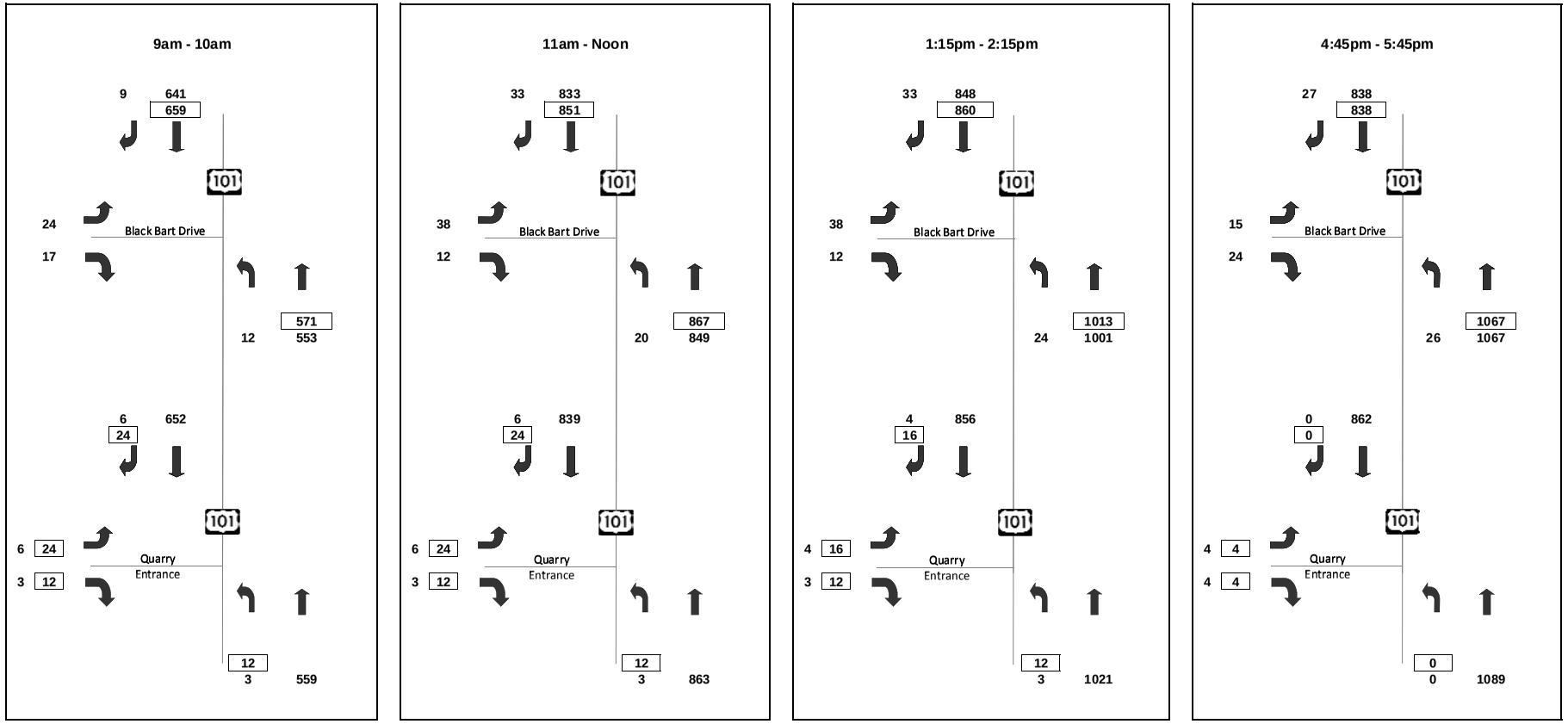
HARRIS QUARRY - TURN MOVEMENTS

2030

BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:

JULY PEAK



Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

Reference North

No Scale

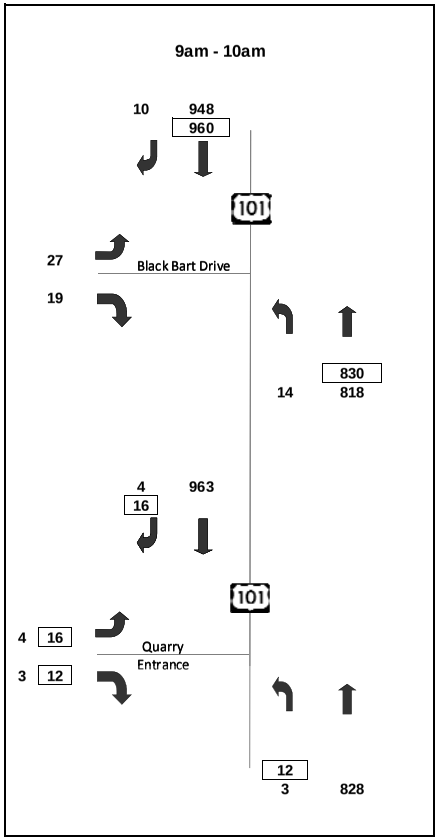
HARRIS QUARRY - TURN MOVEMENTS

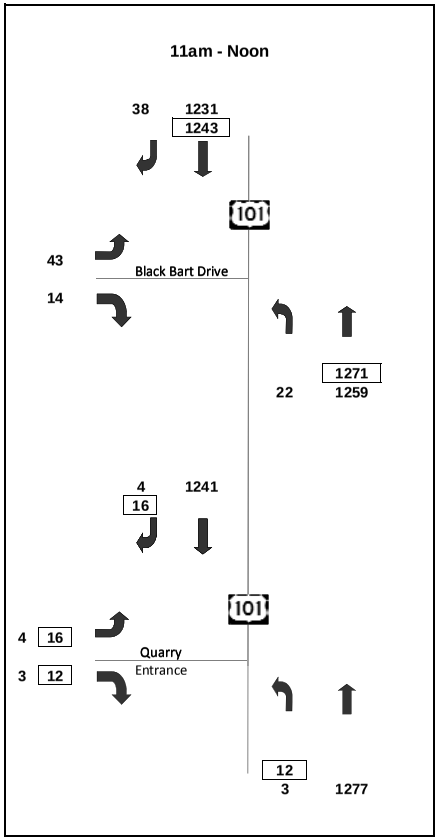
2030

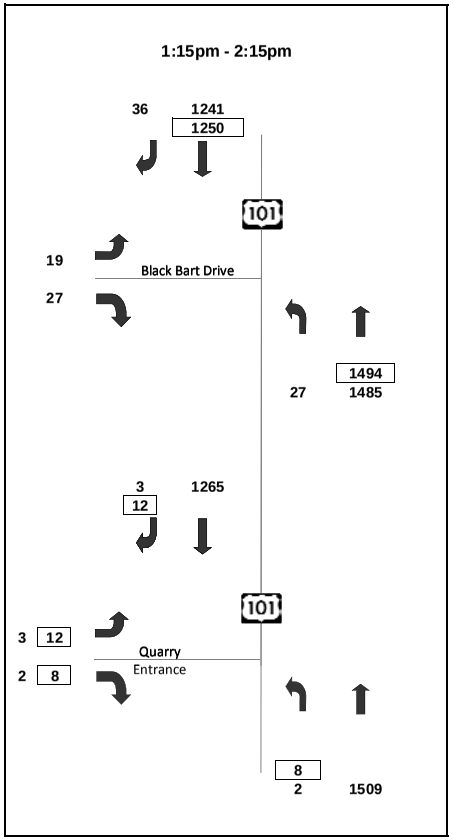
BASE CONDITIONS (75,000 CUBIC YARDS)

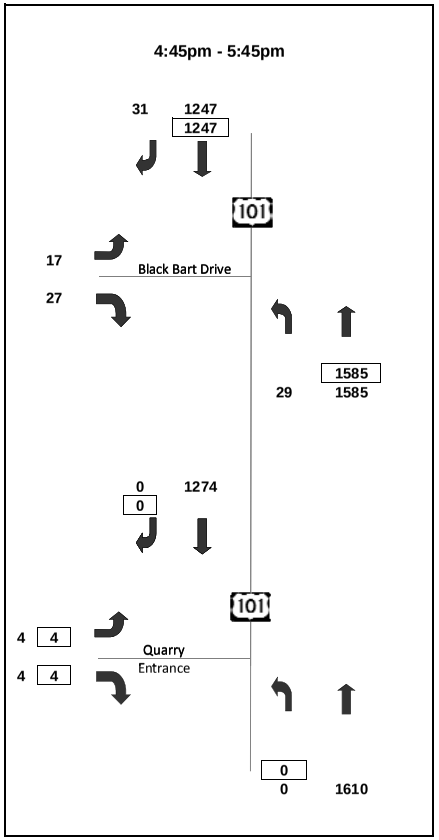
PRODUCTION:

OCTOBER PEAK









Note:

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Where:

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Reference North

No Scale

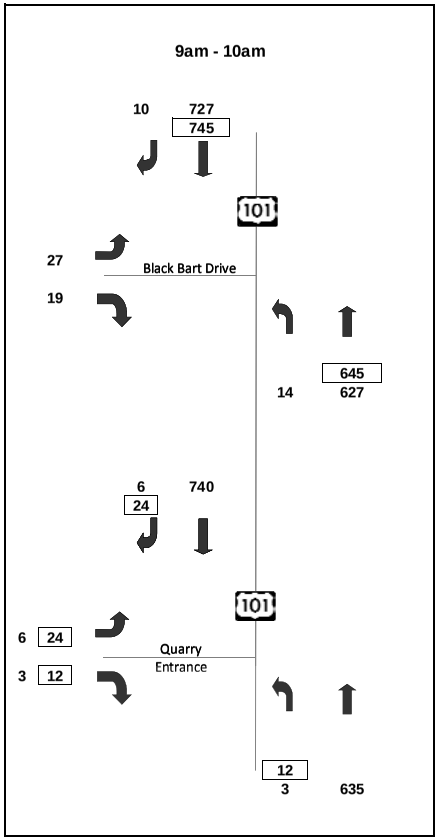
HARRIS QUARRY - TURN MOVEMENTS

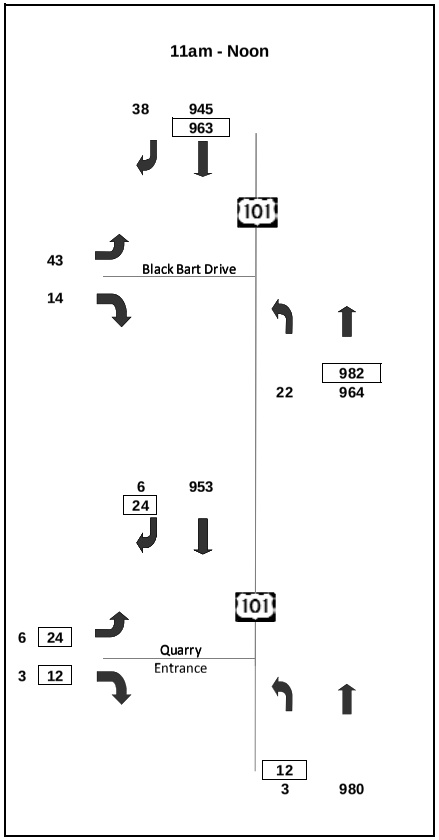
2040

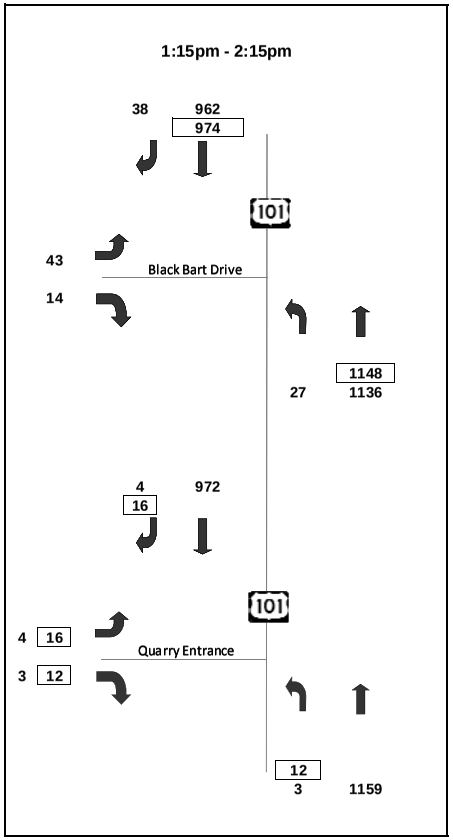
BASE CONDITIONS (75,000 CUBIC YARDS)

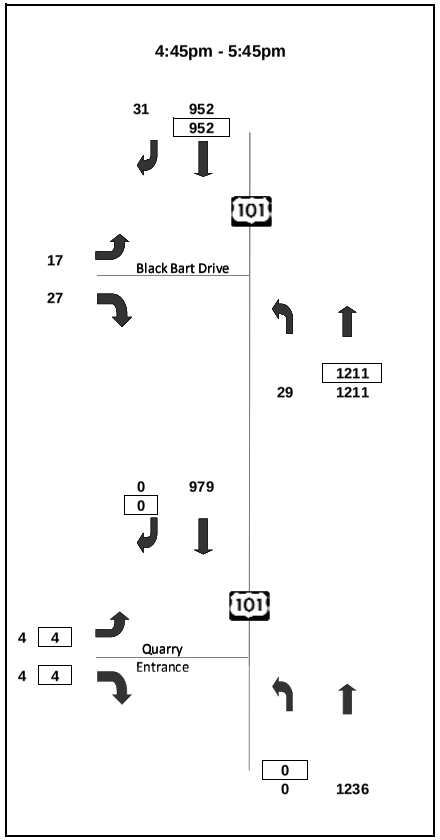
PRODUCTION:

JULY PEAK









Reference North
No Scale

Note:

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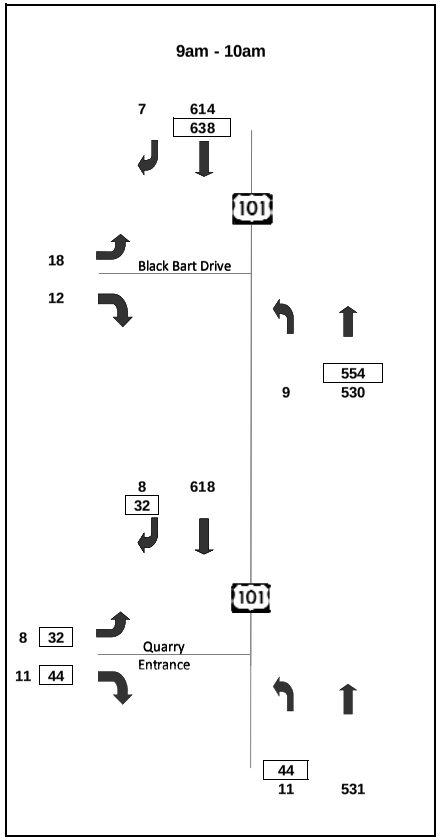
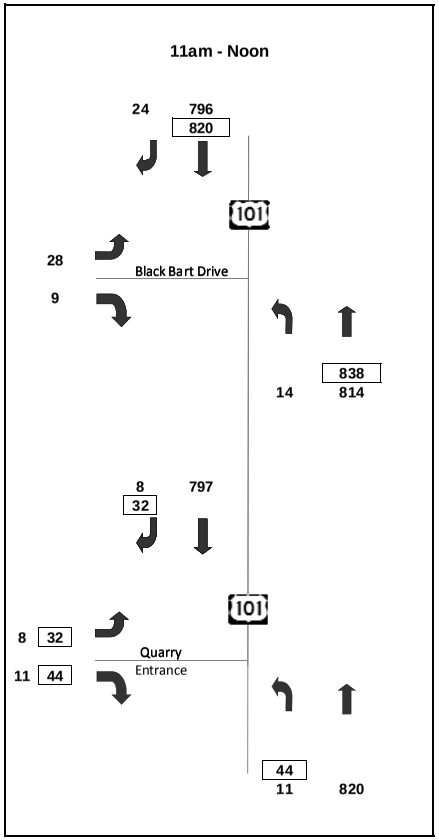
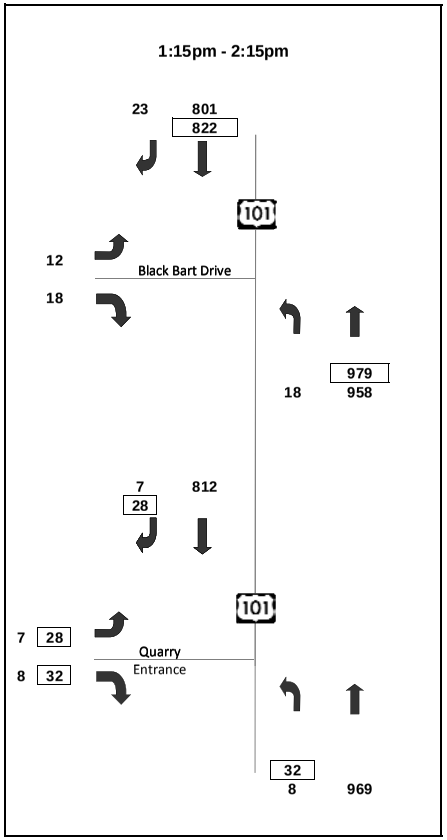
HARRIS QUARRY - TURN MOVEMENTS

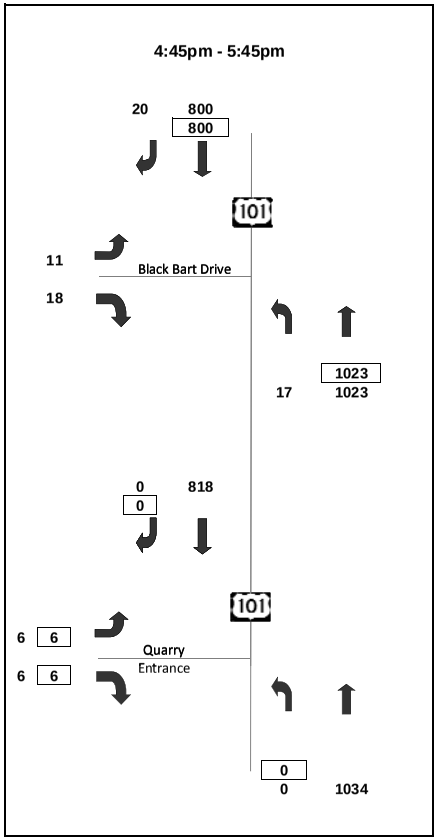
2040
BASE CONDITIONS (75,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK









Note:

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Where:

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Reference North

No Scale

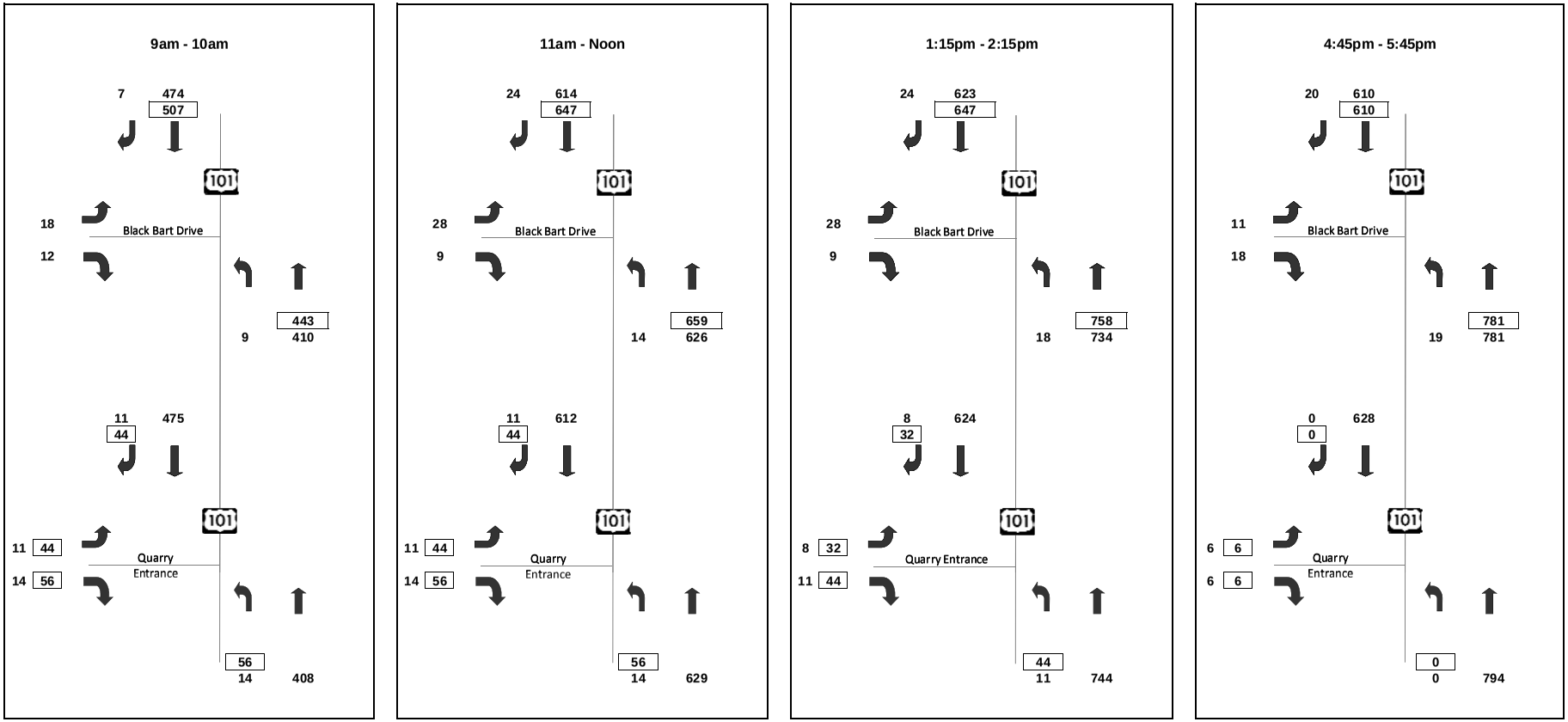
HARRIS QUARRY - TURN MOVEMENTS

2010

PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:

JULY PEAK



Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

Reference North

No Scale

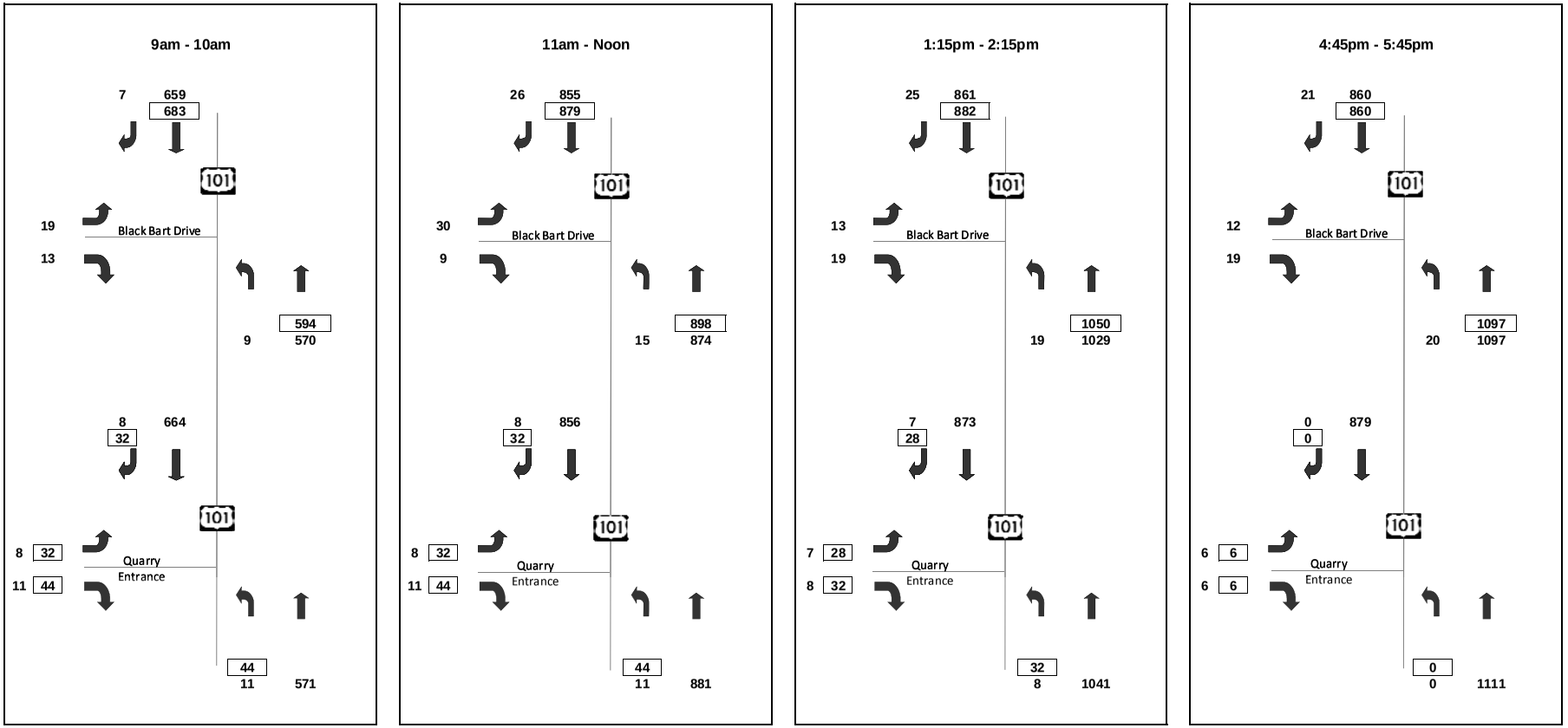
HARRIS QUARRY - TURN MOVEMENTS

2010

PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:

OCTOBER PEAK



Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

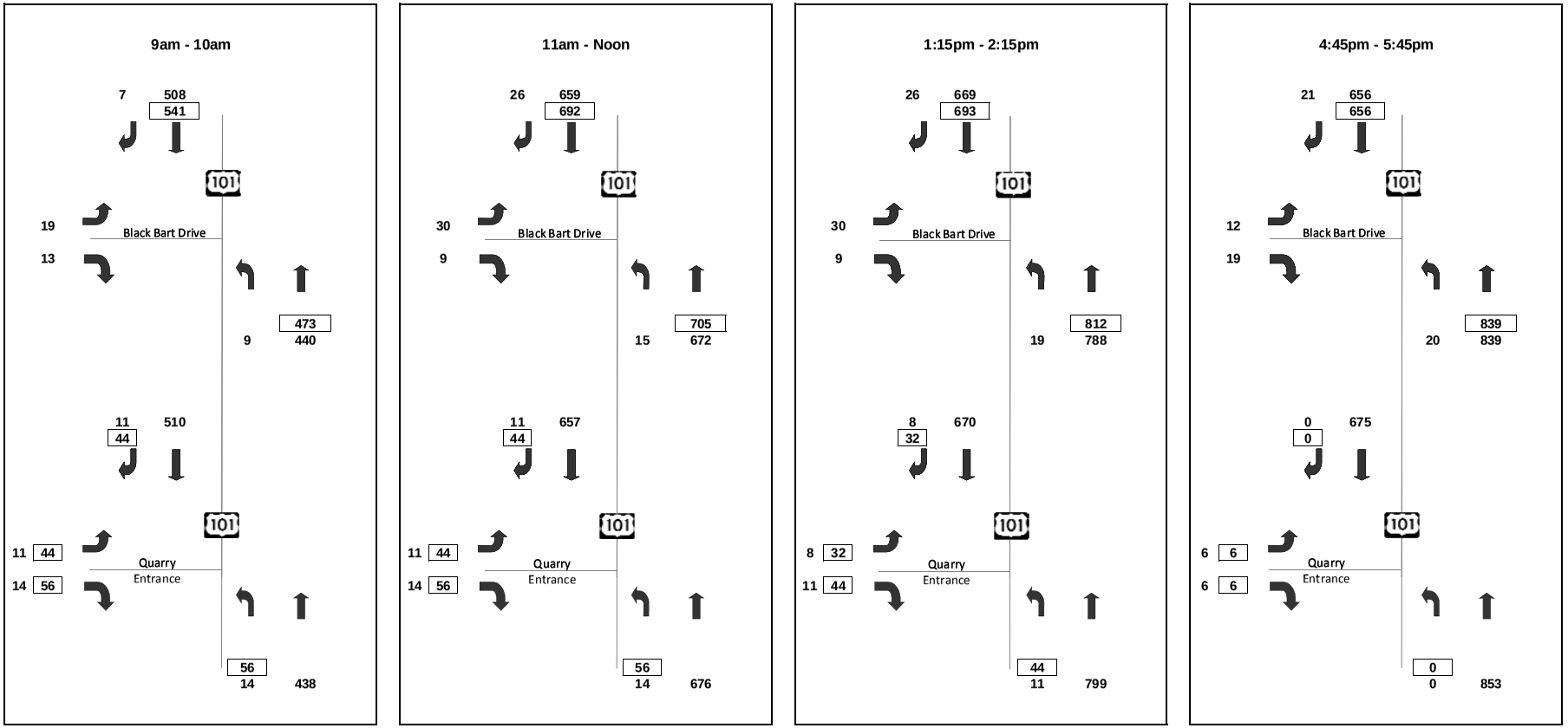
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:
JULY PEAK



Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

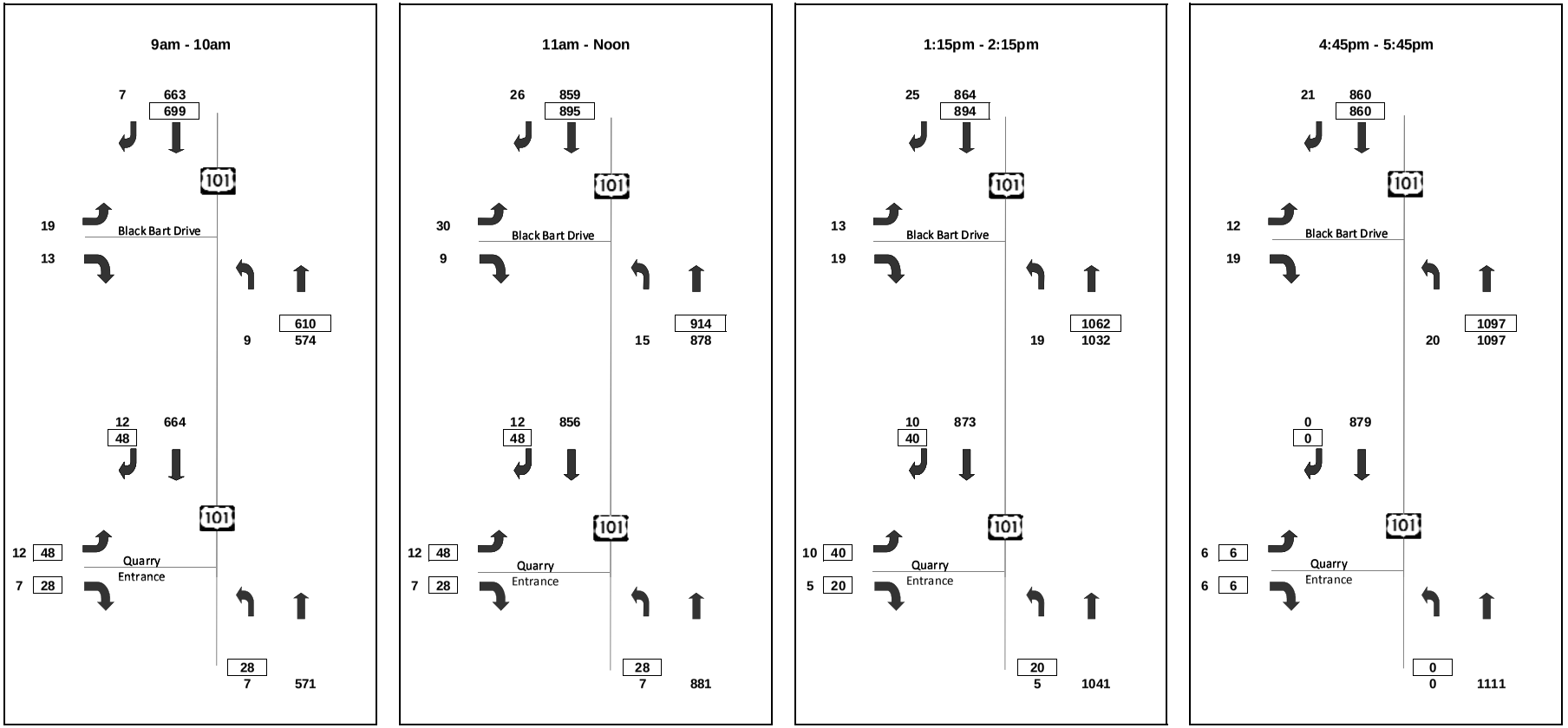
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK



Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

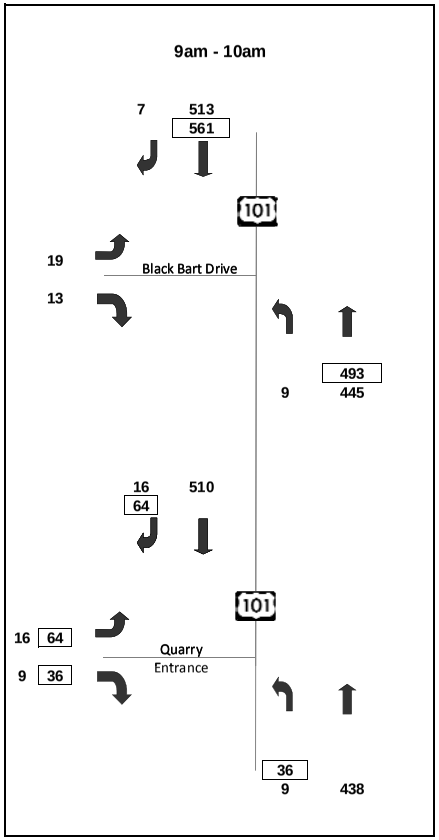
Reference North

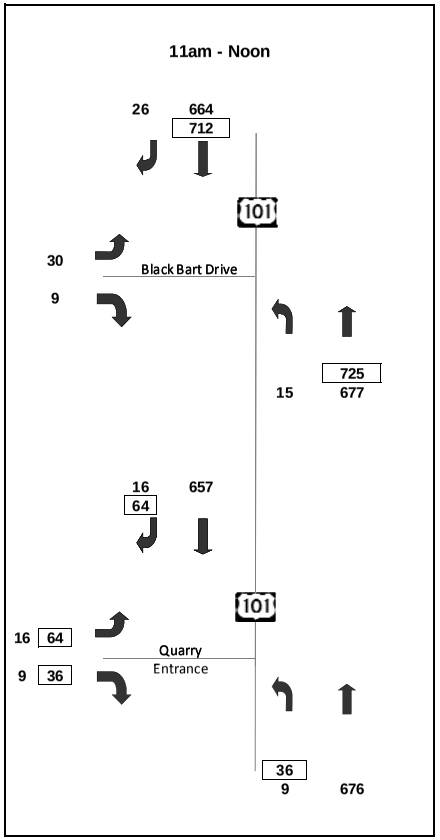
No Scale

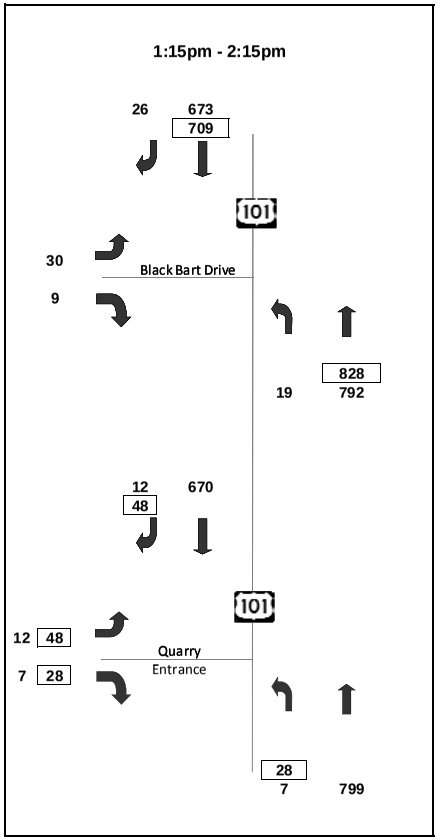
HARRIS QUARRY - TURN MOVEMENTS

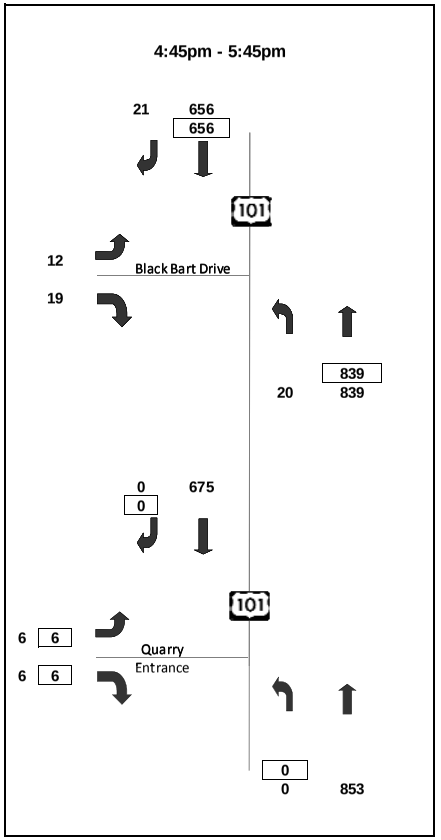
2014 WITH WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:
JULY PEAK









Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

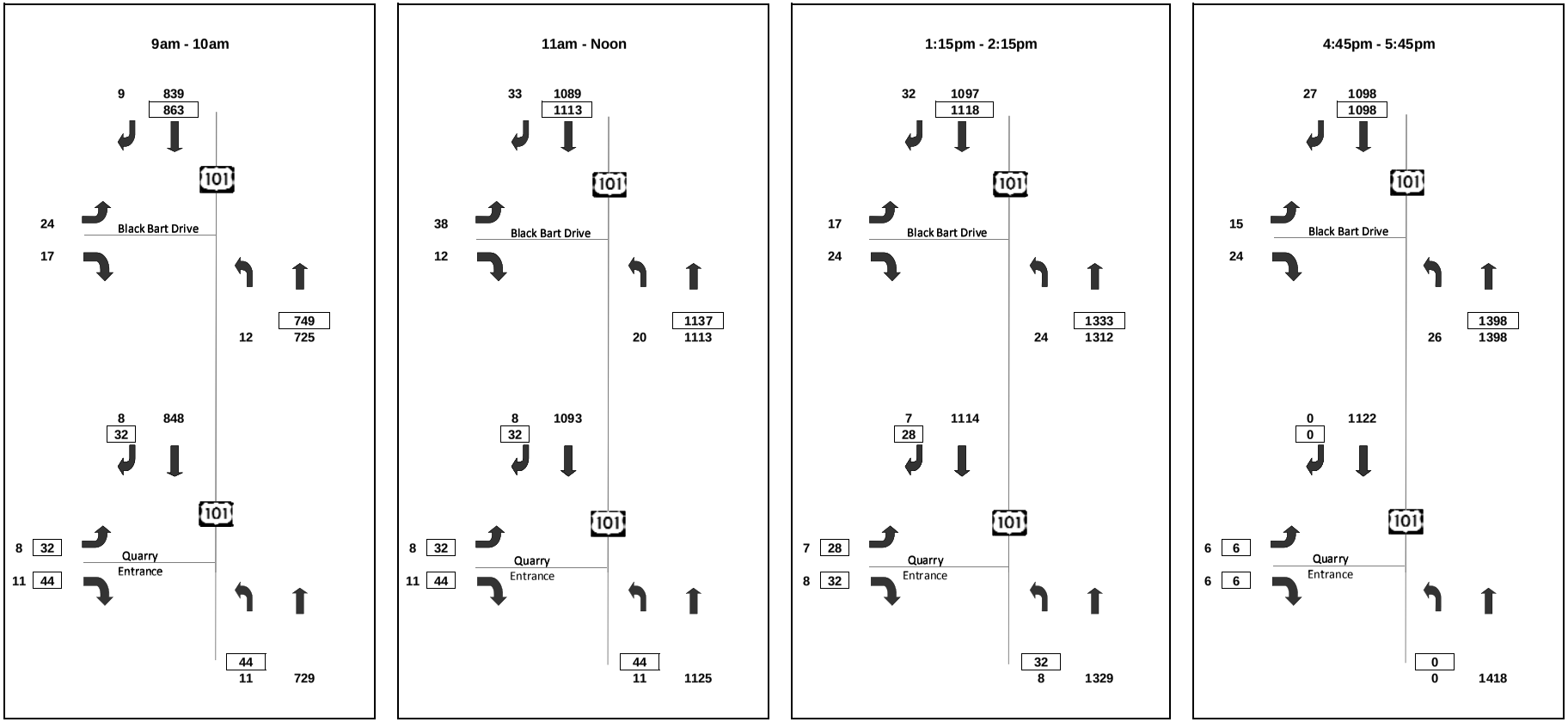
Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK



Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

N

Reference North

No Scale

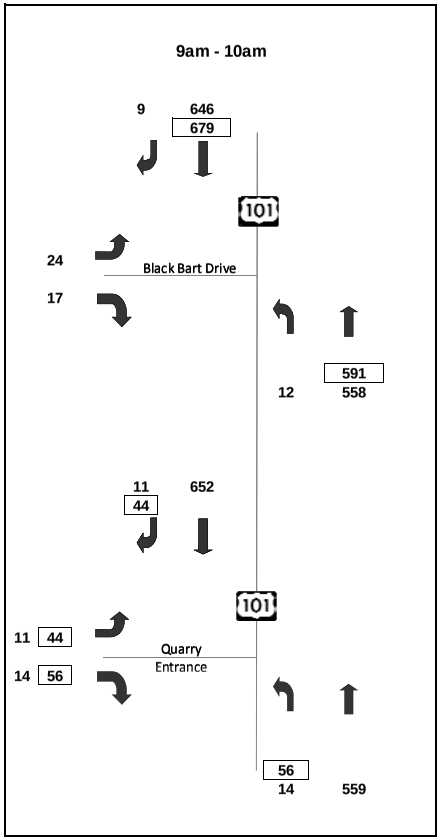
HARRIS QUARRY - TURN MOVEMENTS

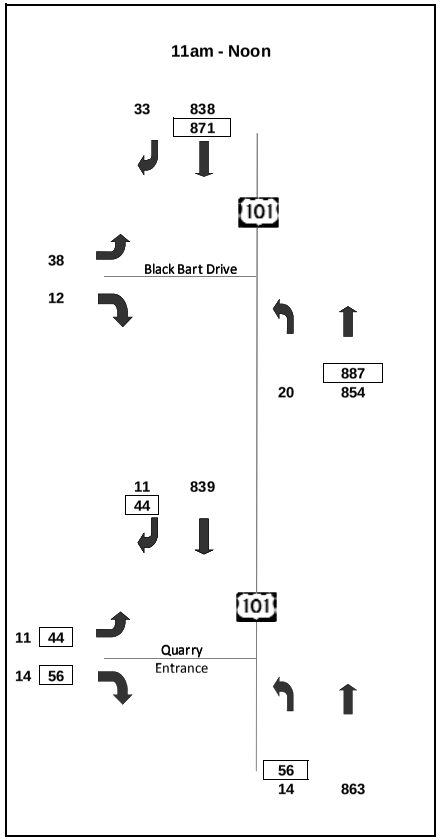
2030

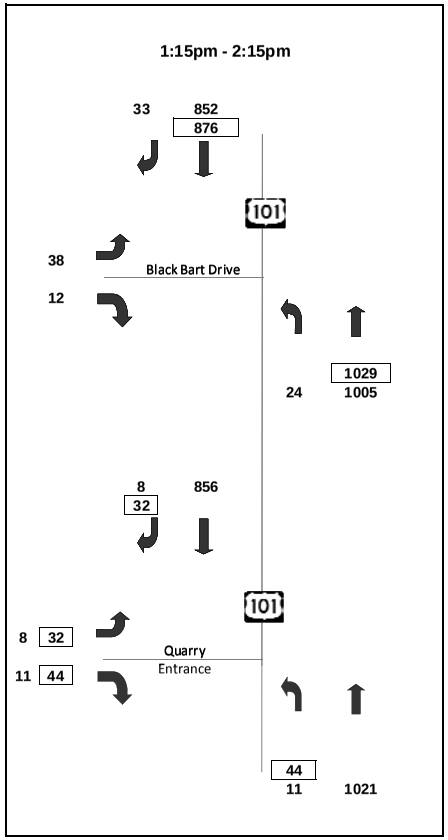
PROJECT CONDITIONS (200,000 CUBIC YARDS)

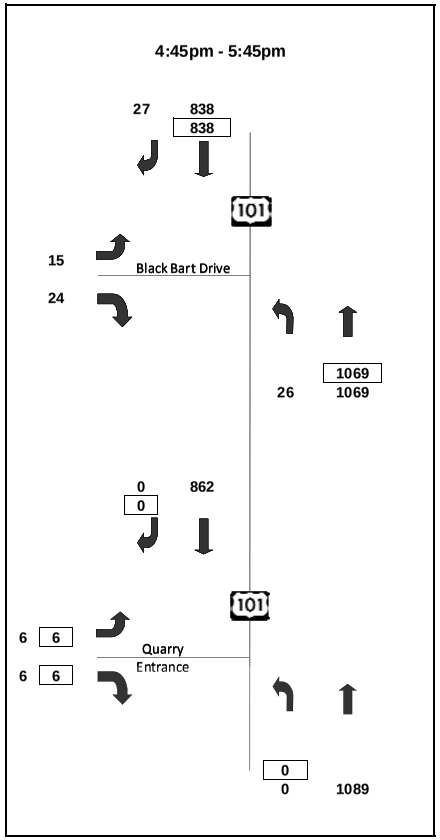
PRODUCTION:

JULY PEAK









Reference North
No Scale

Note:

= Trucks + Passenger Cars

[#] = Passenger Car Equivalent

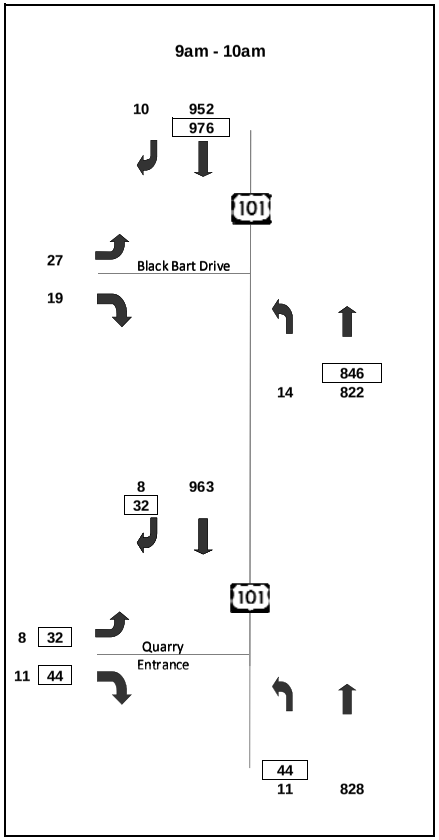
Where:

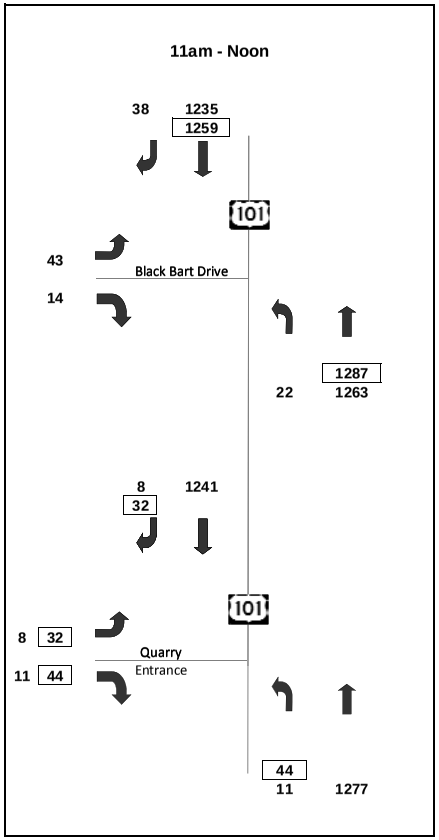
1 Truck = 4 Passenger Car Equivalents

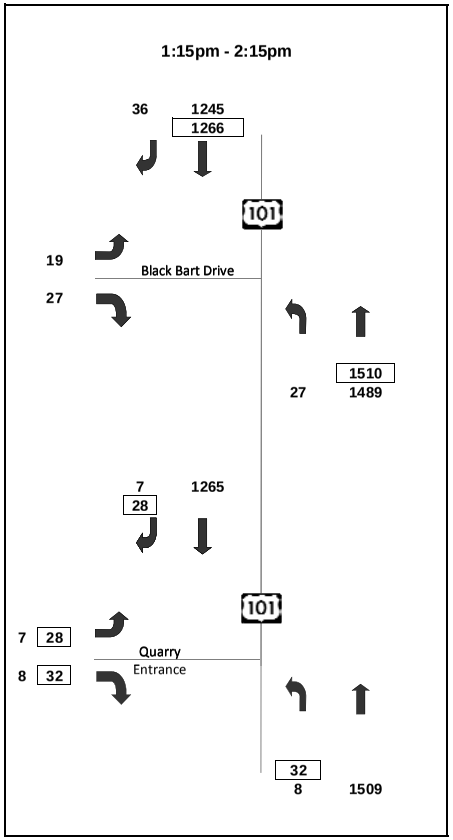
HARRIS QUARRY - TURN MOVEMENTS

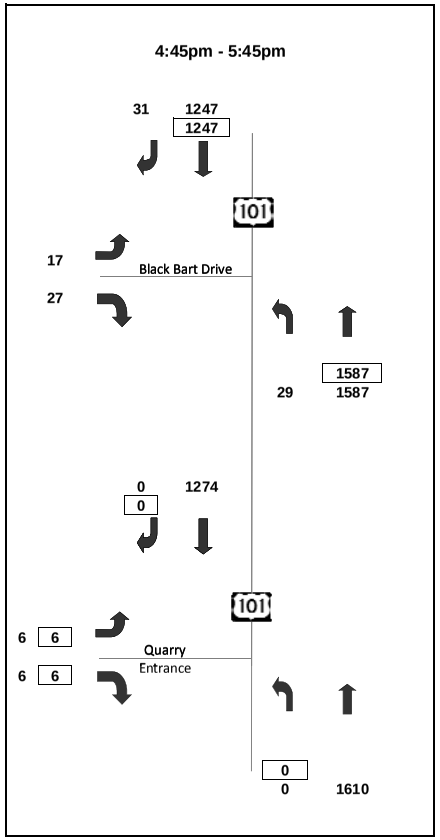
2030
PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:
OCTOBER PEAK









Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

Reference North

No Scale

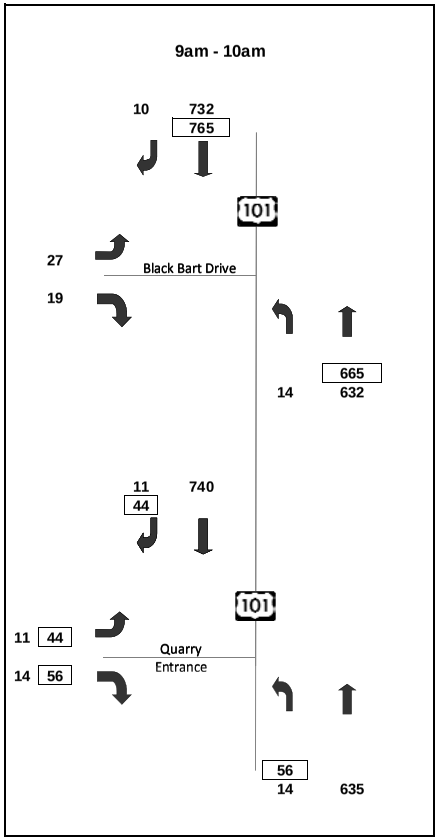
HARRIS QUARRY - TURN MOVEMENTS

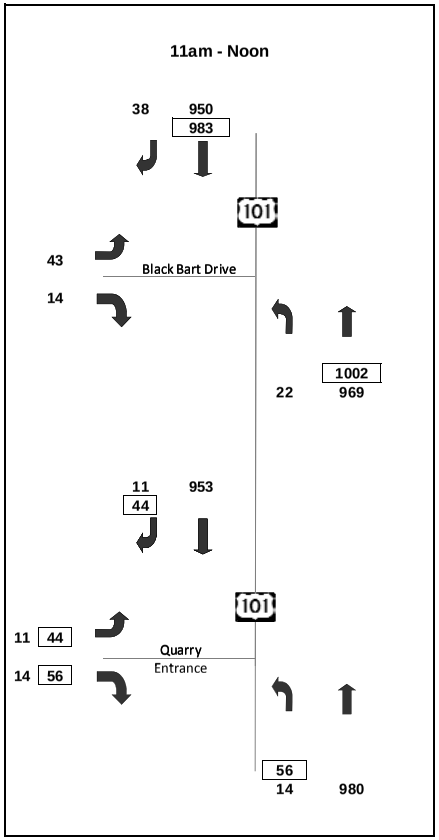
2040

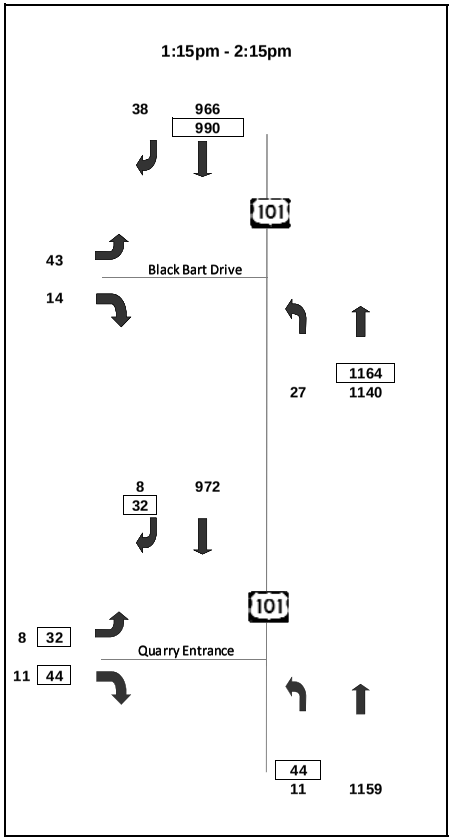
PROJECT CONDITIONS (200,000 CUBIC YARDS)

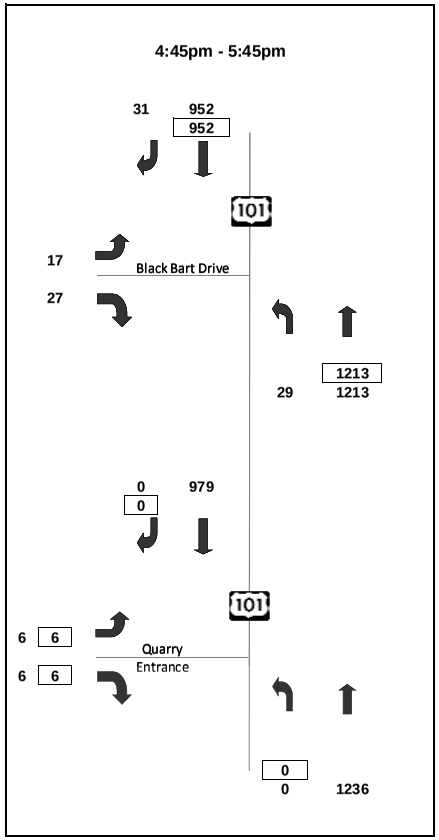
PRODUCTION:

JULY PEAK









Note:

\# = Trucks + Passenger Cars

[#] = Passenger Car Equivalent

Where:

1 Truck = 4 Passenger Car Equivalents

Reference North

No Scale

HARRIS QUARRY - TURN MOVEMENTS

2040

PROJECT CONDITIONS (200,000 CUBIC YARDS)

PRODUCTION:

OCTOBER PEAK

Appendix E

July and October Turn Movements

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2010
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	2	8	0	0	0
NB Through	B	531	0	531	820	0	820	969	0	969	1034	0	1034
SB Through	C	618	0	618	797	0	797	812	0	812	818	0	818
SB Right	D	0	4	16	0	4	16	0	3	12	0	0	0
EB Left	E	0	4	16	0	4	16	0	3	12	4	0	4
EB Right	F	0	3	12	0	3	12	0	2	8	4	0	4
Harris Access In	A+D	0	7	28	0	7	28	0	5	20	0	0	0
Harris Access Out	E+F	0	7	28	0	7	28	0	5	20	8	0	8

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	3	12	0	0	0
NB Through	B	408	0	408	629	0	629	744	0	744	794	0	794
SB Through	C	475	0	475	612	0	612	624	0	624	628	0	628
SB Right	D	0	6	24	0	6	24	0	4	16	0	0	0
EB Left	E	0	6	24	0	6	24	0	4	16	4	0	4
EB Right	F	0	3	12	0	3	12	0	3	12	4	0	4
Harris Access In	A+D	0	9	36	0	9	36	0	7	28	0	0	0
Harris Access Out	E+F	0	9	36	0	9	36	0	7	28	8	0	8

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2010
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	14	14	18	18	19	19
NB Through	H	526	538	810	822	954	963	1019	1019
SB Through	I	610	622	792	804	797	806	800	800
SB Right	J	7	7	24	24	23	23	20	20
EB Left	K	18	18	28	28	12	12	11	11
EB Right	L	12	12	9	9	18	18	18	18

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	14	14	18	18	19	19
NB Through	H	405	423	621	639	730	742	779	779
SB Through	I	469	487	609	627	619	631	610	610
SB Right	J	7	7	24	24	24	24	20	20
EB Left	K	18	18	28	28	28	28	11	11
EB Right	L	12	12	9	9	9	9	18	18

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	2	8	0	0	0
NB Through	B	571	0	571	881	0	881	1041	0	1041	1111	0	1111
SB Through	C	664	0	664	856	0	856	873	0	873	879	0	879
SB Right	D	0	4	16	0	4	16	0	3	12	0	0	0
EB Left	E	0	4	16	0	4	16	0	3	12	4	0	4
EB Right	F	0	3	12	0	3	12	0	2	8	4	0	4
Harris Access In	A+D	0	7	28	0	7	28	0	5	20	0	0	0
Harris Access Out	E+F	0	7	28	0	7	28	0	5	20	8	0	8

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	3	12	0	0	0
NB Through	B	438	0	438	676	0	676	799	0	799	853	0	853
SB Through	C	510	0	510	657	0	657	670	0	670	675	0	675
SB Right	D	0	6	24	0	6	24	0	4	16	0	0	0
EB Left	E	0	6	24	0	6	24	0	4	16	4	0	4
EB Right	F	0	3	12	0	3	12	0	3	12	4	0	4
Harris Access In	A+D	0	9	36	0	9	36	0	7	28	0	0	0
Harris Access Out	E+F	0	9	36	0	9	36	0	7	28	8	0	8

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	566	578	870	882	1025	1034	1095	1095
SB Through	I	655	667	851	863	857	866	860	860
SB Right	J	7	7	26	26	25	25	21	21
EB Left	K	19	19	30	30	13	13	12	12
EB Right	L	13	13	9	9	19	19	19	19

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	435	453	667	685	784	796	837	837
SB Through	I	503	521	654	672	665	677	656	656
SB Right	J	7	7	26	26	26	26	21	21
EB Left	K	19	19	30	30	30	30	12	12
EB Right	L	13	13	9	9	9	9	19	19

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	1	4	0	1	4	0	1	4	0	0	0
NB Through	B	571	0	571	881	0	881	1041	0	1041	1111	0	1111
SB Through	C	664	0	664	856	0	856	873	0	873	879	0	879
SB Right	D	0	6	24	0	6	24	0	4	16	0	0	0
EB Left	E	0	6	24	0	6	24	0	4	16	4	0	4
EB Right	F	0	1	4	0	1	4	0	1	4	4	0	4
Harris Access In	A+D	0	7	28	0	7	28	0	5	20	0	0	0
Harris Access Out	E+F	0	7	28	0	7	28	0	5	20	8	0	8

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	2	8	0	2	8	0	1	4	0	0	0
NB Through	B	438	0	438	676	0	676	799	0	799	853	0	853
SB Through	C	510	0	510	657	0	657	670	0	670	675	0	675
SB Right	D	0	8	32	0	8	32	0	6	24	0	0	0
EB Left	E	0	8	32	0	8	32	0	6	24	4	0	4
EB Right	F	0	2	8	0	2	8	0	1	4	4	0	4
Harris Access In	A+D	0	10	40	0	10	40	0	7	28	0	0	0
Harris Access Out	E+F	0	10	40	0	10	40	0	7	28	8	0	8

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	568	586	872	890	1026	1038	1095	1095
SB Through	I	657	675	853	871	858	870	860	860
SB Right	J	7	7	26	26	25	25	21	21
EB Left	K	19	19	30	30	13	13	12	12
EB Right	L	13	13	9	9	19	19	19	19

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	437	461	669	693	786	804	837	837
SB Through	I	505	529	656	680	667	685	656	656
SB Right	J	7	7	26	26	26	26	21	21
EB Left	K	19	19	30	30	30	30	12	12
EB Right	L	13	13	9	9	9	9	19	19

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2030
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	2	8	0	0	0
NB Through	B	729	0	729	1125	0	1125	1329	0	1329	1418	0	1418
SB Through	C	848	0	848	1093	0	1093	1114	0	1114	1122	0	1122
SB Right	D	0	4	16	0	4	16	0	3	12	0	0	0
EB Left	E	0	4	16	0	4	16	0	3	12	4	0	4
EB Right	F	0	3	12	0	3	12	0	2	8	4	0	4
Harris Access In	A+D	0	7	28	0	7	28	0	5	20	0	0	0
Harris Access Out	E+F	0	7	28	0	7	28	0	5	20	8	0	8

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	3	12	0	0	0
NB Through	B	559	0	559	863	0	863	1021	0	1021	1089	0	1089
SB Through	C	652	0	652	839	0	839	856	0	856	862	0	862
SB Right	D	0	6	24	0	6	24	0	4	16	0	0	0
EB Left	E	0	6	24	0	6	24	0	4	16	4	0	4
EB Right	F	0	3	12	0	3	12	0	3	12	4	0	4
Harris Access In	A+D	0	9	36	0	9	36	0	7	28	0	0	0
Harris Access Out	E+F	0	9	36	0	9	36	0	7	28	8	0	8

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2030
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	12	12	20	20	24	24	26	26
NB Through	H	721	733	1109	1121	1308	1317	1396	1396
SB Through	I	835	847	1085	1097	1093	1102	1098	1098
SB Right	J	9	9	33	33	32	32	27	27
EB Left	K	24	24	38	38	17	17	15	15
EB Right	L	17	17	12	12	24	24	24	24

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	12	12	20	20	24	24	26	26
NB Through	H	553	571	849	867	1001	1013	1067	1067
SB Through	I	641	659	833	851	848	860	838	838
SB Right	J	9	9	33	33	33	33	27	27
EB Left	K	24	24	38	38	38	38	15	15
EB Right	L	17	17	12	12	12	12	24	24

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2040
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	2	8	0	0	0
NB Through	B	828	0	828	1277	0	1277	1509	0	1509	1610	0	1610
SB Through	C	963	0	963	1241	0	1241	1265	0	1265	1274	0	1274
SB Right	D	0	4	16	0	4	16	0	3	12	0	0	0
EB Left	E	0	4	16	0	4	16	0	3	12	4	0	4
EB Right	F	0	3	12	0	3	12	0	2	8	4	0	4
Harris Access In	A+D	0	7	28	0	7	28	0	5	20	0	0	0
Harris Access Out	E+F	0	7	28	0	7	28	0	5	20	8	0	8

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	3	12	0	3	12	0	3	12	0	0	0
NB Through	B	635	0	635	980	0	980	1159	0	1159	1236	0	1236
SB Through	C	740	0	740	953	0	953	972	0	972	979	0	979
SB Right	D	0	6	24	0	6	24	0	4	16	0	0	0
EB Left	E	0	6	24	0	6	24	0	4	16	4	0	4
EB Right	F	0	3	12	0	3	12	0	3	12	4	0	4
Harris Access In	A+D	0	9	36	0	9	36	0	7	28	0	0	0
Harris Access Out	E+F	0	9	36	0	9	36	0	7	28	8	0	8

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2040
BASE CONDITIONS (75,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	14	14	22	22	27	27	29	29
NB Through	H	818	830	1259	1271	1485	1494	1585	1585
SB Through	I	948	960	1231	1243	1241	1250	1247	1247
SB Right	J	10	10	38	38	36	36	31	31
EB Left	K	27	27	43	43	19	19	17	17
EB Right	L	19	19	14	14	27	27	27	27

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	14	14	22	22	27	27	29	29
NB Through	H	627	645	964	982	1136	1148	1211	1211
SB Through	I	727	745	945	963	962	974	952	952
SB Right	J	10	10	38	38	38	38	31	31
EB Left	K	27	27	43	43	43	43	17	17
EB Right	L	19	19	14	14	14	14	27	27

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2010
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	11	44	0	11	44	0	8	32	0	0	0
NB Through	B	531	0	531	820	0	820	969	0	969	1034	0	1034
SB Through	C	618	0	618	797	0	797	812	0	812	818	0	818
SB Right	D	0	8	32	0	8	32	0	7	28	0	0	0
EB Left	E	0	8	32	0	8	32	0	7	28	6	0	6
EB Right	F	0	11	44	0	11	44	0	8	32	6	0	6
Harris Access In	A+D	0	19	76	0	19	76	0	15	60	0	0	0
Harris Access Out	E+F	0	19	76	0	19	76	0	15	60	12	0	12

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	14	56	0	14	56	0	11	44	0	0	0
NB Through	B	408	0	408	629	0	629	744	0	744	794	0	794
SB Through	C	475	0	475	612	0	612	624	0	624	628	0	628
SB Right	D	0	11	44	0	11	44	0	8	32	0	0	0
EB Left	E	0	11	44	0	11	44	0	8	32	6	0	6
EB Right	F	0	14	56	0	14	56	0	11	44	6	0	6
Harris Access In	A+D	0	25	100	0	25	100	0	19	76	0	0	0
Harris Access Out	E+F	0	25	100	0	25	100	0	19	76	12	0	12

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2010
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	14	14	18	18	17	17
NB Through	H	530	554	814	838	958	979	1023	1023
SB Through	I	614	638	796	820	801	822	800	800
SB Right	J	7	7	24	24	23	23	20	20
EB Left	K	18	18	28	28	12	12	11	11
EB Right	L	12	12	9	9	18	18	18	18

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	14	14	18	18	19	19
NB Through	H	410	443	626	659	734	758	781	781
SB Through	I	474	507	614	647	623	647	610	610
SB Right	J	7	7	24	24	24	24	20	20
EB Left	K	18	18	28	28	28	28	11	11
EB Right	L	12	12	9	9	9	9	18	18

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	11	44	0	11	44	0	8	32	0	0	0
NB Through	B	571	0	571	881	0	881	1041	0	1041	1111	0	1111
SB Through	C	664	0	664	856	0	856	873	0	873	879	0	879
SB Right	D	0	8	32	0	8	32	0	7	28	0	0	0
EB Left	E	0	8	32	0	8	32	0	7	28	6	0	6
EB Right	F	0	11	44	0	11	44	0	8	32	6	0	6
Harris Access In	A+D	0	19	76	0	19	76	0	15	60	0	0	0
Harris Access Out	E+F	0	19	76	0	19	76	0	15	60	12	0	12

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	14	56	0	14	56	0	11	44	0	0	0
NB Through	B	438	0	438	676	0	676	799	0	799	853	0	853
SB Through	C	510	0	510	657	0	657	670	0	670	675	0	675
SB Right	D	0	11	44	0	11	44	0	8	32	0	0	0
EB Left	E	0	11	44	0	11	44	0	8	32	6	0	6
EB Right	F	0	14	56	0	14	56	0	11	44	6	0	6
Harris Access In	A+D	0	25	100	0	25	100	0	19	76	0	0	0
Harris Access Out	E+F	0	25	100	0	25	100	0	19	76	12	0	12

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2014 WITHOUT WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	570	594	874	898	1029	1050	1097	1097
SB Through	I	659	683	855	879	861	882	860	860
SB Right	J	7	7	26	26	25	25	21	21
EB Left	K	19	19	30	30	13	13	12	12
EB Right	L	13	13	9	9	19	19	19	19

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	440	473	672	705	788	812	839	839
SB Through	I	508	541	659	692	669	693	656	656
SB Right	J	7	7	26	26	26	26	21	21
EB Left	K	19	19	30	30	30	30	12	12
EB Right	L	13	13	9	9	9	9	19	19

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	7	28	0	7	28	0	5	20	0	0	0
NB Through	B	571	0	571	881	0	881	1041	0	1041	1111	0	1111
SB Through	C	664	0	664	856	0	856	873	0	873	879	0	879
SB Right	D	0	12	48	0	12	48	0	10	40	0	0	0
EB Left	E	0	12	48	0	12	48	0	10	40	6	0	6
EB Right	F	0	7	28	0	7	28	0	5	20	6	0	6
Harris Access In	A+D	0	19	76	0	19	76	0	15	60	0	0	0
Harris Access Out	E+F	0	19	76	0	19	76	0	15	60	12	0	12

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	9	36	0	9	36	0	7	28	0	0	0
NB Through	B	438	0	438	676	0	676	799	0	799	853	0	853
SB Through	C	510	0	510	657	0	657	670	0	670	675	0	675
SB Right	D	0	16	64	0	16	64	0	12	48	0	0	0
EB Left	E	0	16	64	0	16	64	0	12	48	6	0	6
EB Right	F	0	9	36	0	9	36	0	7	28	6	0	6
Harris Access In	A+D	0	25	100	0	25	100	0	19	76	0	0	0
Harris Access Out	E+F	0	25	100	0	25	100	0	19	76	12	0	12

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2014 WITH WILLITS BYPASS CONSTRUCTION
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	574	610	878	914	1032	1062	1097	1097
SB Through	I	663	699	859	895	864	894	860	860
SB Right	J	7	7	26	26	25	25	21	21
EB Left	K	19	19	30	30	13	13	12	12
EB Right	L	13	13	9	9	19	19	19	19

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	9	9	15	15	19	19	20	20
NB Through	H	445	493	677	725	792	828	839	839
SB Through	I	513	561	664	712	673	709	656	656
SB Right	J	7	7	26	26	26	26	21	21
EB Left	K	19	19	30	30	30	30	12	12
EB Right	L	13	13	9	9	9	9	19	19

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2030
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	11	44	0	11	44	0	8	32	0	0	0
NB Through	B	729	0	729	1125	0	1125	1329	0	1329	1418	0	1418
SB Through	C	848	0	848	1093	0	1093	1114	0	1114	1122	0	1122
SB Right	D	0	8	32	0	8	32	0	7	28	0	0	0
EB Left	E	0	8	32	0	8	32	0	7	28	6	0	6
EB Right	F	0	11	44	0	11	44	0	8	32	6	0	6
Harris Access In	A+D	0	19	76	0	19	76	0	15	60	0	0	0
Harris Access Out	E+F	0	19	76	0	19	76	0	15	60	12	0	12

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	14	56	0	14	56	0	11	44	0	0	0
NB Through	B	559	0	559	863	0	863	1021	0	1021	1089	0	1089
SB Through	C	652	0	652	839	0	839	856	0	856	862	0	862
SB Right	D	0	11	44	0	11	44	0	8	32	0	0	0
EB Left	E	0	11	44	0	11	44	0	8	32	6	0	6
EB Right	F	0	14	56	0	14	56	0	11	44	6	0	6
Harris Access In	A+D	0	25	100	0	25	100	0	19	76	0	0	0
Harris Access Out	E+F	0	25	100	0	25	100	0	19	76	12	0	12

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2030
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	12	12	20	20	24	24	26	26
NB Through	H	725	749	1113	1137	1312	1333	1398	1398
SB Through	I	839	863	1089	1113	1097	1118	1098	1098
SB Right	J	9	9	33	33	32	32	27	27
EB Left	K	24	24	38	38	17	17	15	15
EB Right	L	17	17	12	12	24	24	24	24

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	12	12	20	20	24	24	26	26
NB Through	H	558	591	854	887	1005	1029	1069	1069
SB Through	I	646	679	838	871	852	876	838	838
SB Right	J	9	9	33	33	33	33	27	27
EB Left	K	24	24	38	38	38	38	15	15
EB Right	L	17	17	12	12	12	12	24	24

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

HARRIS QUARRY DRIVEWAY - TURN MOVEMENTS

2040
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	11	44	0	11	44	0	8	32	0	0	0
NB Through	B	828	0	828	1277	0	1277	1509	0	1509	1610	0	1610
SB Through	C	963	0	963	1241	0	1241	1265	0	1265	1274	0	1274
SB Right	D	0	8	32	0	8	32	0	7	28	0	0	0
EB Left	E	0	8	32	0	8	32	0	7	28	6	0	6
EB Right	F	0	11	44	0	11	44	0	8	32	6	0	6
Harris Access In	A+D	0	19	76	0	19	76	0	15	60	0	0	0
Harris Access Out	E+F	0	19	76	0	19	76	0	15	60	12	0	12

October - Peak Production Days

		9:00am - 10:00am			11:00am - Noon			1:15pm - 2:15pm			4:45pm - 5:45pm		
		Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE	Vehicle	Truck	PCE
NB Left	A	0	14	56	0	14	56	0	11	44	0	0	0
NB Through	B	635	0	635	980	0	980	1159	0	1159	1236	0	1236
SB Through	C	740	0	740	953	0	953	972	0	972	979	0	979
SB Right	D	0	11	44	0	11	44	0	8	32	0	0	0
EB Left	E	0	11	44	0	11	44	0	8	32	6	0	6
EB Right	F	0	14	56	0	14	56	0	11	44	6	0	6
Harris Access In	A+D	0	25	100	0	25	100	0	19	76	0	0	0
Harris Access Out	E+F	0	25	100	0	25	100	0	19	76	12	0	12

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

BLACK BART DRIVE - TURN MOVEMENTS

2040
PROJECT CONDITIONS (200,000 CUBIC YARDS)

July - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	14	14	22	22	27	27	29	29
NB Through	H	822	846	1263	1287	1489	1510	1587	1587
SB Through	I	952	976	1235	1259	1245	1266	1247	1247
SB Right	J	10	10	38	38	36	36	31	31
EB Left	K	27	27	43	43	19	19	17	17
EB Right	L	19	19	14	14	27	27	27	27

October - Peak Production Days

		9:00am - 10:00am		11:00am - Noon		1:15pm - 2:15pm		4:45pm - 5:45pm	
		Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE	Vehicle & Truck	PCE
NB Left	G	14	14	22	22	27	27	29	29
NB Through	H	632	665	969	1002	1140	1164	1213	1213
SB Through	I	732	765	950	983	966	990	952	952
SB Right	J	10	10	38	38	38	38	31	31
EB Left	K	27	27	43	43	43	43	17	17
EB Right	L	19	19	14	14	14	14	27	27

PCE = Passenger Care Equivalent
Where: 1 Truck = 4 Passenger Car Equivalents

*See "Turn Movement Key" for the Movement Letter Designations.

Appendix F

VMT Gravity Model Calculations

Vehicle Miles Traveled for Aggregate Production - Base Permit Conditions

		POPULATION 2000		A	D	T	F	P	J	K	A*K	Adjusted Trips	A*K*D
		Incorporated	Un-incorporated	Attractions	Roundtrip Distance	Travel Time	1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	1	Miles Traveled
Boonville	Harris Quarry Base	943	2221	3164	74	86	0.000135	3720	0.502974581	0.137640275	435	89	6586
Boonville	Davis Pit	943	2221	3164	98	138	0.000053	3720	0.195337114	0.053454499	169	312	30576
Boonville	Keithly Ranch	943	2221	3164	87	126	0.000063	4960	0.312421265	0.085494875	271	487	42369
Boonville	DNA River	943	2221	3164	119	160	0.000039	1240	0.0484375	0.013255045	42	119	14161
Boonville	Cooks Humboldt	943	2221	3164	205	250	0.000016	992	0.015872	0.004343413	14	53	10865
Boonville	Ford Gravel	943	2221	3164	53.2	74	0.000183	9920	1.811541271	0.495732882	1568	615	32718
Boonville	Ten Mile	943	2221	3164	119	156	0.000041	2480	0.10190664	0.027887012	88	41	4879
Boonville	Pieta	943	2221	3164	65	90	0.000123	2480	0.30617284	0.083784977	265	159	10335
Boonville	Layton Rock	943	2221	3164	133	160	0.000039	2480	0.096875	0.02651009	84	36	4788
Boonville	Cooks Valley	943	2221	3164	205	250	0.000016	2480	0.03968	0.010858533	34	115	23575
Boonville	Wisley Ranch	943	2221	3164	123	154	0.000042	744	0.031371226	0.008584816	27	11	1353
Boonville	Coal Mine	943	2221	3164	153	202	0.000025	1240	0.030389178	0.008316076	26	65	9945
Boonville	Syar Healdsburg	943	2221	3164	105	124	0.000065	2480	0.161290323	0.044137507	140	384	40320
					1539.2	1970		38936	3.654268937		3163	2486	

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Covelo	Harris Quarry Base	1838	536	2374	95	142	0.000050	3720	0.184487205	0.131208885	311	64	6080
Covelo	Davis Pit	1838	536	2374	175	244	0.000017	3720	0.062483203	0.044438591	105	194	33950
Covelo	Keithly Ranch	1838	536	2374	189	258	0.000015	4960	0.074514753	0.052995532	126	226	42714
Covelo	DNA River	1838	536	2374	207	274	0.000013	1240	0.016516597	0.011746745	28	79	16353
Covelo	Cooks Humboldt	1838	536	2374	124	174	0.000033	992	0.032765227	0.023302911	55	208	25792
Covelo	Ford Gravel	1838	536	2374	144	206	0.000024	9920	0.233763785	0.166254813	395	155	22320
Covelo	Ten Mile	1838	536	2374	105	194	0.000027	2480	0.065894356	0.046864633	111	52	5460
Covelo	Pieta	1838	536	2374	166	224	0.000020	2480	0.04942602	0.03515221	83	50	8300
Covelo	Layton Rock	1838	536	2374	48	76	0.000173	2480	0.429362881	0.30536657	725	306	14688
Covelo	Cooks Valley	1838	536	2374	125	174	0.000033	2480	0.081913066	0.058257277	138	466	58250
Covelo	Wisley Ranch	1838	536	2374	114	192	0.000027	744	0.020182292	0.014353819	34	14	1596
Covelo	Coal Mine	1838	536	2374	52	100	0.000100	1240	0.124	0.088189865	209	526	27352
Covelo	Syar Healdsburg	1838	536	2374	234	284	0.000012	2480	0.030747867	0.021868148	52	143	33462
					1778	2542		38936	1.406057253		2372	2483	

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ft Bragg/Mendocino	Harris Quarry Base	6771	3203	9974	81	100	0.000100	3720	0.372	0.093802153	936	192	15552
Ft Bragg/Mendocino	Davis Pit	6771	3203	9974	160	204	0.000024	3720	0.089388697	0.022539925	225	416	66560
Ft Bragg/Mendocino	Keithly Ranch	6771	3203	9974	174	218	0.000021	4960	0.104368319	0.026317132	262	471	81954
Ft Bragg/Mendocino	DNA River	6771	3203	9974	192	234	0.000018	1240	0.02264592	0.005710312	57	161	30912
Ft Bragg/Mendocino	Cooks Humboldt	6771	3203	9974	116	164	0.000037	992	0.036882808	0.009300233	93	352	40832
Ft Bragg/Mendocino	Ford Gravel	6771	3203	9974	129	166	0.000036	9920	0.359994194	0.090774813	905	355	45795
Ft Bragg/Mendocino	Ten Mile	6771	3203	9974	21	36	0.000772	2480	1.913580247	0.482521361	4813	2238	46998
Ft Bragg/Mendocino	Pieta	6771	3203	9974	152	182	0.000030	2480	0.074870185	0.018878991	188	113	17176
Ft Bragg/Mendocino	Layton Rock	6771	3203	9974	86	126	0.000063	2480	0.156210632	0.039389499	393	166	14276
Ft Bragg/Mendocino	Cooks Valley	6771	3203	9974	116	144	0.000048	2480	0.119598765	0.030157585	301	1017	117972
Ft Bragg/Mendocino	Wisley Ranch	6771	3203	9974	25	34	0.000865	744	0.643598616	0.162287461	1619	676	16900
Ft Bragg/Mendocino	Coal Mine	6771	3203	9974	136	200	0.000025	1240	0.031	0.007816846	78	196	26656
Ft Bragg/Mendocino	Syar Healdsburg	6771	3203	9974	219	244	0.000017	2480	0.041655469	0.01050369	105	288	63072
					1607	2052		38936	3.965793852		9975	6641	

Vehicle Miles Traveled for Aggregate Production - Base Permit Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Hopland	Harris Quarry Base	1005	1229	2234	60	63	0.000252	3720	0.937263794	0.039450489	88	18	1080
Hopland	Davis Pit	1005	1229	2234	45	62	0.000260	3720	0.967741935	0.040733348	91	168	7560
Hopland	Keithly Ranch	1005	1229	2234	33	50	0.000400	4960	1.984	0.083508795	187	336	11088
Hopland	DNA River	1005	1229	2234	66	82	0.000149	1240	0.184414039	0.007762195	17	48	3168
Hopland	Cooks Humboldt	1005	1229	2234	191	230	0.000019	992	0.018752363	0.000789308	2	8	1528
Hopland	Ford Gravel	1005	1229	2234	23	40	0.000625	9920	6.2	0.260964985	583	229	5267
Hopland	Ten Mile	1005	1229	2234	163	204	0.000024	2480	0.059592464	0.002508314	6	3	489
Hopland	Pieta	1005	1229	2234	11	14	0.005102	2480	12.65306122	0.532581601	1190	713	7843
Hopland	Layton Rock	1005	1229	2234	119	140	0.000051	2480	0.126530612	0.005325816	12	5	595
Hopland	Cooks Valley	1005	1229	2234	191	130	0.000059	2480	0.146745562	0.006176686	14	47	8977
Hopland	Wisley Ranch	1005	1229	2234	166	202	0.000025	744	0.018233507	0.000767469	2	1	166
Hopland	Coal Mine	1005	1229	2234	138	196	0.000026	1240	0.032278217	0.001358627	3	8	1104
Hopland	Syar Healdsburg	1005	1229	2234	79	76	0.000173	2480	0.429362881	0.018072367	40	110	8690
					1285	1489		38936	23.7579766	1	2235	1694	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Laytonville	Harris Quarry Base	1310	2695	4005	58	72	0.000193	3720	0.717592593	0.013503686	54	11	638
Laytonville	Davis Pit	1310	2695	4005	137	174	0.000033	3720	0.1228696	0.002312165	9	17	2329
Laytonville	Keithly Ranch	1310	2695	4005	151	190	0.000028	4960	0.137396122	0.002585526	10	18	2718
Laytonville	DNA River	1310	2695	4005	169	206	0.000024	1240	0.029220473	0.000549872	2	6	1014
Laytonville	Cooks Humboldt	1310	2695	4005	73	90	0.000123	992	0.122469136	0.002304629	9	34	2482
Laytonville	Ford Gravel	1310	2695	4005	106	138	0.000053	9920	0.520898971	0.009802298	39	15	1590
Laytonville	Ten Mile	1310	2695	4005	53	110	0.000083	2480	0.204958678	0.003856921	15	7	371
Laytonville	Pieta	1310	2695	4005	129	154	0.000042	2480	0.104570754	0.001967817	8	5	645
Laytonville	Layton Rock	1310	2695	4005	5	7	0.020408	2480	50.6122449	0.952423239	3814	1612	8060
Laytonville	Cooks Valley	1310	2695	4005	73	90	0.000123	2480	0.30617284	0.005761573	23	78	5694
Laytonville	Wisley Ranch	1310	2695	4005	63	100	0.000100	744	0.0744	0.001400062	6	3	189
Laytonville	Coal Mine	1310	2695	4005	49	96	0.000109	1240	0.134548611	0.002531941	10	25	1225
Laytonville	Syar Healdsburg	1310	2695	4005	196	216	0.000021	2480	0.053155007	0.001000273	4	11	2156
					1262	1643			53.14049768		4003	1842	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Potter Valley	Harris Quarry Base	1275	616	1891	44	62	0.000260	3720	0.967741935	0.235807562	446	91	4004
Potter Valley	Davis Pit	1275	616	1891	63	94	0.000113	3720	0.42100498	0.102585363	194	359	22617
Potter Valley	Keithly Ranch	1275	616	1891	79	112	0.000080	4960	0.395408163	0.096348243	182	327	25833
Potter Valley	DNA River	1275	616	1891	96	124	0.000065	1240	0.080645161	0.01965063	37	105	10080
Potter Valley	Cooks Humboldt	1275	616	1891	175	226	0.000020	992	0.019422038	0.004732525	9	34	5950
Potter Valley	Ford Gravel	1275	616	1891	51	80	0.000156	9920	1.55	0.377685111	714	280	14280
Potter Valley	Ten Mile	1275	616	1891	147	200	0.000025	2480	0.062	0.015107404	29	13	1911
Potter Valley	Pieta	1275	616	1891	74	96	0.000109	2480	0.269097222	0.065570332	124	74	5476
Potter Valley	Layton Rock	1275	616	1891	103	134	0.000056	2480	0.138115393	0.033654276	64	27	2781
Potter Valley	Cooks Valley	1275	616	1891	175	226	0.000020	2480	0.048555094	0.011831314	22	74	12950
Potter Valley	Wisley Ranch	1275	616	1891	150	198	0.000026	744	0.018977655	0.004624244	9	4	600
Potter Valley	Coal Mine	1275	616	1891	122	192	0.000027	1240	0.033637153	0.008196291	15	38	4636
Potter Valley	Syar Healdsburg	1275	616	1891	142	158	0.000040	2480	0.099343054	0.024206705	46	126	17892
					1421	1902			4.103947849		1891	1552	

Vehicle Miles Traveled for Aggregate Production - Base Permit Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Redwood Valley	Harris Quarry Base	4992	2624	7616	19	26	0.001479	3720	5.50295858	0.483384384	3681	754	14326
Redwood Valley	Davis Pit	4992	2624	7616	61	86	0.000135	3720	0.502974581	0.044181699	336	621	37881
Redwood Valley	Keithly Ranch	4992	2624	7616	78	104	0.000092	4960	0.458579882	0.040282032	307	552	43056
Redwood Valley	DNA River	4992	2624	7616	94	116	0.000074	1240	0.0921522	0.008094725	62	176	16544
Redwood Valley	Cooks Humboldt	4992	2624	7616	149	190	0.000028	992	0.027479224	0.002413798	18	68	10132
Redwood Valley	Ford Gravel	4992	2624	7616	33	52	0.000370	9920	3.668639053	0.322256256	2454	962	31746
Redwood Valley	Ten Mile	4992	2624	7616	121	164	0.000037	2480	0.09220702	0.00809954	62	29	3509
Redwood Valley	Pieta	4992	2624	7616	56	70	0.000204	2480	0.506122449	0.04445821	339	203	11368
Redwood Valley	Layton Rock	4992	2624	7616	78	102	0.000096	2480	0.238369858	0.020938603	159	67	5226
Redwood Valley	Cooks Valley	4992	2624	7616	149	190	0.000028	2480	0.068698061	0.006034494	46	155	23095
Redwood Valley	Wisley Ranch	4992	2624	7616	125	162	0.000038	744	0.028349337	0.002490229	19	8	1000
Redwood Valley	Coal Mine	4992	2624	7616	96	156	0.000041	1240	0.05095332	0.004475781	34	86	8256
Redwood Valley	Syar Healdsburg	4992	2624	7616	124	130	0.000059	2480	0.146745562	0.01289025	98	269	33356
					1183	1548			11.38422913		7615	3950	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ukiah	Harris Quarry Base	24762	3935	28697	32	36	0.000772	3720	2.87037037	0.186326304	5347	1095	35040
Ukiah	Davis Pit	24762	3935	28697	72	94	0.000113	3720	0.42100498	0.027328983	784	1449	104328
Ukiah	Keithly Ranch	24762	3935	28697	62	84	0.000142	4960	0.702947846	0.045630931	1309	2352	145824
Ukiah	DNA River	24762	3935	28697	95	116	0.000074	1240	0.0921522	0.005981938	172	487	46265
Ukiah	Cooks Humboldt	24762	3935	28697	163	200	0.000025	992	0.0248	0.001609859	46	174	28362
Ukiah	Ford Gravel	24762	3935	28697	17	32	0.000977	9920	9.6875	0.628851275	18046	7078	120326
Ukiah	Ten Mile	24762	3935	28697	135	176	0.000032	2480	0.080061983	0.005197118	149	69	9315
Ukiah	Pieta	24762	3935	28697	39	50	0.000400	2480	0.992	0.064394371	1848	1106	43134
Ukiah	Layton Rock	24762	3935	28697	91	112	0.000080	2480	0.197704082	0.012833699	368	156	14196
Ukiah	Cooks Valley	24762	3935	28697	163	200	0.000025	2480	0.062	0.004024648	115	389	63407
Ukiah	Wisley Ranch	24762	3935	28697	138	174	0.000033	744	0.02457392	0.001595184	46	19	2622
Ukiah	Coal Mine	24762	3935	28697	110	166	0.000036	1240	0.044999274	0.002921068	84	211	23210
Ukiah	Syar Healdsburg	24762	3935	28697	107	110	0.000083	2480	0.204958678	0.013304622	382	1049	112243
					1224	1550			15.40507333		28696	15634	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Willits/Brooktrails	Harris Quarry Base	5336	2893	8229	11	14	0.005102	3720	18.97959184	0.833617016	6860	1405	15455
Willits/Brooktrails	Davis Pit	5336	2893	8229	91	116	0.000074	3720	0.276456599	0.01214246	100	185	16835
Willits/Brooktrails	Keithly Ranch	5336	2893	8229	105	130	0.000059	4960	0.293491124	0.012890646	106	190	19950
Willits/Brooktrails	DNA River	5336	2893	8229	122	146	0.000047	1240	0.058172265	0.002555028	21	59	7198
Willits/Brooktrails	Cooks Humboldt	5336	2893	8229	119	148	0.000046	992	0.045288532	0.001989152	16	61	7259
Willits/Brooktrails	Ford Gravel	5336	2893	8229	59	78	0.000164	9920	1.630506246	0.071614699	589	231	13629
Willits/Brooktrails	Ten Mile	5336	2893	8229	91	122	0.000067	2480	0.166621876	0.007318326	60	28	2548
Willits/Brooktrails	Pieta	5336	2893	8229	82	96	0.000109	2480	0.269097222	0.011819223	97	58	4756
Willits/Brooktrails	Layton Rock	5336	2893	8229	48	60	0.000278	2480	0.688888889	0.03025721	249	105	5040
Willits/Brooktrails	Cooks Valley	5336	2893	8229	112	148	0.000046	2480	0.113221329	0.00497288	41	139	15568
Willits/Brooktrails	Wisley Ranch	5336	2893	8229	94	120	0.000069	744	0.051666667	0.002269291	19	8	752
Willits/Brooktrails	Coal Mine	5336	2893	8229	66	114	0.000077	1240	0.095413974	0.004190749	34	86	5676
Willits/Brooktrails	Syar Healdsburg	5336	2893	8229	150	158	0.000040	2480	0.099343054	0.004363321	36	99	14850
					1150	1450		38936	22.767760		8228	2654	

Vehicle Miles Traveled for Aggregate Production - Project Conditions

		POPULATION 2000		A	D	T	F	P	J	K	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Roundtrip Distance	Travel Time	1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips		Trips	
Boonville	Harris Quarry Base	943	2221	3164	74	86	0.000135	10160	1.373715522	0.303582878	961	326	127	199	14726
Boonville	Davis Pit	943	2221	3164	98	138	0.000053	3720	0.195337114	0.043168329	137	348	18	330	32340
Boonville	Keithly Ranch	943	2221	3164	87	126	0.000063	4960	0.312421265	0.069043223	218	525	29	496	43152
Boonville	DNA River	943	2221	3164	119	160	0.000039	1240	0.0484375	0.010704397	34	131	4	127	15113
Boonville	Cooks Humboldt	943	2221	3164	205	250	0.000016	992	0.015872	0.003507617	11	53	1	52	10660
Boonville	Ford Gravel	943	2221	3164	53.2	74	0.000183	9920	1.811541271	0.400339738	1267	673	167	506	26919.2
Boonville	Ten Mile	943	2221	3164	119	156	0.000041	2480	0.10190664	0.022520755	71	39	9	30	3570
Boonville	Pieta	943	2221	3164	65	90	0.000123	2480	0.30617284	0.067662358	214	162	28	134	8710
Boonville	Layton Rock	943	2221	3164	133	160	0.000039	2480	0.096875	0.021408793	68	32	9	23	3059
Boonville	Cooks Valley	943	2221	3164	205	250	0.000016	2480	0.03968	0.008769042	28	120	4	116	23780
Boonville	Wisley Ranch	943	2221	3164	123	154	0.000042	744	0.031371226	0.006932853	22	11	3	8	984
Boonville	Coal Mine	943	2221	3164	153	202	0.000025	1240	0.030389178	0.006715826	21	69	3	66	10098
Boonville	Syar Healdsburg	943	2221	3164	105	124	0.000065	2480	0.161290323	0.035644192	113	414	15	399	41895
					1539.2	1970		45376	4.525009878			2903		2486	
											Total Base Trips	2486			
											Trips to be Reduced	417			

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Covelo	Harris Quarry Base	1838	536	2374	95	142	0.000050	10160	0.50386828	0.29202335	693	235	83	152	14440
Covelo	Davis Pit	1838	536	2374	175	244	0.000017	3720	0.062483203	0.036212945	86	218	10	208	36400
Covelo	Keithly Ranch	1838	536	2374	189	258	0.000015	4960	0.074514753	0.043185984	103	248	12	236	44604
Covelo	DNA River	1838	536	2374	207	274	0.000013	1240	0.016516597	0.009572406	23	88	3	85	17595
Covelo	Cooks Humboldt	1838	536	2374	124	174	0.000033	992	0.032765227	0.018989509	45	218	5	213	26412
Covelo	Ford Gravel	1838	536	2374	144	206	0.000024	9920	0.233763785	0.135480812	322	171	38	133	19152
Covelo	Ten Mile	1838	536	2374	105	194	0.000027	2480	0.065894356	0.038189923	91	50	11	39	4095
Covelo	Pieta	1838	536	2374	166	224	0.000020	2480	0.04942602	0.028645487	68	51	8	43	7138
Covelo	Layton Rock	1838	536	2374	48	76	0.000173	2480	0.429362881	0.248842786	591	279	71	208	9984
Covelo	Cooks Valley	1838	536	2374	125	174	0.000033	2480	0.081913066	0.047473772	113	482	13	469	58625
Covelo	Wisley Ranch	1838	536	2374	114	192	0.000027	744	0.020182292	0.011696907	28	14	3	11	1254
Covelo	Coal Mine	1838	536	2374	52	100	0.000100	1240	0.124	0.071865797	171	559	20	539	28028
Covelo	Syar Healdsburg	1838	536	2374	234	284	0.000012	2480	0.030747867	0.017820323	42	154	5	149	34866
					1778	2542		45376	1.725438328	1		2767	284	2485	
											Total Base Trips	2483			
											Trips to be Reduced	284			

		POPULATION 2000			Roundtrip										
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time	1/T^2	Productions	F*P	F*P/Sum F*P	A*K Trips	Initial Adjusted Trips	Reduction	Final Adjusted Trips	VMT
Ft Bragg/Mendocino	Harris Quarry Base	6771	3203	9974	81	100	0.000100	10160	1.016	0.220400311	2198	745	226	519	42039
Ft Bragg/Mendocino	Davis Pit	6771	3203	9974	160	204	0.000024	3720	0.089388697	0.01939104	193	490	20	470	75200
Ft Bragg/Mendocino	Keithly Ranch	6771	3203	9974	174	218	0.000021	4960	0.104368319	0.022640561	226	544	23	521	90654
Ft Bragg/Mendocino	DNA River	6771	3203	9974	192	234	0.000018	1240	0.02264592	0.004912567	49	188	5	183	35136
Ft Bragg/Mendocino	Cooks Humboldt	6771	3203	9974	116	164	0.000037	992	0.036882808	0.008000967	80	387	8	379	43964
Ft Bragg/Mendocino	Ford Gravel	6771	3203	9974	129	166	0.000036	9920	0.359994194	0.078093339	779	414	80	334	43086
Ft Bragg/Mendocino	Ten Mile	6771	3203	9974	21	36	0.000772	2480	1.913580247	0.415111892	4140	2275	426	1849	38829
Ft Bragg/Mendocino	Pieta	6771	3203	9974	152	182	0.000030	2480	0.074870185	0.016241547	162	123	17	106	16112
Ft Bragg/Mendocino	Layton Rock	6771	3203	9974	86	126	0.000063	2480	0.156210632	0.033886685	338	160	35	125	10750
Ft Bragg/Mendocino	Cooks Valley	6771	3203	9974	116	144	0.000048	2480	0.119598765	0.025944493	259	1106	27	1079	125164
Ft Bragg/Mendocino	Wisley Ranch	6771	3203	9974	25	34	0.000865	744	0.643598616	0.139615488	1393	687	143	544	13600
Ft Bragg/Mendocino	Coal Mine	6771	3203	9974	136	200	0.000025	1240	0.031	0.006724813	67	219	7	212	28832
Ft Bragg/Mendocino	Syar Healdsburg	6771	3203	9974	219	244	0.000017	2480	0.041655469	0.009036298	90	330	9	321	70299
					1607	2052		45376	4.609793852	1		7668	1026	6642	
											Total Base Trips	6641			
											Trips to be Reduced	1027			

Vehicle Miles Traveled for Aggregate Production - Project Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Hopland	Harris Quarry Base	1005	1229	2234	60	63	0.000252	10160	2.55983875	0.100858279	225	76	44	32	1920
Hopland	Davis Pit	1005	1229	2234	45	62	0.000260	3720	0.967741935	0.038129271	85	216	17	199	8955
Hopland	Keithly Ranch	1005	1229	2234	33	50	0.000400	4960	1.984	0.07817009	175	421	34	387	12771
Hopland	DNA River	1005	1229	2234	66	82	0.000149	1240	0.184414039	0.007265959	16	61	3	58	3828
Hopland	Cooks Humboldt	1005	1229	2234	191	230	0.000019	992	0.018752363	0.000738848	2	10	0	10	1910
Hopland	Ford Gravel	1005	1229	2234	23	40	0.000625	9920	6.2	0.244281531	546	290	107	183	4209
Hopland	Ten Mile	1005	1229	2234	163	204	0.000024	2480	0.059592464	0.002347958	5	3	1	2	326
Hopland	Pieta	1005	1229	2234	11	14	0.005102	2480	12.65306122	0.498533737	1114	844	218	626	6886
Hopland	Layton Rock	1005	1229	2234	119	140	0.000051	2480	0.126530612	0.004985337	11	5	2	3	357
Hopland	Cooks Valley	1005	1229	2234	191	130	0.000059	2480	0.146745562	0.005781811	13	55	3	52	9932
Hopland	Wisley Ranch	1005	1229	2234	166	202	0.000025	744	0.018233507	0.000718405	2	1	0	1	166
Hopland	Coal Mine	1005	1229	2234	138	196	0.000026	1240	0.032278217	0.00127177	3	10	1	9	1242
Hopland	Syar Healdsburg	1005	1229	2234	79	76	0.000173	2480	0.429362881	0.016917004	38	139	7	132	10428
					1285	1489		45376	25.38055156	1		2131	437	1694	
											Total Base Trips	1694			
											Trips to be Reduced	437			

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Laytonville	Harris Quarry Base	1310	2695	4005	58	72	0.000193	10160	1.959876543	0.036038549	144	49	9	40	2320
Laytonville	Davis Pit	1310	2695	4005	137	174	0.000033	3720	0.1228696	0.002259347	9	23	1	22	3014
Laytonville	Keithly Ranch	1310	2695	4005	151	190	0.000028	4960	0.137396122	0.002526464	10	24	1	23	3473
Laytonville	DNA River	1310	2695	4005	169	206	0.000024	1240	0.029220473	0.000537311	2	8	0	8	1352
Laytonville	Cooks Humboldt	1310	2695	4005	73	90	0.000123	992	0.122469136	0.002251984	9	44	1	43	3139
Laytonville	Ford Gravel	1310	2695	4005	106	138	0.000053	9920	0.520898971	0.00957838	38	20	2	18	1908
Laytonville	Ten Mile	1310	2695	4005	53	110	0.000083	2480	0.204958678	0.003768816	15	8	1	7	371
Laytonville	Pieta	1310	2695	4005	129	154	0.000042	2480	0.104570754	0.001922865	8	6	0	6	774
Laytonville	Layton Rock	1310	2695	4005	5	7	0.020408	2480	50.6122449	0.930666718	3727	1762	233	1529	7645
Laytonville	Cooks Valley	1310	2695	4005	73	90	0.000123	2480	0.30617284	0.005629959	23	98	1	97	7081
Laytonville	Wisley Ranch	1310	2695	4005	63	100	0.000100	744	0.0744	0.00136808	5	2	0	2	126
Laytonville	Coal Mine	1310	2695	4005	49	96	0.000109	1240	0.134548611	0.002474103	10	33	1	32	1568
Laytonville	Syar Healdsburg	1310	2695	4005	196	216	0.000021	2480	0.053155007	0.000977423	4	15	0	15	2940
					1262	1643			54.38278163			2092	250	1842	
											Total Base Trips	1842			
											Trips to be Reduced	250			

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Potter Valley	Harris Quarry Base	1275	616	1891	44	62	0.000260	10160	2.643080125	0.45733679	865	293	58	235	10340
Potter Valley	Davis Pit	1275	616	1891	63	94	0.000113	3720	0.42100498	0.07284723	138	350	9	341	21483
Potter Valley	Keithly Ranch	1275	616	1891	79	112	0.000080	4960	0.395408163	0.068418168	129	310	9	301	23779
Potter Valley	DNA River	1275	616	1891	96	124	0.000065	1240	0.080645161	0.013954174	26	100	2	98	9408
Potter Valley	Cooks Humboldt	1275	616	1891	175	226	0.000020	992	0.019422038	0.003360629	6	29	0	29	5075
Potter Valley	Ford Gravel	1275	616	1891	51	80	0.000156	9920	1.55	0.268199219	507	269	34	235	11985
Potter Valley	Ten Mile	1275	616	1891	147	200	0.000025	2480	0.062	0.010727969	20	11	1	10	1470
Potter Valley	Pieta	1275	616	1891	74	96	0.000109	2480	0.269097222	0.046562364	88	67	6	61	4514
Potter Valley	Layton Rock	1275	616	1891	103	134	0.000056	2480	0.138115393	0.023898349	45	21	3	18	1854
Potter Valley	Cooks Valley	1275	616	1891	175	226	0.000020	2480	0.048555094	0.008401573	16	68	1	67	11725
Potter Valley	Wisley Ranch	1275	616	1891	150	198	0.000026	744	0.018977655	0.003283737	6	3	0	3	450
Potter Valley	Coal Mine	1275	616	1891	122	192	0.000027	1240	0.033637153	0.005820296	11	36	1	35	4270
Potter Valley	Syar Healdsburg	1275	616	1891	142	158	0.000040	2480	0.099343054	0.017189503	33	121	2	119	16898
					1421	1902			5.779286039			1678	126	1552	
											Total Base Trips	1552			
											Trips to be Reduced	126			

Vehicle Miles Traveled for Aggregate Production - Project Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Redwood Valley	Harris Quarry Base	4992	2624	7616	19	26	0.001479	10160	15.0295858	0.718745591	5474	1855	163	1692	32148
Redwood Valley	Davis Pit	4992	2624	7616	61	86	0.000135	3720	0.502974581	0.024053275	183	465	5	460	28060
Redwood Valley	Keithly Ranch	4992	2624	7616	78	104	0.000092	4960	0.458579882	0.02193023	167	402	5	397	30966
Redwood Valley	DNA River	4992	2624	7616	94	116	0.000074	1240	0.0921522	0.004406907	34	131	1	130	12220
Redwood Valley	Cooks Humboldt	4992	2624	7616	149	190	0.000028	992	0.027479224	0.001314113	10	48	0	48	7152
Redwood Valley	Ford Gravel	4992	2624	7616	33	52	0.000370	9920	3.668639053	0.175441837	1336	709	40	669	22077
Redwood Valley	Ten Mile	4992	2624	7616	121	164	0.000037	2480	0.09220702	0.004409529	34	19	1	18	2178
Redwood Valley	Pieta	4992	2624	7616	56	70	0.000204	2480	0.506122449	0.024203813	184	139	5	134	7504
Redwood Valley	Layton Rock	4992	2624	7616	78	102	0.000096	2480	0.238369858	0.011399335	87	41	3	38	2964
Redwood Valley	Cooks Valley	4992	2624	7616	149	190	0.000028	2480	0.068698061	0.003285282	25	107	1	106	15794
Redwood Valley	Wisley Ranch	4992	2624	7616	125	162	0.000038	744	0.028349337	0.001355723	10	5	0	5	625
Redwood Valley	Coal Mine	4992	2624	7616	96	156	0.000041	1240	0.05095332	0.002436692	19	62	1	61	5856
Redwood Valley	Syar Healdsburg	4992	2624	7616	124	130	0.000059	2480	0.146745562	0.007017673	53	194	2	192	23808
					1183	1548			20.91085635			4177	227	3950	
											Total Base Trips	3950			
											Trips to be Reduced	227			

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Ukiah	Harris Quarry Base	24762	3935	28697	32	36	0.000772	10160	7.839506173	0.384775974	11042	3742	1083	2659	85088
Ukiah	Davis Pit	24762	3935	28697	72	94	0.000113	3720	0.42100498	0.020663623	593	1506	58	1448	104256
Ukiah	Keithly Ranch	24762	3935	28697	62	84	0.000142	4960	0.702947846	0.034501847	990	2383	97	2286	141732
Ukiah	DNA River	24762	3935	28697	95	116	0.000074	1240	0.0921522	0.004522983	130	499	13	486	46170
Ukiah	Cooks Humboldt	24762	3935	28697	163	200	0.000025	992	0.0248	0.001217225	35	169	3	166	27058
Ukiah	Ford Gravel	24762	3935	28697	17	32	0.000977	9920	9.6875	0.475478579	13645	7246	1338	5908	100436
Ukiah	Ten Mile	24762	3935	28697	135	176	0.000032	2480	0.080061983	0.003929575	113	62	11	51	6885
Ukiah	Pieta	24762	3935	28697	39	50	0.000400	2480	0.992	0.048689006	1397	1058	137	921	35919
Ukiah	Layton Rock	24762	3935	28697	91	112	0.000080	2480	0.197704082	0.009703644	278	131	27	104	9464
Ukiah	Cooks Valley	24762	3935	28697	163	200	0.000025	2480	0.062	0.003043063	87	371	9	362	59006
Ukiah	Wisley Ranch	24762	3935	28697	138	174	0.000033	744	0.02457392	0.001206129	35	17	3	14	1932
Ukiah	Coal Mine	24762	3935	28697	110	166	0.000036	1240	0.044999274	0.002208639	63	206	6	200	22000
Ukiah	Syar Healdsburg	24762	3935	28697	107	110	0.000083	2480	0.204958678	0.010059712	289	1059	28	1031	110317
					1224	1550			20.37420913			18449	2813	15636	
											Total Base Trips	15634			
											Trips to be Reduced	2815			

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	A*K	Initial	Reduction	Final Adjusted	VMT
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time					Trips	Adjusted Trips		Trips	
Willits/Brooktrails	Harris Quarry Base	5336	2893	8229	11	14	0.005102	10160	51.83673469	0.931897988	7669	2599	577	2022	22242
Willits/Brooktrails	Davis Pit	5336	2893	8229	91	116	0.000074	3720	0.276456599	0.004970015	41	104	3	101	9191
Willits/Brooktrails	Keithly Ranch	5336	2893	8229	105	130	0.000059	4960	0.293491124	0.005276254	43	103	3	100	10500
Willits/Brooktrails	DNA River	5336	2893	8229	122	146	0.000047	1240	0.058172265	0.001045795	9	35	1	34	4148
Willits/Brooktrails	Cooks Humboldt	5336	2893	8229	119	148	0.000046	992	0.045288532	0.000814177	7	34	1	33	3927
Willits/Brooktrails	Ford Gravel	5336	2893	8229	59	78	0.000164	9920	1.630506246	0.029312523	241	128	18	110	6490
Willits/Brooktrails	Ten Mile	5336	2893	8229	91	122	0.000067	2480	0.166621876	0.002995455	25	14	2	12	1092
Willits/Brooktrails	Pieta	5336	2893	8229	82	96	0.000109	2480	0.269097222	0.004837711	40	30	3	27	2214
Willits/Brooktrails	Layton Rock	5336	2893	8229	48	60	0.000278	2480	0.688888889	0.012384541	102	48	8	40	1920
Willits/Brooktrails	Cooks Valley	5336	2893	8229	112	148	0.000046	2480	0.113221329	0.002035443	17	73	1	72	8064
Willits/Brooktrails	Wisley Ranch	5336	2893	8229	94	120	0.000069	744	0.051666667	0.000928841	8	4	1	3	282
Willits/Brooktrails	Coal Mine	5336	2893	8229	66	114	0.000077	1240	0.095413974	0.00171531	14	46	1	45	2970
Willits/Brooktrails	Syar Healdsburg	5336	2893	8229	150	158	0.000040	2480	0.099343054	0.001785946	15	55	1	54	8100
					1150	1450		45376	55.624902			3273	620	2653	
											Total Base Trips	2654			
											Trips to be Reduced	619			

Vehicle Miles Traveled for Asphalt Production - Base Permit Conditions

		POPULATION 2000		A	D	T	F	P	J	K	A*K	Adjusted Trips	A*K*D
		Incorporated	Un-incorporated	Attractions	Roundtrip Distance	Travel Time	1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles Traveled
Boonville	Harris Quarry AC	943	2221	3164	74	86	0.000135208	0	0	0	0	0	0
Boonville	Granite	943	2221	3164	53.2	74	0.000183	7500	1.369612856	0.868076803	2747	384	20429
Boonville	Baxman	943	2221	3164	119	156	0.000041	2500	0.102728468	0.065110516	206	29	3451
Boonville	Syar/Bodean	943	2221	3164	135	154	0.000042	2500	0.105414066	0.06681268	211	239	32265
					381.2	470		12500	1.577755391		3164	652	56145

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Covelo	Harris Quarry AC	1838	536	2374	95	142	4.95933E-05	0	0	0	0	0	0
Covelo	Granite	1838	536	2374	144	206	0.000024	7500	0.176736733	0.658192032	1563	218	31392
Covelo	Baxman	1838	536	2374	105	194	0.000027	2500	0.066425763	0.247378725	587	82	8610
Covelo	Syar/Bodean	1838	536	2374	264	314	0.000010	2500	0.025355998	0.094429243	224	254	67056
					608	856		12500	0.268518494		2374	554	107058

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ft Bragg/Mendocino	Harris Quarry AC	6771	3203	9974	81	100	0.0001	0	0	0	0	0	0
Ft Bragg/Mendocino	Granite	6771	3203	9974	129	166	0.000036	7500	0.272173029	0.121805711	1215	170	21930
Ft Bragg/Mendocino	Baxman	6771	3203	9974	21	36	0.000772	2500	1.929012346	0.86329171	8610	1203	25263
Ft Bragg/Mendocino	Syar/Bodean	6771	3203	9974	249	274	0.000013	2500	0.03329959	0.014902579	149	169	42081
					480	576		12500	2.234484965		9974	1542	89274

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Hopland	Harris Quarry AC	1005	1229	2234	60	63	0.000251953	0	0	0	0	0	0
Hopland	Granite	1005	1229	2234	23	40	0.000625	7500	4.6875	0.945443036	2112	295	6785
Hopland	Baxman	1005	1229	2234	163	204	0.000024	2500	0.060073049	0.012116404	27	4	652
Hopland	Syar/Bodean	1005	1229	2234	109	109	0.000084	2500	0.210419998	0.042440559	95	108	11772
					355	416		12500	4.957993047	1	2234	407	19209

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Laytonville	Harris Quarry AC	1310	2695	4005	58	72	0.000192901	0	0	0	0	0	0
Laytonville	Granite	1310	2695	4005	106	138	0.000053	7500	0.393824827	0.613675396	2458	343	36358
Laytonville	Baxman	1310	2695	4005	53	110	0.000083	2500	0.20661157	0.321951357	1289	180	9540
Laytonville	Syar/Bodean	1310	2695	4005	226	246	0.000017	2500	0.041311389	0.064373247	258	293	66218
					443	566			0.641747786		4005	816	112116

Vehicle Miles Traveled for Asphalt Production - Base Permit Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Potter Valley	Harris Quarry AC	1275	616	1891	44	62	0.000260146	0	0	0	0	0	0
Potter Valley	Granite	1275	616	1891	51	80	0.000156	7500	1.171875	0.897913946	1698	237	12087
Potter Valley	Baxman	1275	616	1891	147	200	0.000025	2500	0.0625	0.047888744	91	13	1911
Potter Valley	Syar/Bodean	1275	616	1891	172	188	0.000028	2500	0.070733364	0.054197311	102	116	19952
					414	530			1.305108364		1891	366	33950

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Redwood Valley	Harris Quarry AC	4992	2624	7616	19	26	0.00147929	0	0	0	0	0	0
Redwood Valley	Granite	4992	2624	7616	33	52	0.000370	7500	2.773668639	0.931470714	7094	991	32703
Redwood Valley	Baxman	4992	2624	7616	121	164	0.000037	2500	0.092950625	0.031215259	238	33	3993
Redwood Valley	Syar/Bodean	4992	2624	7616	154	150	0.000044	2500	0.111111111	0.037314027	284	322	49588
					327	392			2.977730375		7616	1346	86284

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ukiah	Harris Quarry AC	24762	3935	28697	32	36	0.000771605	0	0	0	0	0	0
Ukiah	Granite	24762	3935	28697	17	32	0.000977	7500	7.32421875	0.972351903	27904	3898	66266
Ukiah	Baxman	24762	3935	28697	135	176	0.000032	2500	0.080707645	0.010714622	307	43	5805
Ukiah	Syar/Bodean	24762	3935	28697	137	140	0.000051	2500	0.12755102	0.016933475	486	551	75487
					321	384			7.532477415		28697	4492	147558

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	Adjusted Trips	Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Willits/Brooktrails	Harris Quarry AC	5336	2893	8229	11	14	0.005102041	0	0	0	0	0	0
Willits/Brooktrails	Granite	5336	2893	8229	59	78	0.000164	7500	1.232741617	0.837778727	6894	963	56817
Willits/Brooktrails	Baxman	5336	2893	8229	91	122	0.000067	2500	0.167965601	0.114150447	939	131	11921
Willits/Brooktrails	Syar/Bodean	5336	2893	8229	180	188	0.000028	2500	0.070733364	0.048070826	396	449	80820
					341	402		12500	1.471441		8229	1543	149558

Vehicle Miles Traveled for Asphalt Production - Base Permit Conditions

		POPULATION 2000		A	D	T	F	P	J	K	A*K	Adjusted Trips	A*K*D
		Incorporated	Un-incorporated	Attractions	Roundtrip Distance	Travel Time	1/T ^2	Productions	F*P	F*P/Sum F*P	Trips	1	Miles Traveled
Boonville	Harris Quarry AC	943	2221	3164	74	86	0.000135	3640	0.492157923	0.237767408	752	75	5550
Boonville	Granite	943	2221	3164	53.2	74	0.000183	7500	1.369612856	0.661676432	2094	363	19312
Boonville	Baxman	943	2221	3164	119	156	0.000041	2500	0.102728468	0.049629358	157	32	3808
Boonville	Syar/Bodean	943	2221	3164	135	154	0.000042	2500	0.105414066	0.050926802	161	250	33750
					381.2	470		16140	2.069913314		3164	720	

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Covelo	Harris Quarry AC	1838	536	2374	95	142	0.000050	3640	0.180519738	0.402014183	954	95	9025
Covelo	Granite	1838	536	2374	144	206	0.000024	7500	0.176736733	0.3935895	934	162	23328
Covelo	Baxman	1838	536	2374	105	194	0.000027	2500	0.066425763	0.147928969	351	71	7455
Covelo	Syar/Bodean	1838	536	2374	264	314	0.000010	2500	0.025355998	0.056467348	134	208	54912
					608	856		16140	0.449038232		2373	536	

		POPULATION 2000			Roundtrip		1/T^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ft Bragg/Mendocino	Harris Quarry AC	6771	3203	9974	81	100	0.000100	3640	0.364	0.140081626	1397	138	11178
Ft Bragg/Mendocino	Granite	6771	3203	9974	129	166	0.000036	7500	0.272173029	0.104742969	1045	181	23349
Ft Bragg/Mendocino	Baxman	6771	3203	9974	21	36	0.000772	2500	1.929012346	0.742360403	7404	1496	31416
Ft Bragg/Mendocino	Syar/Bodean	6771	3203	9974	249	274	0.000013	2500	0.03329959	0.012815002	128	199	49551
					480	576		16140	2.598484965		9974	2014	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Hopland	Harris Quarry AC	1005	1229	2234	60	63	0.000252	3640	0.917107584	0.156100745	349	35	2100
Hopland	Granite	1005	1229	2234	23	40	0.000625	7500	4.6875	0.797858674	1782	309	7107
Hopland	Baxman	1005	1229	2234	163	204	0.000024	2500	0.060073049	0.010225025	23	5	815
Hopland	Syar/Bodean	1005	1229	2234	109	109	0.000084	2500	0.210419998	0.035815556	80	124	13516
					355	416		16140	5.875100631	1	2234	473	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Laytonville	Harris Quarry AC	1310	2695	4005	58	72	0.000193	3640	0.702160494	0.5224765	2093	207	12006
Laytonville	Granite	1310	2695	4005	106	138	0.000053	7500	0.393824827	0.293044423	1174	204	21624
Laytonville	Baxman	1310	2695	4005	53	110	0.000083	2500	0.20661157	0.153739339	616	124	6572
Laytonville	Syar/Bodean	1310	2695	4005	226	246	0.000017	2500	0.041311389	0.030739738	123	191	43166
					443	566			1.34390828		4006	726	

Vehicle Miles Traveled for Asphalt Production - Base Permit Conditions

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Potter Valley	Harris Quarry AC	1275	616	1891	44	62	0.000260	3640	0.946930281	0.420476924	795	79	3476
Potter Valley	Granite	1275	616	1891	51	80	0.000156	7500	1.171875	0.520361852	984	171	8721
Potter Valley	Baxman	1275	616	1891	147	200	0.000025	2500	0.0625	0.027752632	52	11	1617
Potter Valley	Syar/Bodean	1275	616	1891	172	188	0.000028	2500	0.070733364	0.031408592	59	92	15824
					414	530			2.252038644		1890	353	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Redwood Valley	Harris Quarry AC	4992	2624	7616	19	26	0.001479	3640	5.384615385	0.643912072	4904	486	9234
Redwood Valley	Granite	4992	2624	7616	33	52	0.000370	7500	2.773668639	0.331685477	2526	438	14454
Redwood Valley	Baxman	4992	2624	7616	121	164	0.000037	2500	0.092950625	0.011115377	85	17	2057
Redwood Valley	Syar/Bodean	4992	2624	7616	154	150	0.000044	2500	0.111111111	0.013287075	101	157	24178
					327	392			8.362345759		7616	1098	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Ukiah	Harris Quarry AC	24762	3935	28697	32	36	0.000772	3640	2.808641975	0.271599415	7794	773	24736
Ukiah	Granite	24762	3935	28697	17	32	0.000977	7500	7.32421875	0.708261695	20325	3528	59976
Ukiah	Baxman	24762	3935	28697	135	176	0.000032	2500	0.080707645	0.007804537	224	45	6075
Ukiah	Syar/Bodean	24762	3935	28697	137	140	0.000051	2500	0.12755102	0.012334353	354	550	75350
					321	384			10.34111939		28697	4896	

		POPULATION 2000			Roundtrip		1/T ^2	Productions	F*P	F*P/Sum F*P	Trips		Miles
		Incorporated	Un-incorporated	Attractions	Distance	Travel Time							Traveled
Willits/Brooktrails	Harris Quarry AC	5336	2893	8229	11	14	0.005102	3640	18.57142857	0.926585332	7625	756	8316
Willits/Brooktrails	Granite	5336	2893	8229	59	78	0.000164	7500	1.232741617	0.061505247	506	88	5192
Willits/Brooktrails	Baxman	5336	2893	8229	91	122	0.000067	2500	0.167965601	0.008380317	69	14	1274
Willits/Brooktrails	Syar/Bodean	5336	2893	8229	180	188	0.000028	2500	0.070733364	0.003529104	29	45	8100
					341	402		16140	20.042869		8229	903	

Appendix G

Warrant Calculations

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 618
Right Turn Volume = 16

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

US 101

Northbound Volumes (veh/hr)
531 = Through Volume
12 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 634
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

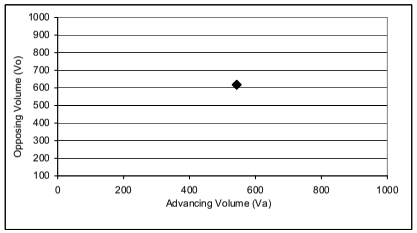
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 634
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.8 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 797
Right Turn Volume = 16

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

US 101

Northbound Volumes (veh/hr)
820 = Through Volume
12 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 813
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

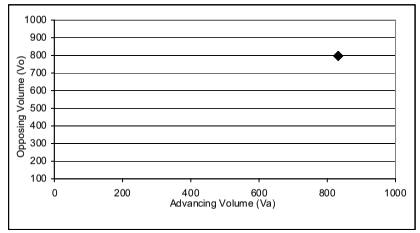
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 813
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.7 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 812
Right Turn Volume = 12

US 101
Northbound Volumes (veh/hr)
969 = Through Volume
8 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 824
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

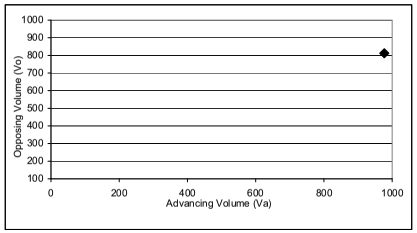
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 933.333333
Advancing Volume Va = 824
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.5 veh/hr
Left Turn Volume Vl = 8 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 818
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1034 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 818
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

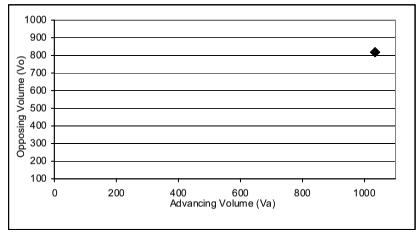
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 818
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.4 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 475
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
408 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 499
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

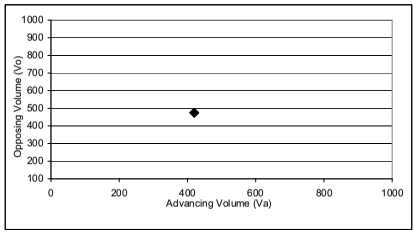
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 499
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.9 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 612
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
629 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 636
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

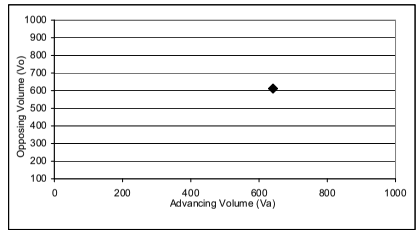
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 636
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.9 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 624
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
744 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 640
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

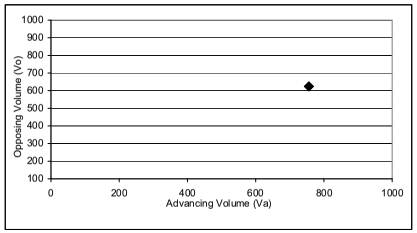
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 800
Advancing Volume Va = 640
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.7 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Base Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 628
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
794 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 628
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

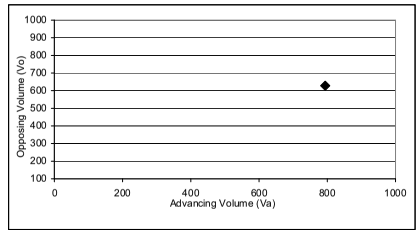
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 628
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.6 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 664
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
571 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 680
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

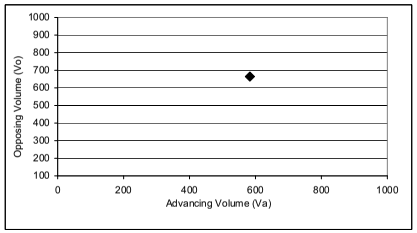
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 800
Advancing Volume Va = 680
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.9 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 856
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
881 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 872
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

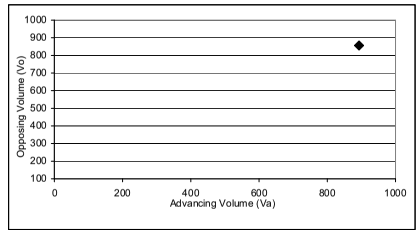
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 800
Advancing Volume Va = 872
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 873
Right Turn Volume = 12

US 101
Northbound Volumes (veh/hr)
1041 = Through Volume
8 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 885
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

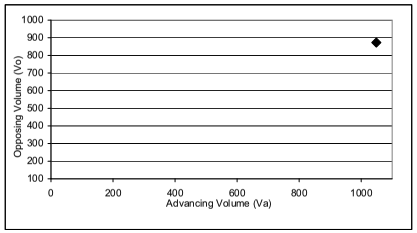
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 933.333333
Advancing Volume Va = 885
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.6 veh/hr
Left Turn Volume Vl = 8 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 879
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1111 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 879
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

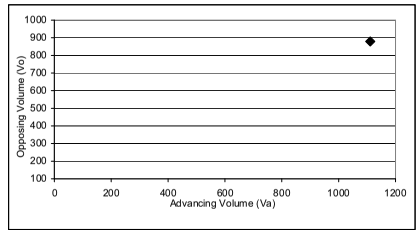
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 879
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.5 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 510
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
438 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 534
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

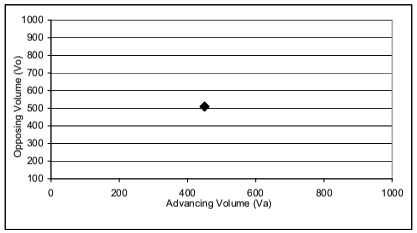
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 534
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.1 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 657
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
676 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 681
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

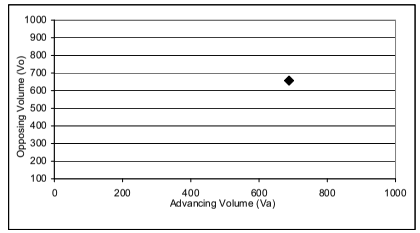
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 681
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 670
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
799 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 686
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

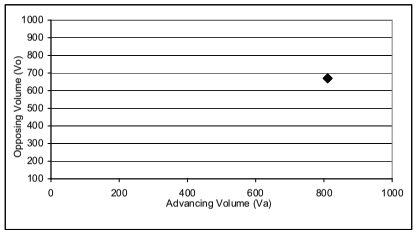
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 800
Advancing Volume Va = 686
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.8 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Base Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 675
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
853 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 675
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

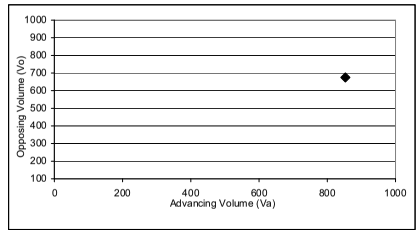
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 675
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

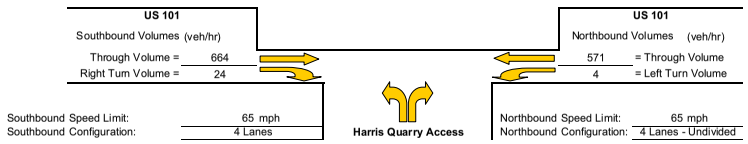
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 688
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

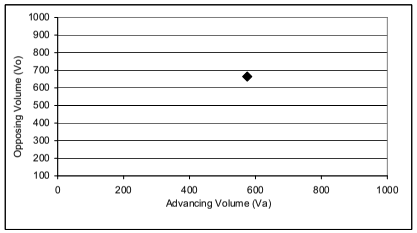
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 533.333333
   Advancing Volume Va = 688
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.9 veh/hr
Left Turn Volume Vl = 4 veh/hr
If Vl>LtVol then warrant is met



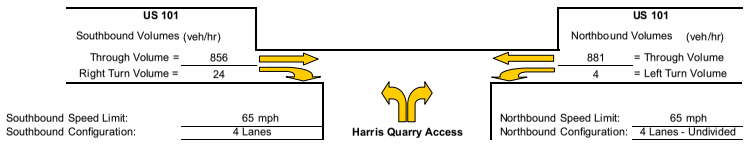
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 880
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

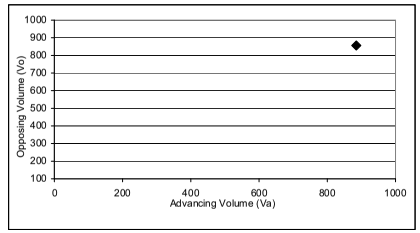
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 533.333333
   Advancing Volume Va = 880
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 4 veh/hr
If Vl>LtVol then warrant is met



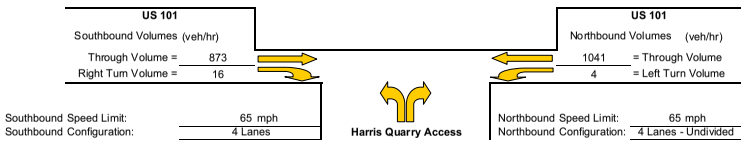
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   - Advancing Volume Threshold AV = -
   - Advancing Volume Va = 889
   - If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

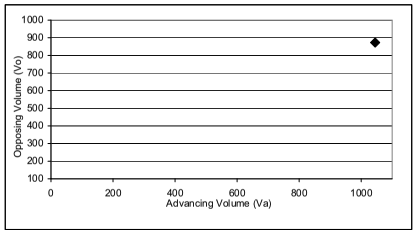
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   - Advancing Volume Threshold AV = 800
   - Advancing Volume Va = 889
   - If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.6 veh/hr
Left Turn Volume Vl = 4 veh/hr
If Vl>LtVol then warrant is met



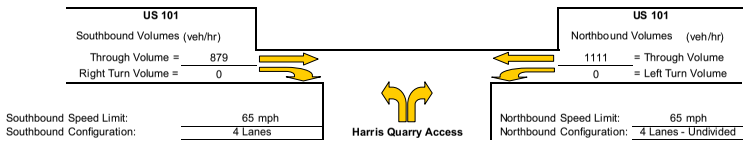
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   - Advancing Volume Threshold AV = -
   - Advancing Volume Va = 879
   - If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

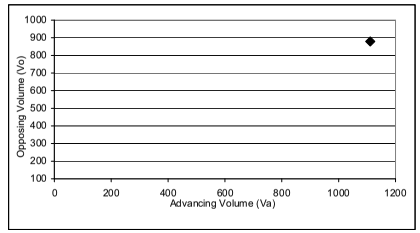
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   - Advancing Volume Threshold AV = 1333.33333
   - Advancing Volume Va = 879
   - If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.5 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 510
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
438 = Through Volume
8 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 542
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

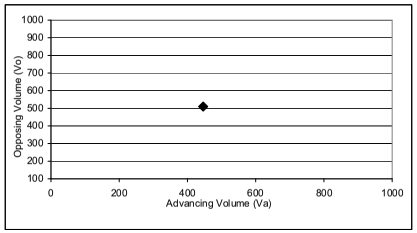
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 542
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.1 veh/hr
Left Turn Volume Vl = 8 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 657
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
676 = Through Volume
8 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 689
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

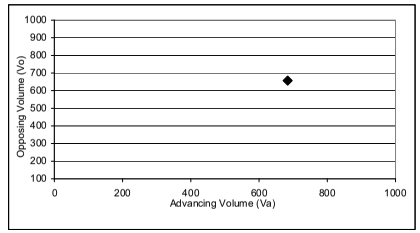
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 689
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 8 veh/hr
If Vl>LtVol then warrant is met



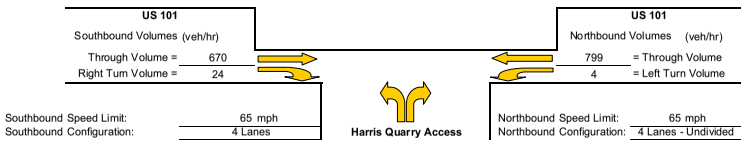
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 694
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

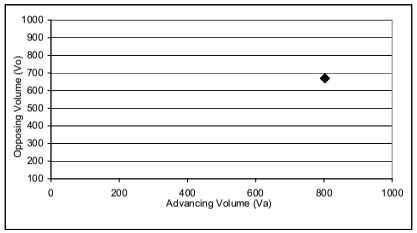
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 533.333333
   Advancing Volume Va = 694
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.8 veh/hr
Left Turn Volume Vl = 4 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Base Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 675
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

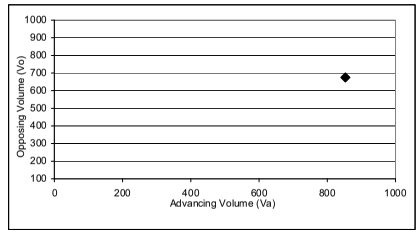
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 675
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 848
Right Turn Volume = 16

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

US 101

Northbound Volumes (veh/hr)
729 = Through Volume
12 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Harris Quarry Access

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 864
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

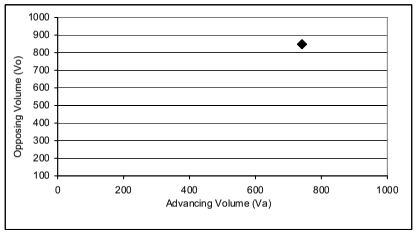
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 864
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.9 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 1093
Right Turn Volume = 16

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

US 101

Northbound Volumes (veh/hr)
1125 = Through Volume
12 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Harris Quarry Access

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1109
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

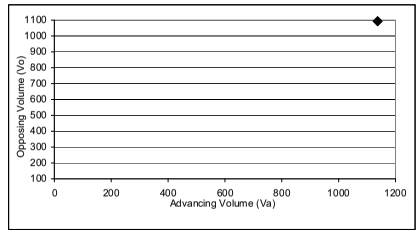
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 1109
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.9 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1114
Right Turn Volume = 12

US 101
Northbound Volumes (veh/hr)
1329 = Through Volume
8 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 1126
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

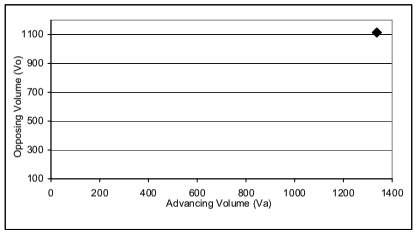
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 933.333333
Advancing Volume Va = 1126
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.7 veh/hr
Left Turn Volume Vl = 8 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1122
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1418 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 1122
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

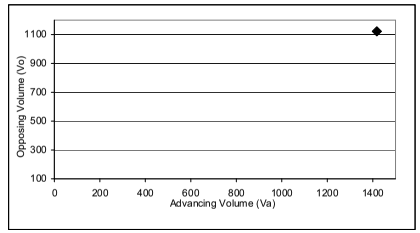
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 1122
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.6 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 652
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
559 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 676
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

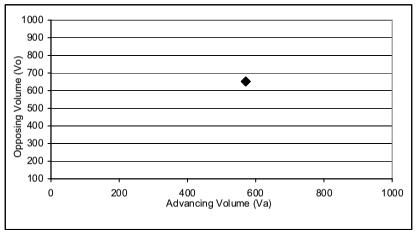
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 533.333333
   Advancing Volume Va = 676
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 839
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
863 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 863
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

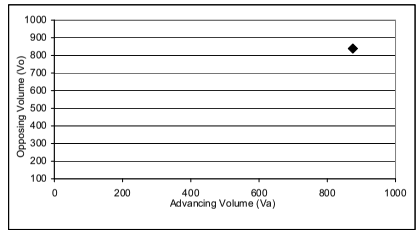
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 533.333333
   Advancing Volume Va = 863
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.1 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 856
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
1021 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 872
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

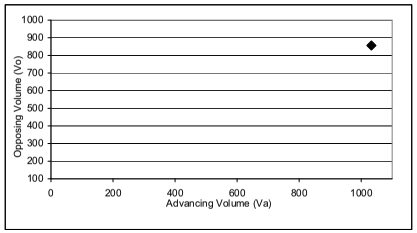
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 800
Advancing Volume Va = 872
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Base Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 862
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1089 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 862
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

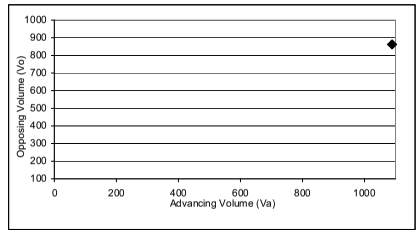
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 862
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

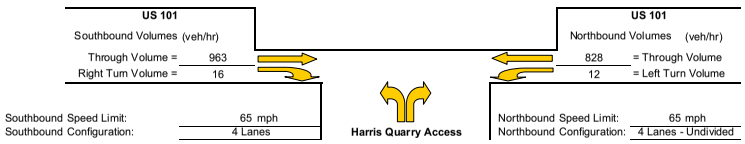
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 979
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

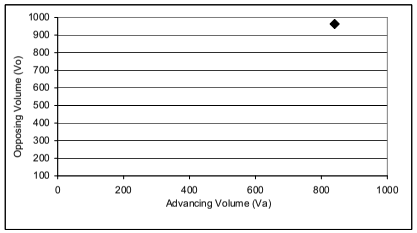
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 979
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.4 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1257
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

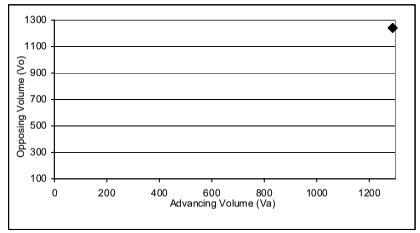
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 1257
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 6.5 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



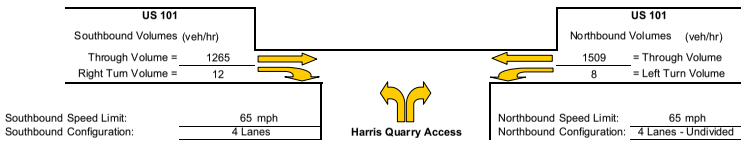
Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	1277
If AV<Va then warrant is met		-

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper

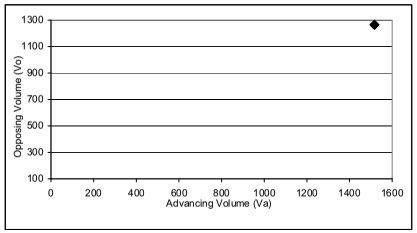
Advancing Volume Threshold	AV =	933.333333
Advancing Volume	Va =	1277
If AV<Va then warrant is met		Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold	LtVol	6.3 veh/hr
Left Turn Volume	Vl =	8 veh/hr

If Vl>LtVol then warrant is met



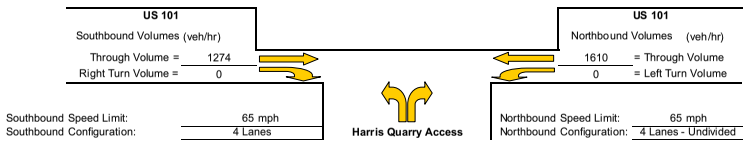
Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	1274
If AV<Va then warrant is met		-

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper

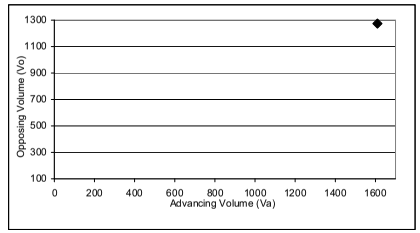
Advancing Volume Threshold	AV =	1333.33333
Advancing Volume	Va =	1274
If AV<Va then warrant is met		No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold	LtVol	6.2 veh/hr
Left Turn Volume	Vl =	0 veh/hr

If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 740
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
635 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 764
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

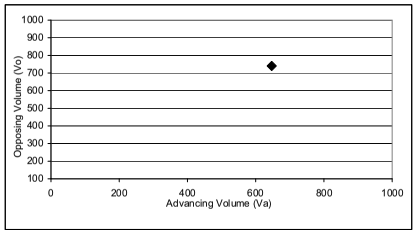
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 764
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 12.6 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 953
Right Turn Volume = 24

US 101
Northbound Volumes (veh/hr)
980 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 977
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

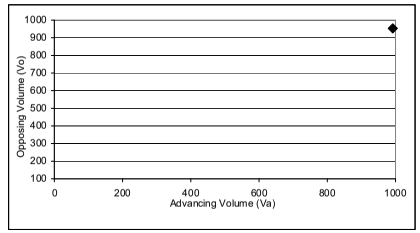
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 533.333333
Advancing Volume Va = 977
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.5 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 972
Right Turn Volume = 16

US 101
Northbound Volumes (veh/hr)
1159 = Through Volume
12 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 988
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

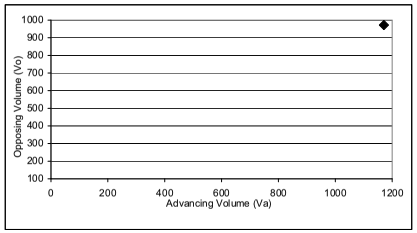
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 800
   Advancing Volume Va = 988
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.3 veh/hr
Left Turn Volume Vl = 12 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Base Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 979
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1236 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 979
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

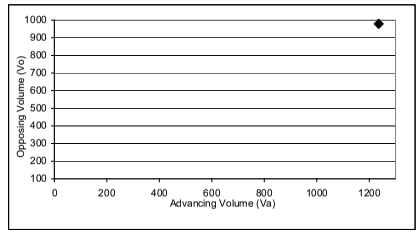
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 979
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.2 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

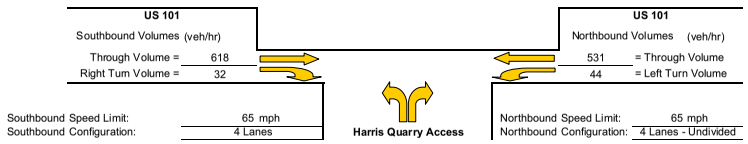
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West



Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 650
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

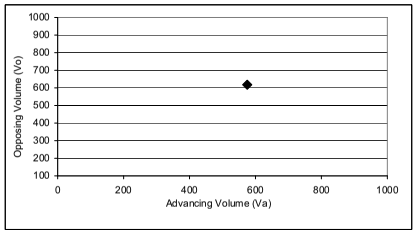
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 266.666667
   Advancing Volume Va = 650
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.8 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 829
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

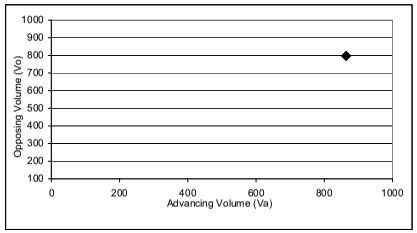
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 266.666667
   Advancing Volume Va = 829
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.7 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 812
Right Turn Volume = 28

US 101
Northbound Volumes (veh/hr)
969 = Through Volume
32 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 840
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

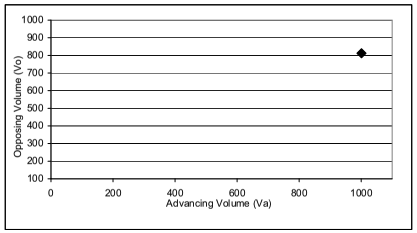
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 400
   Advancing Volume Va = 840
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.5 veh/hr
Left Turn Volume Vl = 32 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 818
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1034 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 818
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

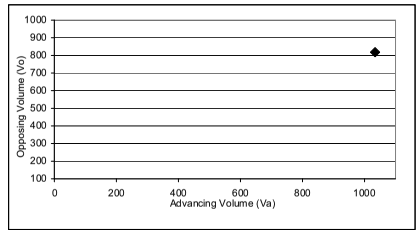
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 818
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.4 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 475
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
408 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1144
Advancing Volume Va = 519
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

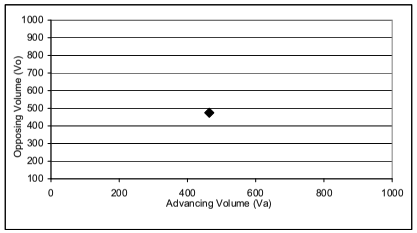
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -133.33333
Advancing Volume Va = 519
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.9 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 612
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
629 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1144
Advancing Volume Va = 656
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

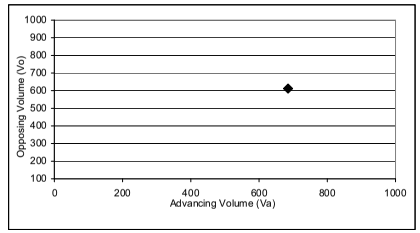
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -133.33333
Advancing Volume Va = 656
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.9 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 624
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
744 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 656
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

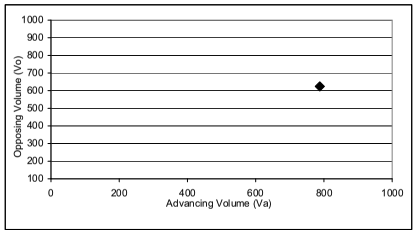
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 656
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.7 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2010 Project Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 628
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
794 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 628
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

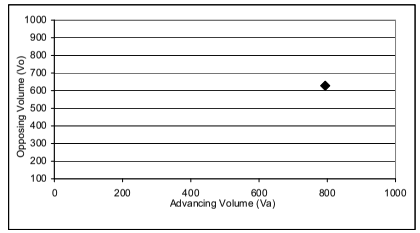
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 628
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.6 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 664
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
571 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 696
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

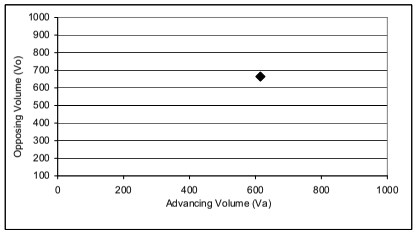
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 696
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.9 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 856
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
881 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 888
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

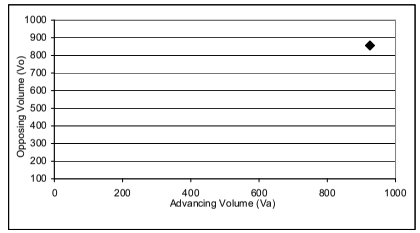
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 888
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 873
Right Turn Volume = 28

US 101
Northbound Volumes (veh/hr)
1041 = Through Volume
32 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 901
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

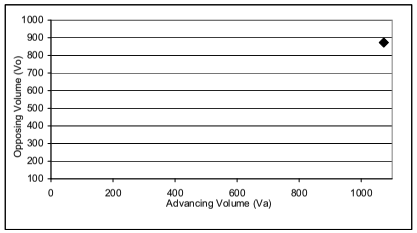
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 400
Advancing Volume Va = 901
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.6 veh/hr
Left Turn Volume Vl = 32 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 879
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1111 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 879
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

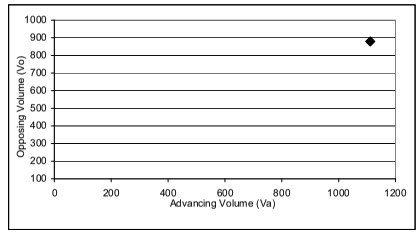
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 879
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.5 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 510
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
438 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1144
   Advancing Volume Va = 554
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

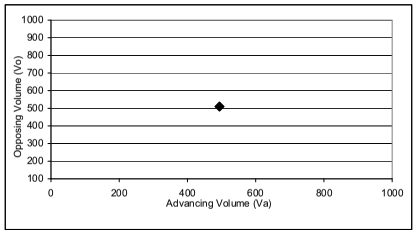
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -133.33333
   Advancing Volume Va = 554
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.1 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 657
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
676 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1144
   Advancing Volume Va = 701
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

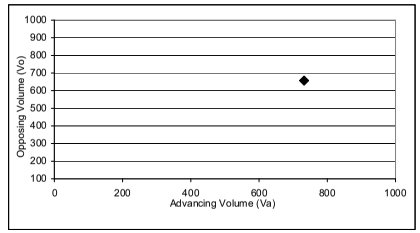
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -133.33333
   Advancing Volume Va = 701
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 670
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
799 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 702
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

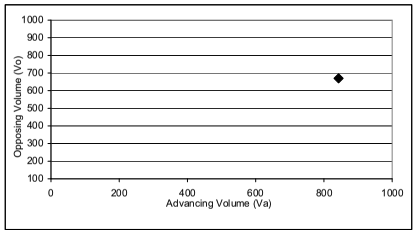
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 702
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.8 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 without Willits Bypass, Project Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 675
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
853 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 675
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

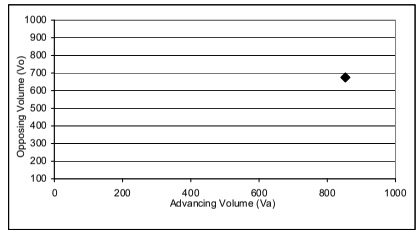
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 675
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 664
Right Turn Volume = 48

US 101
Northbound Volumes (veh/hr)
571 = Through Volume
28 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1088
Advancing Volume Va = 712
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

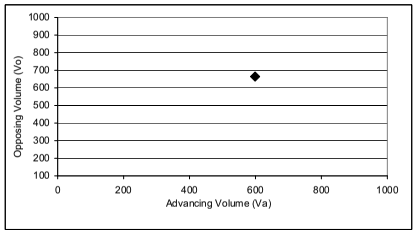
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -266.66667
Advancing Volume Va = 712
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.9 veh/hr
Left Turn Volume Vl = 28 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 856
Right Turn Volume = 48

US 101
Northbound Volumes (veh/hr)
881 = Through Volume
28 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1088
Advancing Volume Va = 904
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

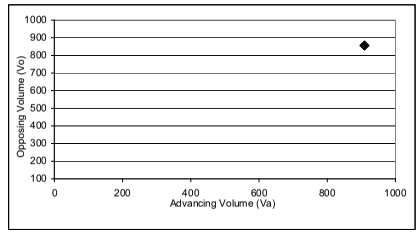
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -266.66667
Advancing Volume Va = 904
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 28 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 873
Right Turn Volume = 40

US 101
Northbound Volumes (veh/hr)
1041 = Through Volume
20 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1200
   Advancing Volume Va = 913
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

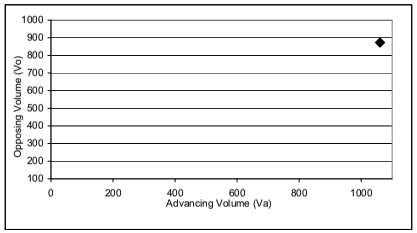
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 0
   Advancing Volume Va = 913
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.6 veh/hr
Left Turn Volume Vl = 20 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 879
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1111 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 879
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

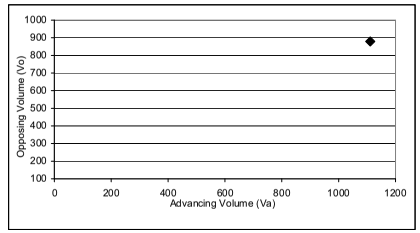
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 879
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.5 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 510
Right Turn Volume = 64

US 101
Northbound Volumes (veh/hr)
438 = Through Volume
36 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 863.9
   Advancing Volume Va = 574
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

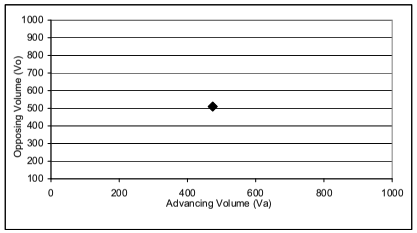
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -800
   Advancing Volume Va = 574
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 17.1 veh/hr
Left Turn Volume Vl = 36 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 657
Right Turn Volume = 64

US 101
Northbound Volumes (veh/hr)
676 = Through Volume
36 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 863.9
   Advancing Volume Va = 721
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

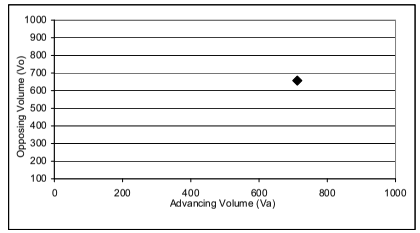
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -800
   Advancing Volume Va = 721
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 36 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 670
Right Turn Volume = 48

US 101
Northbound Volumes (veh/hr)
799 = Through Volume
28 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1088
Advancing Volume Va = 718
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

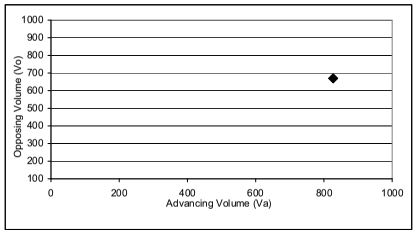
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -266.66667
Advancing Volume Va = 718
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.8 veh/hr
Left Turn Volume Vl = 28 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2014 with Willits Bypass, Project Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 675
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
853 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 675
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

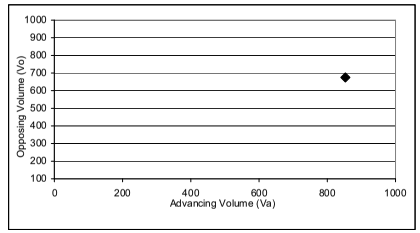
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 675
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 13.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 848
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
729 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 880
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

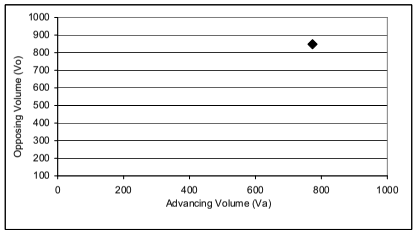
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 880
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.9 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1093
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
1125 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 1125
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

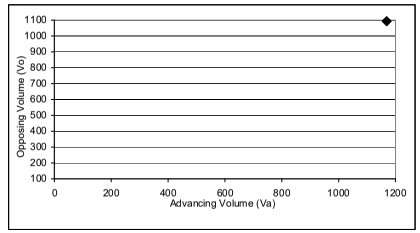
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 1125
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.9 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1114
Right Turn Volume = 28

US 101
Northbound Volumes (veh/hr)
1329 = Through Volume
32 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1142
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

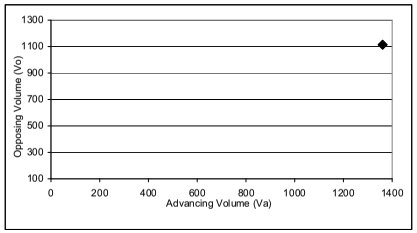
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 400
   Advancing Volume Va = 1142
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.7 veh/hr
Left Turn Volume Vl = 32 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1122
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1418 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1122
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

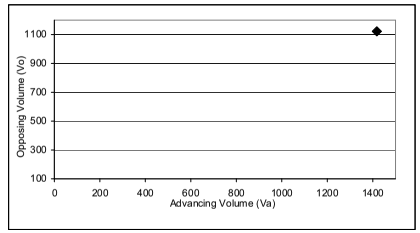
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 1122
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 7.6 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 652
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
559 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1144
Advancing Volume Va = 696
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

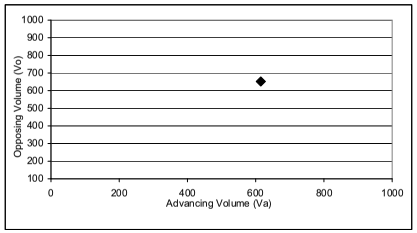
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -133.33333
Advancing Volume Va = 696
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 14.1 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 839
Right Turn Volume = 44

US 101
Northbound Volumes (veh/hr)
863 = Through Volume
56 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = 1144
Advancing Volume Va = 883
If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

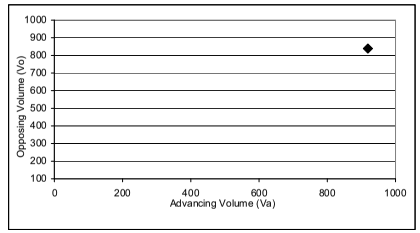
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = -133.33333
Advancing Volume Va = 883
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 11.1 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 856
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
1021 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 888
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

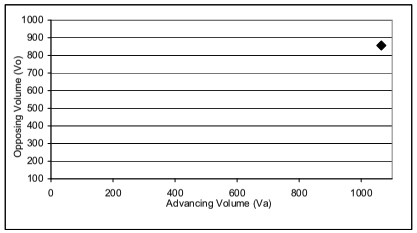
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 888
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.8 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2030 Project Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 862
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1089 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 862
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

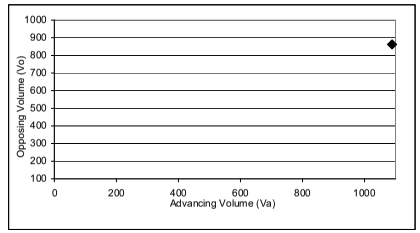
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 862
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 10.7 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - July Peak 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 963
Right Turn Volume = 32

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

US 101

Northbound Volumes (veh/hr)
828 = Through Volume
44 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Harris Quarry Access

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 995
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

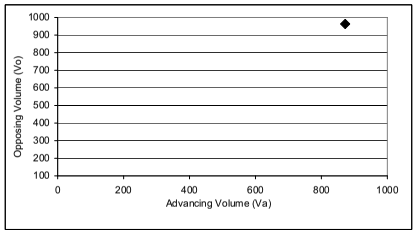
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 266.666667
   Advancing Volume Va = 995
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.4 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - July Peak 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 1241
Right Turn Volume = 32

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

US 101

Northbound Volumes (veh/hr)
1277 = Through Volume
44 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Harris Quarry Access

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1273
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

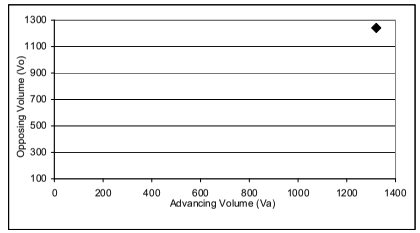
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 266.666667
   Advancing Volume Va = 1273
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 6.5 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - July Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1265
Right Turn Volume = 28

US 101
Northbound Volumes (veh/hr)
1509 = Through Volume
32 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1293
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

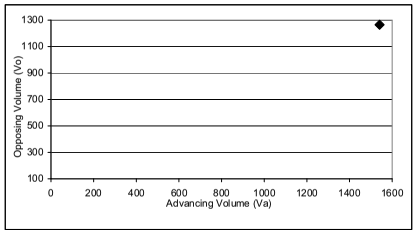
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 400
   Advancing Volume Va = 1293
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 6.3 veh/hr
Left Turn Volume Vl = 32 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - July Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 1274
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1610 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = -
   Advancing Volume Va = 1274
   If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

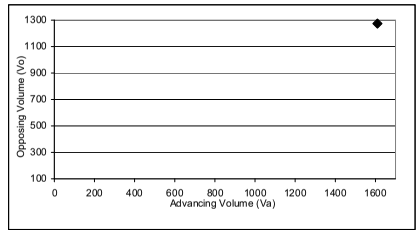
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = 1333.33333
   Advancing Volume Va = 1274
   If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 6.2 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - October Peak, 9-10am

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 740
Right Turn Volume = 44

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

US 101

Northbound Volumes (veh/hr)
635 = Through Volume
56 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1144
   Advancing Volume Va = 784
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

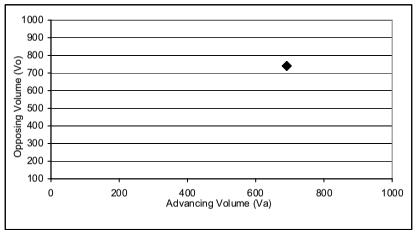
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -133.33333
   Advancing Volume Va = 784
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 12.6 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - October Peak, 11am-Noon

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101

Southbound Volumes (veh/hr)
Through Volume = 953
Right Turn Volume = 44

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

US 101

Northbound Volumes (veh/hr)
980 = Through Volume
56 = Left Turn Volume

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane
   Advancing Volume Threshold AV = 1144
   Advancing Volume Va = 997
   If AV<Va then warrant is met No

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

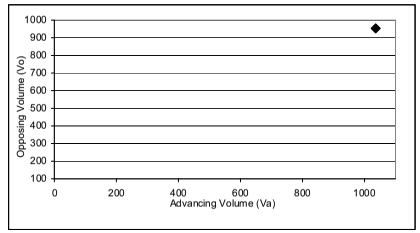
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
   Advancing Volume Threshold AV = -133.33333
   Advancing Volume Va = 997
   If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.5 veh/hr
Left Turn Volume Vl = 56 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - October Peak, 1:15-2:15pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 972
Right Turn Volume = 32

US 101
Northbound Volumes (veh/hr)
1159 = Through Volume
44 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 1004
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

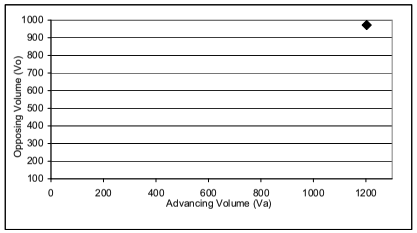
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 266.666667
Advancing Volume Va = 1004
If AV<Va then warrant is met Yes

Right Turn Taper Warranted: **YES**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.3 veh/hr
Left Turn Volume Vl = 44 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **YES**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: US 101/Harris Quarry Access
Study Scenario: 2040 Project Conditions - October Peak, 4:45-5:45pm

Direction of Analysis Street: North/South
Cross Street Intersects: From the West

US 101
Southbound Volumes (veh/hr)
Through Volume = 979
Right Turn Volume = 0

US 101
Northbound Volumes (veh/hr)
1236 = Through Volume
0 = Left Turn Volume

Southbound Speed Limit: 65 mph
Southbound Configuration: 4 Lanes

Harris Quarry Access

Northbound Speed Limit: 65 mph
Northbound Configuration: 4 Lanes - Undivided

Southbound Right Turn Lane Warrants

1. Check for right turn volume criteria

NOT WARRANTED - Less than 40 vehicles

2. Check advance volume threshold criteria for turn lane
Advancing Volume Threshold AV = -
Advancing Volume Va = 979
If AV<Va then warrant is met -

Right Turn Lane Warranted: **NO**

Southbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

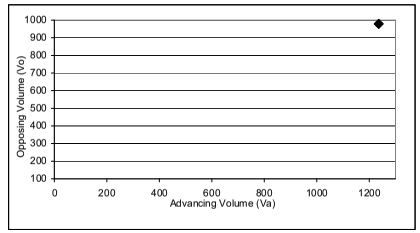
Thresholds not met, continue to next step

2. Check advance volume threshold criteria for taper
Advancing Volume Threshold AV = 1333.33333
Advancing Volume Va = 979
If AV<Va then warrant is met No

Right Turn Taper Warranted: **NO**

Northbound Left Turn Lane Warrants

Left Turn Volume Threshold LtVol 9.2 veh/hr
Left Turn Volume Vl = 0 veh/hr
If Vl>LtVol then warrant is met



◆ Study Intersection

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Appendix H

Intersection Level of Service Calculations

9-10am Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 539		0	0 622		7	18	0	12	0	0	0
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:	9 539		0	0 622		7	18	0	12	0	0	0
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:	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 Volume:	9 539		0	0 622		7	18	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	9 539		0	0 622		7	18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	629 xxxx	xxxxx	xxxx	xxxx	xxxxx		910	1179	311	xxxx	xxxx	xxxxx
Potent Cap.:	963 xxxx	xxxxx	xxxx	xxxx	xxxxx		278	192	691	xxxx	xxxx	xxxxx
Move Cap.:	963 xxxx	xxxxx	xxxx	xxxx	xxxxx		276	190	691	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8 xxxx	xxxxx	xxxxx	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	363	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	15.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 531		0	0 618		16	16	0	12	0	0	0
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:	12 531		0	0 618		16	16	0	12	0	0	0
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:	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 Volume:	12 531		0	0 618		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 531		0	0 618		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	634 xxxx	xxxxx	xxxx	xxxx	xxxxx		916	1181	317	xxxx	xxxx	xxxxx
Potent Cap.:	959 xxxx	xxxxx	xxxx	xxxx	xxxxx		276	192	685	xxxx	xxxx	xxxxx
Move Cap.:	959 xxxx	xxxxx	xxxx	xxxx	xxxxx		273	189	685	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8 xxxx	xxxxx	xxxxx	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	368	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.8 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	15.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[25.5]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	822		0 0	804			24	24			0 9	0			0 0
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:	14	822		0 0	804			24	24			0 9	0			0 0
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:	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 Volume:	14	822		0 0	804			24	24			0 9	0			0 0
Reduct Vol:	0	0		0 0	0			0	0			0 0	0			0 0
FinalVolume:	14	822		0 0	804			24	24			0 9	0			0 0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	828	xxxx	xxxxx	xxxx xxxx	xxxxx				1243		1654	402	xxxx	xxxx	xxxxx	
Potent Cap.:	812	xxxx	xxxxx	xxxx xxxx	xxxxx				169		99	604	xxxx	xxxx	xxxxx	
Move Cap.:	812	xxxx	xxxxx	xxxx xxxx	xxxxx				167		98	604	xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.14		0.00	0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	9.5	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	208	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	25.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				25.5			xxxxxx					
ApproachLOS:	*			*				D			*					

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

11-12pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[21.7]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	820		0 0	797			16	16			0 12	0			0 0
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:	12	820		0 0	797			16	16			0 12	0			0 0
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:	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 Volume:	12	820		0 0	797			16	16			0 12	0			0 0
Reduct Vol:	0	0		0 0	0			0	0			0 0	0			0 0
FinalVolume:	12	820		0 0	797			16	16			0 12	0			0 0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	813	xxxx	xxxxx	xxxx xxxx	xxxxx				1239		1649	407	xxxx	xxxx	xxxxx	
Potent Cap.:	823	xxxx	xxxxx	xxxx xxxx	xxxxx				170		100	600	xxxx	xxxx	xxxxx	
Move Cap.:	823	xxxx	xxxxx	xxxx xxxx	xxxxx				168		99	600	xxxx	xxxx	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx xxxx	xxxx				0.09		0.00	0.02	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	9.4	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	244	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.7	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				21.7			xxxxxx					
ApproachLOS:	*			*				C			*					

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

1:15-2:15pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	18	963		0 0	806		23		12		0		18		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	18	963		0 0	806		23		12		0		18		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	18	963		0 0	806		23		12		0		18		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	18	963		0 0	806		23		12		0		18		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	829	xxxx	xxxxx	xxxx	xxxx	xxxxx			1324		1805		403	xxxx	xxxx	xxxxx
Potent Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx			150		80		603	xxxx	xxxx	xxxxx
Move Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx			148		78		603	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx			0.08		0.00		0.03	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx xxxxx					xxxx	xxxx	xxxx	xxxxx
Control Del:	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx xxxxx					xxxxx	xxxx	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	270 xxxxx					xxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4 xxxxx					xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.0 xxxxx					xxxxx	xxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*		*		*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				20.0					xxxxxx			
ApproachLOS:	*			*				C					*			

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

1:15-2:15pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[23.5]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	8	969		0 0	812		12		12		0		8		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	8	969		0 0	812		12		12		0		8		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	8	969		0 0	812		12		12		0		8		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	8	969		0 0	812		12		12		0		8		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	824	xxxx	xxxxx	xxxx	xxxx	xxxxx			1319		1803		412	xxxx	xxxx	xxxxx
Potent Cap.:	815	xxxx	xxxxx	xxxx	xxxx	xxxxx			151		80		595	xxxx	xxxx	xxxxx
Move Cap.:	815	xxxx	xxxxx	xxxx	xxxx	xxxxx			150		80		595	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.08		0.00		0.01	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx xxxxx					xxxx	xxxx	xxxx	xxxxx
Control Del:	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx xxxxx					xxxxx	xxxx	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	214 xxxxx					xxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3 xxxxx					xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.5 xxxxx					xxxxx	xxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*		*		*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				23.5					xxxxxx			
ApproachLOS:	*			*				C					*			

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

4:45-5:45pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1019		0	0 800		20	11	0	18	0	0	0
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:	19 1019		0	0 800		20	11	0	18	0	0	0
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:	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 Volume:	19 1019		0	0 800		20	11	0	18	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1019		0	0 800		20	11	0	18	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	820 xxxx xxxxx			xxxx xxxx xxxxx			1348	1857	400	xxxx xxxx xxxxx		
Potent Cap.:	818 xxxx xxxxx			xxxx xxxx xxxxx			145	74	605	xxxx xxxx xxxxx		
Move Cap.:	818 xxxx xxxxx			xxxx xxxx xxxxx			142	73	605	xxxx xxxx xxxxx		
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.08	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.5 xxxx xxxxx			xxxxx 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	271	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	19.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[20.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1034		0	0 818		0	4	0	4	0	0	0
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 1034		0	0 818		0	4	0	4	0	0	0
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:	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 Volume:	0 1034		0	0 818		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1034		0	0 818		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1335	1852	409	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			148	75	597	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			148	75	597	xxxx xxxx xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.03	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	237	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	20.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 423	0	0	0 487	7		18	0	12	0	0	0
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 1.00	1.00	
Initial Bse:	9 423	0	0	0 487	7		18	0	12	0	0	0
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 1.00	1.00	
PHF 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 1.00	1.00	
PHF Volume:	9 423	0	0	0 487	7		18	0	12	0	0	0
Reduct Vol:	0 0	0	0	0 0	0		0	0	0	0	0	0
FinalVolume:	9 423	0	0	0 487	7		18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	494 xxxx xxxxx		xxxx	xxxx xxxxx			717	928	244	xxxx	xxxx	xxxxx
Potent Cap.:	1080 xxxx xxxxx		xxxx	xxxx xxxxx			369	270	763	xxxx	xxxx	xxxxx
Move Cap.:	1080 xxxx xxxxx		xxxx	xxxx xxxxx			367	268	763	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		xxxx	xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx xxxxx		xxxxx	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	463	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	13.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.3			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[13.9]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 408	0	0	0 475	24		24	0	12	0	0	0
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 1.00	1.00	
Initial Bse:	12 408	0	0	0 475	24		24	0	12	0	0	0
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 1.00	1.00	
PHF 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 1.00	1.00	
PHF Volume:	12 408	0	0	0 475	24		24	0	12	0	0	0
Reduct Vol:	0 0	0	0	0 0	0		0	0	0	0	0	0
FinalVolume:	12 408	0	0	0 475	24		24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	499 xxxx xxxxx		xxxx	xxxx xxxxx			715	919	250	xxxx	xxxx	xxxxx
Potent Cap.:	1075 xxxx xxxxx		xxxx	xxxx xxxxx			370	273	757	xxxx	xxxx	xxxxx
Move Cap.:	1075 xxxx xxxxx		xxxx	xxxx xxxxx			367	270	757	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		xxxx	xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx xxxxx		xxxxx	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	443	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.4 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[18.9]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	639	0	0	627	24	28	0	9	0	0	0				
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:	14	639	0	0	627	24	28	0	9	0	0	0				
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:	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 Volume:	14	639	0	0	627	24	28	0	9	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	14	639	0	0	627	24	28	0	9	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	651	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	1294	314	xxxx	xxxx	xxxxx				
Potent Cap.:	945	xxxx	xxxxx	xxxx	xxxx	xxxxx	253	164	688	xxxx	xxxx	xxxxx				
Move Cap.:	945	xxxx	xxxxx	xxxx	xxxx	xxxxx	250	162	688	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	296	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.9	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				18.9			xxxxxx					
ApproachLOS:	*			*				C			*					

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

11-12pm Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.6]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	629	0	0	612	24	24	0	12	0	0	0				
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:	12	629	0	0	612	24	24	0	12	0	0	0				
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:	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 Volume:	12	629	0	0	612	24	24	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	629	0	0	612	24	24	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	636	xxxx	xxxxx	xxxx	xxxx	xxxxx	963	1277	318	xxxx	xxxx	xxxxx				
Potent Cap.:	957	xxxx	xxxxx	xxxx	xxxx	xxxxx	257	168	684	xxxx	xxxx	xxxxx				
Move Cap.:	957	xxxx	xxxxx	xxxx	xxxx	xxxxx	255	166	684	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	322	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				17.6			xxxxxx					
ApproachLOS:	*			*				C			*					

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

1:15-2:15 Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[20.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	18	742	0	0	631	24	28	0	9	0	0	0
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:	18	742	0	0	631	24	28	0	9	0	0	0
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:	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 Volume:	18	742	0	0	631	24	28	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	742	0	0	631	24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	655	xxxx	xxxxx	xxxx	xxxx	xxxxx	1038	1409	316	xxxx	xxxx	xxxxx
Potent Cap.:	942	xxxx	xxxxx	xxxx	xxxx	xxxxx	230	140	686	xxxx	xxxx	xxxxx
Move Cap.:	942	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	137	686	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	271	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15 Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.2]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	744	0	0	624	16	16	0	12	0	0	0
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:	12	744	0	0	624	16	16	0	12	0	0	0
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:	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 Volume:	12	744	0	0	624	16	16	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	744	0	0	624	16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	640	xxxx	xxxxx	xxxx	xxxx	xxxxx	1028	1400	320	xxxx	xxxx	xxxxx
Potent Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx	233	142	682	xxxx	xxxx	xxxxx
Move Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx	231	140	682	xxxx	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	322	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[15.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	779	0	0	610	20	11	0	18	0	0	0				
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:	19	779	0	0	610	20	11	0	18	0	0	0				
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:	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 Volume:	19	779	0	0	610	20	11	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	19	779	0	0	610	20	11	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	630	xxxx	xxxxx	xxxx	xxxx	xxxxx	1038	1427	305	xxxx	xxxx	xxxxx				
Potent Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	230	136	697	xxxx	xxxx	xxxxx				
Move Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	134	697	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	390	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				15.0			xxxxxx					
ApproachLOS:	*			*				B			*					

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

4:45-5:45pm Peak Hour - Base 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.5]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	794	0	0	628	0	4	0	4	0	0	0				
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	794	0	0	628	0	4	0	4	0	0	0				
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:	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 Volume:	0	794	0	0	628	0	4	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	794	0	0	628	0	4	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1025	1422	314	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	350	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				15.5			xxxxxx					
ApproachLOS:	*			*				C			*					

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

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9-10am Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[17.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9	586	0	0	675	7	19	0	13	0	0	0
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:	9	586	0	0	675	7	19	0	13	0	0	0
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:	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 Volume:	9	586	0	0	675	7	19	0	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	586	0	0	675	7	19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	682 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	986	1279	338	xxxx	xxxx	xxxxx
Potent Cap.:	920 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	248	167	664	xxxx	xxxx	xxxxx
Move Cap.:	920 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	246	166	664	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	331	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	4	571	0	0	664	24	24	0	4	0	0	0
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:	4	571	0	0	664	24	24	0	4	0	0	0
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:	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 Volume:	4	571	0	0	664	24	24	0	4	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	4	571	0	0	664	24	24	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	688 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	970	1255	344	xxxx	xxxx	xxxxx
Potent Cap.:	916 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	254	173	658	xxxx	xxxx	xxxxx
Move Cap.:	916 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	254	172	658	xxxx	xxxx	xxxxx
Volume/Cap:	0.00 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	278	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.9 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	19.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[31.8]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	15	890	0	0	871	26	30	0	9	0	0	0						
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:	15	890	0	0	871	26	30	0	9	0	0	0						
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:	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 Volume:	15	890	0	0	871	26	30	0	9	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	15	890	0	0	871	26	30	0	9	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	897	xxxx	xxxxx	xxxx	xxxx	xxxxx	1346	1791	436	xxxx	xxxx	xxxxx						
Potent Cap.:	765	xxxx	xxxxx	xxxx	xxxx	xxxxx	145	82	574	xxxx	xxxx	xxxxx						
Move Cap.:	765	xxxx	xxxxx	xxxx	xxxx	xxxxx	143	80	574	xxxx	xxxx	xxxxx						
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	0.00	0.02	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.8	xxxx	xxxxx	xxxxx	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	173	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	31.8	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			31.8			xxxxxx								
ApproachLOS:	*			*			D			*								

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D[30.5]

Street Name:	US 101									Quarry Access								
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	4	881	0	0	856	24	24	0	4	0	0	0						
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:	4	881	0	0	856	24	24	0	4	0	0	0						
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:	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 Volume:	4	881	0	0	856	24	24	0	4	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	4	881	0	0	856	24	24	0	4	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	880	xxxx	xxxxx	xxxx	xxxx	xxxxx	1317	1757	440	xxxx	xxxx	xxxxx						
Potent Cap.:	777	xxxx	xxxxx	xxxx	xxxx	xxxxx	152	86	570	xxxx	xxxx	xxxxx						
Move Cap.:	777	xxxx	xxxxx	xxxx	xxxx	xxxxx	151	85	570	xxxx	xxxx	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	0.00	0.01	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	169	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	30.5	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			30.5			xxxxxx								
ApproachLOS:	*			*			D			*								

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1038		0	0 870		26	13	0	19	0	0	0
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	1.00	1.00
Initial Bse:	19 1038		0	0 870		26	13	0	19	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	19 1038		0	0 870		26	13	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1038		0	0 870		26	13	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	896 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1427	1946	435	xxxx	xxxx	xxxxx
Potent Cap.:	766 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	128	66	575	xxxx	xxxx	xxxxx
Move Cap.:	766 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	126	64	575	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	235	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	22.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: D[31.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	4 1041		0	0 873		16	16	0	4	0	0	0
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	1.00	1.00
Initial Bse:	4 1041		0	0 873		16	16	0	4	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	4 1041		0	0 873		16	16	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	4 1041		0	0 873		16	16	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	889 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1410	1930	445	xxxx	xxxx	xxxxx
Potent Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	132	67	567	xxxx	xxxx	xxxxx
Move Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	131	67	567	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	155	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.7 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	31.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			31.6			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[22.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1096		0	0 860		21	12	0	19	0	0	0
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:	20 1096		0	0 860		21	12	0	19	0	0	0
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:	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 Volume:	20 1096		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1096		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	881 xxxx	xxxxx	xxxx	xxxx	xxxxx		1448	1996	430	xxxx	xxxx	xxxxx
Potent Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		124	61	579	xxxx	xxxx	xxxxx
Move Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		122	59	579	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.10	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	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	236	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[23.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	4	0	4	0	0	0
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 1111		0	0 879		0	4	0	4	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1435	1990	440	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	208	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	23.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.0]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	9	461		0		0	529		7			19		0	13		0		0	0	
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:	9	461		0		0	529		7			19		0	13		0		0	0	
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:	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 Volume:	9	461		0		0	529		7			19		0	13		0		0	0	
Reduct Vol:	0	0		0		0	0		0			0		0	0		0		0	0	
FinalVolume:	9	461		0		0	529		7			19		0	13		0		0	0	
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5	6.9	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0	3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																					
Cnflict Vol:	536	xxxx	xxxxx	xxxx	xxxx	xxxxx						778		1008	265	xxxx	xxxx	xxxxx			
Potent Cap.:	1042	xxxx	xxxxx	xxxx	xxxx	xxxxx						338		242	740	xxxx	xxxx	xxxxx			
Move Cap.:	1042	xxxx	xxxxx	xxxx	xxxx	xxxxx						335		240	740	xxxx	xxxx	xxxxx			
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.06		0.00	0.02	xxxx	xxxx	xxxx			
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	431	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.0	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				14.0			xxxxxx										
ApproachLOS:	*			*				B			*										

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[15.4]

Street Name:	US 101									Quarry Access								
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	1	1	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	8	438		0		0	510		32			32		0	8		0		0	0	
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:	8	438		0		0	510		32			32		0	8		0		0	0	
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:	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 Volume:	8	438		0		0	510		32			32		0	8		0		0	0	
Reduct Vol:	0	0		0		0	0		0			0		0	0		0		0	0	
FinalVolume:	8	438		0		0	510		32			32		0	8		0		0	0	
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5	6.9	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0	3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																					
Cnflict Vol:	542	xxxx	xxxxx	xxxx	xxxx	xxxxx						761		980	271	xxxx	xxxx	xxxxx			
Potent Cap.:	1037	xxxx	xxxxx	xxxx	xxxx	xxxxx						346		252	733	xxxx	xxxx	xxxxx			
Move Cap.:	1037	xxxx	xxxxx	xxxx	xxxx	xxxxx						344		250	733	xxxx	xxxx	xxxxx			
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00	0.01	xxxx	xxxx	xxxx			
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	385	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	A	*		*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				15.4			xxxxxx										
ApproachLOS:	*			*				C			*										

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[21.2]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	15	693	0	0	680	26	30	0	9	0	0	0						
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:	15	693	0	0	680	26	30	0	9	0	0	0						
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:	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 Volume:	15	693	0	0	680	26	30	0	9	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	15	693	0	0	680	26	30	0	9	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	706	xxxx	xxxxx	xxxx	xxxx	xxxxx	1057	1403	340	xxxx	xxxx	xxxxx						
Potent Cap.:	902	xxxx	xxxxx	xxxx	xxxx	xxxxx	224	141	662	xxxx	xxxx	xxxxx						
Move Cap.:	902	xxxx	xxxxx	xxxx	xxxx	xxxxx	221	139	662	xxxx	xxxx	xxxxx						
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.01	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	261	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.2	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			21.2			xxxxxx								
ApproachLOS:	*			*			C			*								

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[20.9]

Street Name:	US 101									Quarry Access								
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	8	676	0	0	657	32	32	0	8	0	0	0						
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:	8	676	0	0	657	32	32	0	8	0	0	0						
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:	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 Volume:	8	676	0	0	657	32	32	0	8	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	8	676	0	0	657	32	32	0	8	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	689	xxxx	xxxxx	xxxx	xxxx	xxxxx	1027	1365	345	xxxx	xxxx	xxxxx						
Potent Cap.:	915	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	149	657	xxxx	xxxx	xxxxx						
Move Cap.:	915	xxxx	xxxxx	xxxx	xxxx	xxxxx	232	147	657	xxxx	xxxx	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.01	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	267	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.9	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			20.9			xxxxxx								
ApproachLOS:	*			*			C			*								

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[23.2]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	804		0 0	686		26		30		0	9	0		0	0
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:	19	804		0 0	686		26		30		0	9	0		0	0
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:	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 Volume:	19	804		0 0	686		26		30		0	9	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	19	804		0 0	686		26		30		0	9	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	712	xxxx	xxxxx	xxxx xxxx	xxxxx				1126		1528	343	xxxx		xxxx	xxxxx
Potent Cap.:	897	xxxx	xxxxx	xxxx xxxx	xxxxx				202		119	659	xxxx		xxxx	xxxxx
Move Cap.:	897	xxxx	xxxxx	xxxx xxxx	xxxxx				198		116	659	xxxx		xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.15		0.00	0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	9.1	xxxx	xxxxx	xxxxx 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		237	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.6	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		23.2	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*		* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					23.2			xxxxxx				
ApproachLOS:	*			*					C			*				

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[22.4]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	4	799		0 0	670		24		24		0	4	0		0	0
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:	4	799		0 0	670		24		24		0	4	0		0	0
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:	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 Volume:	4	799		0 0	670		24		24		0	4	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	4	799		0 0	670		24		24		0	4	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	694	xxxx	xxxxx	xxxx xxxx	xxxxx				1090		1489	347	xxxx		xxxx	xxxxx
Potent Cap.:	911	xxxx	xxxxx	xxxx xxxx	xxxxx				213		125	655	xxxx		xxxx	xxxxx
Move Cap.:	911	xxxx	xxxxx	xxxx xxxx	xxxxx				212		125	655	xxxx		xxxx	xxxxx
Volume/Cap:	0.00	xxxx	xxxx	xxxx xxxx	xxxx				0.11		0.00	0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	9.0	xxxx	xxxxx	xxxxx 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		235	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.4	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		22.4	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	A	*		* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					22.4			xxxxxx				
ApproachLOS:	*			*					C			*				

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 837	0	0	656	21		12	0	19	0	0	0
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:	20 837	0	0	656	21		12	0	19	0	0	0
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:	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 Volume:	20 837	0	0	656	21		12	0	19	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	20 837	0	0	656	21		12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	677 xxxx	xxxxx	xxxx	xxxx	xxxxx		1115	1533	328	xxxx	xxxx	xxxxx
Potent Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		205	118	674	xxxx	xxxx	xxxxx
Move Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		202	115	674	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	354	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 853	0	0	675	0		4	0	4	0	0	0
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:	0 853	0	0	675	0		4	0	4	0	0	0
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:	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 Volume:	0 853	0	0	675	0		4	0	4	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	0 853	0	0	675	0		4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1102	1528	338	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	318	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	16.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.8]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	578		0 0	667		7		19		0	13	0		0	0
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:	9	578		0 0	667		7		19		0	13	0		0	0
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:	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 Volume:	9	578		0 0	667		7		19		0	13	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	9	578		0 0	667		7		19		0	13	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	674	xxxx	xxxxx	xxxx xxxx	xxxxx				974		1263	334	xxxx		xxxx	xxxxx
Potent Cap.:	927	xxxx	xxxxx	xxxx xxxx	xxxxx				253		171	668	xxxx		xxxx	xxxxx
Move Cap.:	927	xxxx	xxxxx	xxxx xxxx	xxxxx				251		170	668	xxxx		xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx xxxx	xxxx				0.08		0.00	0.02	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx 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	336 xxxxx		xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	0.3 xxxxx		xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	16.8 xxxxx		xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	* *	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				16.8				xxxxxx				
ApproachLOS:	*			*				C				*				

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.6]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	571		0 0	664		16		16		0	12	0		0	0
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:	12	571		0 0	664		16		16		0	12	0		0	0
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:	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 Volume:	12	571		0 0	664		16		16		0	12	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	12	571		0 0	664		16		16		0	12	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	680	xxxx	xxxxx	xxxx xxxx	xxxxx				982		1267	340	xxxx		xxxx	xxxxx
Potent Cap.:	922	xxxx	xxxxx	xxxx xxxx	xxxxx				250		170	662	xxxx		xxxx	xxxxx
Move Cap.:	922	xxxx	xxxxx	xxxx xxxx	xxxxx				247		168	662	xxxx		xxxx	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx xxxx	xxxx				0.06		0.00	0.02	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx 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	338 xxxxx		xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	0.3 xxxxx		xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	16.6 xxxxx		xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	* *	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				16.6				xxxxxx				
ApproachLOS:	*			*				C				*				

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[31.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15 882		0	0 863		26	30	0	9	0	0	0
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:	15 882		0	0 863		26	30	0	9	0	0	0
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:	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 Volume:	15 882		0	0 863		26	30	0	9	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	15 882		0	0 863		26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	889 xxxx xxxxx			xxxx xxxx xxxxx			1334	1775	432	xxxx xxxx xxxxx		
Potent Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			148	84	578	xxxx xxxx xxxxx		
Move Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			146	82	578	xxxx xxxx xxxxx		
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.21	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.8 xxxx xxxxx			xxxxx 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	176	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.8	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	31.2	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			31.2			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[24.1]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 881		0	0 856		16	16	0	12	0	0	0
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:	12 881		0	0 856		16	16	0	12	0	0	0
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:	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 Volume:	12 881		0	0 856		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 881		0	0 856		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	872 xxxx xxxxx			xxxx xxxx xxxxx			1329	1769	436	xxxx xxxx xxxxx		
Potent Cap.:	782 xxxx xxxxx			xxxx xxxx xxxxx			149	84	574	xxxx xxxx xxxxx		
Move Cap.:	782 xxxx xxxxx			xxxx xxxx xxxxx			147	83	574	xxxx xxxx xxxxx		
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.11	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.7 xxxx xxxxx			xxxxx 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	216	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.4	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	9.7 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	24.1	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	1034		0 0	866		25		13		0	19	0		0	0
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:	19	1034		0 0	866		25		13		0	19	0		0	0
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:	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 Volume:	19	1034		0 0	866		25		13		0	19	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	19	1034		0 0	866		25		13		0	19	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	891	xxxx	xxxxx	xxxx xxxx	xxxxx				1421		1938	433	xxxx	xxxx	xxxxx	
Potent Cap.:	769	xxxx	xxxxx	xxxx xxxx	xxxxx				130		66	576	xxxx	xxxx	xxxxx	
Move Cap.:	769	xxxx	xxxxx	xxxx xxxx	xxxxx				127		65	576	xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.10		0.00	0.03	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	
Control Del:	9.8	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	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	237	xxxxx	xxxx	xxxx	xxxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	22.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx				
Shared LOS:	*	*	*	* *	*	*	C	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			22.6		xxxxxx							
ApproachLOS:	*			*			C		*							

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: D[26.5]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	8	1041		0 0	873		12		12		0	8	0		0	0
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:	8	1041		0 0	873		12		12		0	8	0		0	0
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:	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 Volume:	8	1041		0 0	873		12		12		0	8	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	8	1041		0 0	873		12		12		0	8	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	885	xxxx	xxxxx	xxxx xxxx	xxxxx				1416		1936	443	xxxx	xxxx	xxxxx	
Potent Cap.:	773	xxxx	xxxxx	xxxx xxxx	xxxxx				131		66	568	xxxx	xxxx	xxxxx	
Move Cap.:	773	xxxx	xxxxx	xxxx xxxx	xxxxx				130		66	568	xxxx	xxxx	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx xxxx	xxxx				0.09		0.00	0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	
Control Del:	9.7	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	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	188	xxxxx	xxxx	xxxx	xxxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx				
Shrd ConDel:	9.7	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	26.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx				
Shared LOS:	A	*	*	* *	*	*	D	*	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			26.5		xxxxxx							
ApproachLOS:	*			*			D		*							

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[22.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1096		0	0 860		21	12	0	19	0	0	0
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:	20 1096		0	0 860		21	12	0	19	0	0	0
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:	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 Volume:	20 1096		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1096		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	881 xxxx	xxxxx	xxxx	xxxx	xxxxx		1448	1996	430	xxxx	xxxx	xxxxx
Potent Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		124	61	579	xxxx	xxxx	xxxxx
Move Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		122	59	579	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.10	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	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	236	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[23.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	4	0	4	0	0	0
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 1111		0	0 879		0	4	0	4	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1435	1990	440	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	208	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	23.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 453	0	0	521	7		19	0	13	0	0	0
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	1.00
Initial Bse:	9 453	0	0	521	7		19	0	13	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	9 453	0	0	521	7		19	0	13	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	9 453	0	0	521	7		19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	528 xxxx	xxxxx	xxxx	xxxx	xxxxx		766	992	261	xxxx	xxxx	xxxxx
Potent Cap.:	1049 xxxx	xxxxx	xxxx	xxxx	xxxxx		343	248	744	xxxx	xxxx	xxxxx
Move Cap.:	1049 xxxx	xxxxx	xxxx	xxxx	xxxxx		341	246	744	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.5 xxxx	xxxxx	xxxxx	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	437	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[14.5]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 438	0	0	510	24		24	0	12	0	0	0
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	1.00
Initial Bse:	12 438	0	0	510	24		24	0	12	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	12 438	0	0	510	24		24	0	12	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	12 438	0	0	510	24		24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	534 xxxx	xxxxx	xxxx	xxxx	xxxxx		765	984	267	xxxx	xxxx	xxxxx
Potent Cap.:	1044 xxxx	xxxxx	xxxx	xxxx	xxxxx		344	250	737	xxxx	xxxx	xxxxx
Move Cap.:	1044 xxxx	xxxxx	xxxx	xxxx	xxxxx		341	248	737	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.5 xxxx	xxxxx	xxxxx	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	415	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.5 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	14.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.5			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15 685	0	0	672	26		30	0	9	0	0	0
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:	15 685	0	0	672	26		30	0	9	0	0	0
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:	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 Volume:	15 685	0	0	672	26		30	0	9	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	15 685	0	0	672	26		30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	698 xxxx	xxxxx	xxxx	xxxx	xxxxx		1045	1387	336	xxxx	xxxx	xxxxx
Potent Cap.:	908 xxxx	xxxxx	xxxx	xxxx	xxxxx		228	144	666	xxxx	xxxx	xxxxx
Move Cap.:	908 xxxx	xxxxx	xxxx	xxxx	xxxxx		225	142	666	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.13	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	265	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	20.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				20.9		xxxxxx		
ApproachLOS:	*			*				C		*		

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 676	0	0	657	24		24	0	12	0	0	0
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:	12 676	0	0	657	24		24	0	12	0	0	0
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:	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 Volume:	12 676	0	0	657	24		24	0	12	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	12 676	0	0	657	24		24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	681 xxxx	xxxxx	xxxx	xxxx	xxxxx		1031	1369	341	xxxx	xxxx	xxxxx
Potent Cap.:	921 xxxx	xxxxx	xxxx	xxxx	xxxxx		232	148	661	xxxx	xxxx	xxxxx
Move Cap.:	921 xxxx	xxxxx	xxxx	xxxx	xxxxx		230	146	661	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.10	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	294	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				19.0		xxxxxx		
ApproachLOS:	*			*				C		*		

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19	796	0	0	677	26	30	0	9	0	0	0
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:	19	796	0	0	677	26	30	0	9	0	0	0
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:	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 Volume:	19	796	0	0	677	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	796	0	0	677	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	703 xxxx	xxxxx		xxxx	xxxx	xxxxx	1113	1511	339	xxxx	xxxx	xxxxx
Potent Cap.:	904 xxxx	xxxxx		xxxx	xxxx	xxxxx	206	121	663	xxxx	xxxx	xxxxx
Move Cap.:	904 xxxx	xxxxx		xxxx	xxxx	xxxxx	202	119	663	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx	xxxx	xxxx	0.15	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1 xxxx	xxxxx		xxxxx	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	241	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	22.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[18.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	799	0	0	670	16	16	0	12	0	0	0
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:	12	799	0	0	670	16	16	0	12	0	0	0
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:	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 Volume:	12	799	0	0	670	16	16	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	799	0	0	670	16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	686 xxxx	xxxxx		xxxx	xxxx	xxxxx	1102	1501	343	xxxx	xxxx	xxxxx
Potent Cap.:	917 xxxx	xxxxx		xxxx	xxxx	xxxxx	209	123	659	xxxx	xxxx	xxxxx
Move Cap.:	917 xxxx	xxxxx		xxxx	xxxx	xxxxx	207	121	659	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx		xxxx	xxxx	xxxx	0.08	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx		xxxxx	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	293	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	18.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 837	0	0	656	21		12	0	19	0	0	0
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:	20 837	0	0	656	21		12	0	19	0	0	0
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:	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 Volume:	20 837	0	0	656	21		12	0	19	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	20 837	0	0	656	21		12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	677 xxxx	xxxxx	xxxx	xxxx	xxxxx		1115	1533	328	xxxx	xxxx	xxxxx
Potent Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		205	118	674	xxxx	xxxx	xxxxx
Move Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		202	115	674	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	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	354	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 853	0	0	675	0		4	0	4	0	0	0
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:	0 853	0	0	675	0		4	0	4	0	0	0
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:	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 Volume:	0 853	0	0	675	0		4	0	4	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	0 853	0	0	675	0		4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1102	1528	338	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	318	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	16.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[23.1]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	733	0	0	847	9	24	0	17	0	0	0				
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:	12	733	0	0	847	9	24	0	17	0	0	0				
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:	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 Volume:	12	733	0	0	847	9	24	0	17	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	733	0	0	847	9	24	0	17	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	856	xxxx	xxxxx	xxxx	xxxx	xxxxx	1238	1604	424	xxxx	xxxx	xxxxx				
Potent Cap.:	793	xxxx	xxxxx	xxxx	xxxx	xxxxx	171	107	585	xxxx	xxxx	xxxxx				
Move Cap.:	793	xxxx	xxxxx	xxxx	xxxx	xxxxx	169	105	585	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	239	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				23.1			xxxxxx					
ApproachLOS:	*			*				C			*					

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

9-10am Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[22.0]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	729	0	0	848	16	16	0	12	0	0	0				
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:	12	729	0	0	848	16	16	0	12	0	0	0				
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:	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 Volume:	12	729	0	0	848	16	16	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	729	0	0	848	16	16	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	864	xxxx	xxxxx	xxxx	xxxx	xxxxx	1245	1609	432	xxxx	xxxx	xxxxx				
Potent Cap.:	787	xxxx	xxxxx	xxxx	xxxx	xxxxx	169	106	577	xxxx	xxxx	xxxxx				
Move Cap.:	787	xxxx	xxxxx	xxxx	xxxx	xxxxx	167	104	577	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	240	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	22.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				22.0			xxxxxx					
ApproachLOS:	*			*				C			*					

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

11-12pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F[68.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1121		0	0 1097		33	38		0	12		0
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:	20 1121		0	0 1097		33	38		0	12		0
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:	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 Volume:	20 1121		0	0 1097		33	38		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	20 1121		0	0 1097		33	38		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8		6.5	6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5		4.0	3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1130 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	1698		2258	549 xxxx xxxx		xxxxx
Potent Cap.:	626 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	85		42	485 xxxx xxxx		xxxxx
Move Cap.:	626 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	83		40	485 xxxx xxxx		xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.46	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx		xxxx	xxxxx xxxx		xxxxx
Control Del:	10.9 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx		xxxx	xxxxx xxxxx		xxxx xxxxx
LOS by Move:	B	*	*	*	*	*	*		*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx		104	xxxxx xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx		2.1	xxxxx xxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx		68.6	xxxxx xxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*		F	*	*	* * *
ApproachDel:	xxxxxx			xxxxxx			68.6			xxxxxx		
ApproachLOS:	*			*			F			*		

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

11-12pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: E[39.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1125		0	0 1093		16	16		0	12		0
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:	12 1125		0	0 1093		16	16		0	12		0
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:	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 Volume:	12 1125		0	0 1093		16	16		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 1125		0	0 1093		16	16		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8		6.5	6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5		4.0	3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1109 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	1688		2250	555 xxxx xxxx		xxxxx
Potent Cap.:	637 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	86		42	481 xxxx xxxx		xxxxx
Move Cap.:	637 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	85		41	481 xxxx xxxx		xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.19	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx		xxxx	xxxxx xxxx		xxxxx
Control Del:	10.8 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx		xxxx	xxxxx xxxxx		xxxx xxxxx
LOS by Move:	B	*	*	*	*	*	*		*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx		132	xxxxx xxxx xxxx xxxxx		
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx		0.8	xxxxx xxxxx xxxx xxxxx		
Shrd ConDel:	10.8 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx		39.6	xxxxx xxxxx xxxx xxxxx		
Shared LOS:	B	*	*	*	*	*	*		E	*	*	* * *
ApproachDel:	xxxxxx			xxxxxx			39.6			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: E[40.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1308		0	0 1102		32	17	0	24	0	0	0
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:	24 1308		0	0 1102		32	17	0	24	0	0	0
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:	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 Volume:	24 1308		0	0 1102		32	17	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1308		0	0 1102		32	17	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1134 xxxx xxxxx			xxxx xxxx xxxxx			1804	2458	551	xxxx xxxx xxxxx		
Potent Cap.:	623 xxxx xxxxx			xxxx xxxx xxxxx			72	31	483	xxxx xxxx xxxxx		
Move Cap.:	623 xxxx xxxxx			xxxx xxxx xxxxx			70	30	483	xxxx xxxx xxxxx		
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.24	0.00	0.05	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	11.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*		*	*		*	*		*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	140	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.1	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	40.9	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*		*	*		*	E		*	*	
ApproachDel:	xxxxxx			xxxxxx			40.9			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[45.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	8 1329		0	0 1114		12	12	0	8	0	0	0
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:	8 1329		0	0 1114		12	12	0	8	0	0	0
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:	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 Volume:	8 1329		0	0 1114		12	12	0	8	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	8 1329		0	0 1114		12	12	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1126 xxxx xxxxx			xxxx xxxx xxxxx			1801	2465	563	xxxx xxxx xxxxx		
Potent Cap.:	628 xxxx xxxxx			xxxx xxxx xxxxx			73	31	475	xxxx xxxx xxxxx		
Move Cap.:	628 xxxx xxxxx			xxxx xxxx xxxxx			72	30	475	xxxx xxxx xxxxx		
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.17	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	10.8 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*		*	*		*	*		*	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	109	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.6	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	10.8 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	45.4	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	B	*		*	*		*	E		*	*	
ApproachDel:	xxxxxx			xxxxxx			45.4			xxxxxx		
ApproachLOS:	*			*			E			*		

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

4:45-5:45pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: E[40.4]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	26	1396		0 0	1098		27		15		0	24	0		0	0
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:	26	1396		0 0	1098		27		15		0	24	0		0	0
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:	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 Volume:	26	1396		0 0	1098		27		15		0	24	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	26	1396		0 0	1098		27		15		0	24	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1125	xxxx	xxxxx	xxxx xxxx	xxxxx				1848		2546	549	xxxx	xxxx	xxxxx	
Potent Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				68		27	485	xxxx	xxxx	xxxxx	
Move Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				65		26	485	xxxx	xxxx	xxxxx	
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx				0.23		0.00	0.05	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	11.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*		* *	*		*		*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		140	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		1.1	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		40.4	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*		* *	*		*		*		E	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					40.4			xxxxxx				
ApproachLOS:	*			*					E			*				

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

4:45-5:45pm Peak Hour - Base 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: E[36.8]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1418		0 0	1122		0		4		0	4	0		0	0
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	1418		0 0	1122		0		4		0	4	0		0	0
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:	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 Volume:	0	1418		0 0	1122		0		4		0	4	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	0	1418		0 0	1122		0		4		0	4	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1831		2540	561	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.06		0.00	0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*		* *	*		*		*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		121	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	0.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.2	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		36.8	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*		* *	*		*		*		E	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					36.8			xxxxxx				
ApproachLOS:	*			*					E			*				

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

9-10am Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	571	0	0	659	9	24	0	17	0	0	0				
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:	12	571	0	0	659	9	24	0	17	0	0	0				
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:	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 Volume:	12	571	0	0	659	9	24	0	17	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	571	0	0	659	9	24	0	17	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	668	xxxx	xxxxx	xxxx	xxxx	xxxxx	969	1254	330	xxxx	xxxx	xxxxx				
Potent Cap.:	931	xxxx	xxxxx	xxxx	xxxx	xxxxx	255	173	672	xxxx	xxxx	xxxxx				
Move Cap.:	931	xxxx	xxxxx	xxxx	xxxx	xxxxx	252	171	672	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	341	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				17.0			xxxxxx					
ApproachLOS:	*			*				C			*					

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

9-10am Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.7]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	559	0	0	652	24	24	0	12	0	0	0				
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:	12	559	0	0	652	24	24	0	12	0	0	0				
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:	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 Volume:	12	559	0	0	652	24	24	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	559	0	0	652	24	24	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	676	xxxx	xxxxx	xxxx	xxxx	xxxxx	968	1247	338	xxxx	xxxx	xxxxx				
Potent Cap.:	925	xxxx	xxxxx	xxxx	xxxx	xxxxx	255	175	664	xxxx	xxxx	xxxxx				
Move Cap.:	925	xxxx	xxxxx	xxxx	xxxx	xxxxx	253	173	664	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	318	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.7	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				17.7			xxxxxx					
ApproachLOS:	*			*				C			*					

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

11-12pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: D[32.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20	867	0	0	851	33	38	0	12	0	0	0
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:	20	867	0	0	851	33	38	0	12	0	0	0
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:	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 Volume:	20	867	0	0	851	33	38	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	867	0	0	851	33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	884 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1325	1758	426	xxxx	xxxx	xxxxx
Potent Cap.:	774 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	150	86	583	xxxx	xxxx	xxxxx
Move Cap.:	774 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	147	83	583	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.26	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	179	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	32.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			32.7			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[26.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	863	0	0	839	24	24	0	12	0	0	0
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:	12	863	0	0	839	24	24	0	12	0	0	0
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:	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 Volume:	12	863	0	0	839	24	24	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	863	0	0	839	24	24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	863 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1307	1738	432	xxxx	xxxx	xxxxx
Potent Cap.:	788 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	154	88	578	xxxx	xxxx	xxxxx
Move Cap.:	788 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	152	87	578	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	202	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.6 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	26.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			26.7			xxxxxx		
ApproachLOS:	*			*			D			*		

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

1:15-2:15pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: E[38.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1013		0	0 860		33	38	0	12	0	0	0
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:	24 1013		0	0 860		33	38	0	12	0	0	0
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:	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 Volume:	24 1013		0	0 860		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1013		0	0 860		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	893 xxxx xxxxx			xxxx xxxx xxxxx			1415	1921	430	xxxx xxxx xxxxx		
Potent Cap.:	768 xxxx xxxxx			xxxx xxxx xxxxx			131	68	579	xxxx xxxx xxxxx		
Move Cap.:	768 xxxx xxxxx			xxxx xxxx xxxxx			128	66	579	xxxx xxxx xxxxx		
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.30	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx xxxxx			xxxxx 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	157	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	38.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			38.3			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: D[26.2]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1021		0	0 856		16	16	0	12	0	0	0
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:	12 1021		0	0 856		16	16	0	12	0	0	0
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:	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 Volume:	12 1021		0	0 856		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 1021		0	0 856		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	872 xxxx xxxxx			xxxx xxxx xxxxx			1399	1909	436	xxxx xxxx xxxxx		
Potent Cap.:	782 xxxx xxxxx			xxxx xxxx xxxxx			134	69	574	xxxx xxxx xxxxx		
Move Cap.:	782 xxxx xxxxx			xxxx xxxx xxxxx			132	68	574	xxxx xxxx xxxxx		
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.12	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx xxxxx			xxxxx 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	198	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.7 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	26.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		*	*		*	D		*	*	*
ApproachDel:	xxxxxx			xxxxxx			26.2			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[22.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	26 1067		0	0 838		27	15	0	24	0	0	0
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:	26 1067		0	0 838		27	15	0	24	0	0	0
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:	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 Volume:	26 1067		0	0 838		27	15	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	26 1067		0	0 838		27	15	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	865 xxxx	xxxxx	xxxx	xxxx	xxxxx		1424	1957	419	xxxx	xxxx	xxxxx
Potent Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		129	64	589	xxxx	xxxx	xxxxx
Move Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		126	62	589	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.12	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	244	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[22.3]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1089		0	0 862		0	4	0	4	0	0	0
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 1089		0	0 862		0	4	0	4	0	0	0
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:	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 Volume:	0 1089		0	0 862		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1089		0	0 862		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1407	1951	431	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	216	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[29.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14 830		0	0 960		10	27		0	19		0
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:	14 830		0	0 960		10	27		0	19		0
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:	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 Volume:	14 830		0	0 960		10	27		0	19		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	14 830		0	0 960		10	27		0	19		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	970 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	1403	1818	480	xxxx xxxx		xxxxx
Potent Cap.:	719 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	133	79	537	xxxx xxxx		xxxxx
Move Cap.:	719 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	131	77	537	xxxx xxxx		xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.21	0.00	0.04	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.1 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	191	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.9	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	29.8	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			29.8			xxxxxx		
ApproachLOS:	*			*			D			*		

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

9-10am Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D[26.9]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 828		0	0 963		16	16		0	12		0
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:	12 828		0	0 963		16	16		0	12		0
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:	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 Volume:	12 828		0	0 963		16	16		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 828		0	0 963		16	16		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	979 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	1409	1823	490	xxxx xxxx		xxxxx
Potent Cap.:	713 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	132	78	530	xxxx xxxx		xxxxx
Move Cap.:	713 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	130	77	530	xxxx xxxx		xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.12	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.1 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	192	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	10.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	26.9	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	B	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			26.9			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: F[141.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22 1271		0	0 1243		38	43		0	14		0
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:	22 1271		0	0 1243		38	43		0	14		0
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:	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 Volume:	22 1271		0	0 1243		38	43		0	14		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	22 1271		0	0 1243		38	43		0	14		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	1281 xxxx	xxxxx		xxxx	xxxx	xxxxx	1923	2558		622	xxxx	xxxx xxxxx
Potent Cap.:	549 xxxx	xxxxx		xxxx	xxxx	xxxxx	60	27		435	xxxx	xxxx xxxxx
Move Cap.:	549 xxxx	xxxxx		xxxx	xxxx	xxxxx	58	26		435	xxxx	xxxx xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx	xxxx	xxxx	0.74	0.00		0.03	xxxx	xxxx xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.8 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	74	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	3.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	141	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*	*	*	F		*	*	*
ApproachDel:	xxxxxx			xxxxxx			141.3			xxxxxx		
ApproachLOS:	*			*			F			*		

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

11-12pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: F[57.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1277		0	0 1241		16	16		0	12		0
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:	12 1277		0	0 1241		16	16		0	12		0
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:	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 Volume:	12 1277		0	0 1241		16	16		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 1277		0	0 1241		16	16		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	1257 xxxx	xxxxx		xxxx	xxxx	xxxxx	1912	2550		629	xxxx	xxxx xxxxx
Potent Cap.:	560 xxxx	xxxxx		xxxx	xxxx	xxxxx	61	27		430	xxxx	xxxx xxxxx
Move Cap.:	560 xxxx	xxxxx		xxxx	xxxx	xxxxx	60	27		430	xxxx	xxxx xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx	xxxx	xxxx	0.27	0.00		0.03	xxxx	xxxx xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.6 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	95	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.6 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	57.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*		*	*	*	*	F		*	*	*
ApproachDel:	xxxxxx			xxxxxx			57.7			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: F[69.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1494		0	0 1250		36	19		0	27		0
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:	27 1494		0	0 1250		36	19		0	27		0
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:	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 Volume:	27 1494		0	0 1250		36	19		0	27		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	27 1494		0	0 1250		36	19		0	27		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1286 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2051	2798		625 xxxx xxxx		xxxxx
Potent Cap.:	546 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	49	19		433 xxxx xxxx		xxxxx
Move Cap.:	546 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	47	18		433 xxxx xxxx		xxxxx
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx	xxxx		0.40	0.00	0.06	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx xxxx		xxxxx
Control Del:	11.9 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx xxxx		xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	99	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	2.0	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	69.2	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			69.2			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: F[67.9]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	8 1509		0	0 1265		12	12		0	8		0
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:	8 1509		0	0 1265		12	12		0	8		0
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:	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 Volume:	8 1509		0	0 1265		12	12		0	8		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	8 1509		0	0 1265		12	12		0	8		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1277 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2042	2796		639 xxxx xxxx		xxxxx
Potent Cap.:	550 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	50	19		424 xxxx xxxx		xxxxx
Move Cap.:	550 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	49	19		424 xxxx xxxx		xxxxx
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.24	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx xxxx		xxxxx
Control Del:	11.6 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx xxxx		xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	77	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.9	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	11.6 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	67.9	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			67.9			xxxxxx		
ApproachLOS:	*			*			F			*		

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

4:45-5:45pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: F[68.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1585		0	0 1247		31	17	0	27	0	0	0
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:	29 1585		0	0 1247		31	17	0	27	0	0	0
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:	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 Volume:	29 1585		0	0 1247		31	17	0	27	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	29 1585		0	0 1247		31	17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1278 xxxx xxxxx			xxxx xxxx xxxxx			2098	2890	624	xxxx xxxx xxxxx		
Potent Cap.:	550 xxxx xxxxx			xxxx xxxx xxxxx			46	16	434	xxxx xxxx xxxxx		
Move Cap.:	550 xxxx xxxxx			xxxx xxxx xxxxx			44	15	434	xxxx xxxx xxxxx		
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx	xxxx		0.39	0.00	0.06	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	98	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	68.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			68.6			xxxxxx		
ApproachLOS:	*			*			F			*		

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

4:45-5:45pm Peak Hour - Base 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: F[51.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1610		0	0 1274		0	4	0	4	0	0	0
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 1610		0	0 1274		0	4	0	4	0	0	0
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:	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 Volume:	0 1610		0	0 1274		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1610		0	0 1274		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			2079	2884	637	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			47	16	425	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			47	16	425	xxxx xxxx xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.08	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	85	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	51.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		*	*		*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			51.7			xxxxxx		
ApproachLOS:	*			*			F			*		

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

9-10am Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14 645		0	0 745		10	27		0	19		0
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:	14 645		0	0 745		10	27		0	19		0
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:	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 Volume:	14 645		0	0 745		10	27		0	19		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	14 645		0	0 745		10	27		0	19		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	755 xxxx xxxxx			xxxx xxxx xxxxx			1096	1418		373 xxxx xxxx xxxxx		
Potent Cap.:	865 xxxx xxxxx			xxxx xxxx xxxxx			211	138		631 xxxx xxxx xxxxx		
Move Cap.:	865 xxxx xxxxx			xxxx xxxx xxxxx			208	136		631 xxxx xxxx xxxxx		
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.13	0.00		0.03 xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	9.2 xxxx xxxxx			xxxxx 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	288	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.6	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	19.9	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[20.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 635		0	0 740		24	24		0	12		0
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:	12 635		0	0 740		24	24		0	12		0
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:	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 Volume:	12 635		0	0 740		24	24		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 635		0	0 740		24	24		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	764 xxxx xxxxx			xxxx xxxx xxxxx			1094	1411		382 xxxx xxxx xxxxx		
Potent Cap.:	858 xxxx xxxxx			xxxx xxxx xxxxx			212	140		622 xxxx xxxx xxxxx		
Move Cap.:	858 xxxx xxxxx			xxxx xxxx xxxxx			209	138		622 xxxx xxxx xxxxx		
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.11	0.00		0.02 xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	9.3 xxxx xxxxx			xxxxx 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	269	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	9.3 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	20.4	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: E[47.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22	982	0	0	963	38	43	0	14	0	0	0
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:	22	982	0	0	963	38	43	0	14	0	0	0
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:	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 Volume:	22	982	0	0	963	38	43	0	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	22	982	0	0	963	38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1001 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1498	1989	482	xxxx	xxxx	xxxxx
Potent Cap.:	700 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	115	62	536	xxxx	xxxx	xxxxx
Move Cap.:	700 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	113	60	536	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.38	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	140	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	47.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			47.5			xxxxxx		
ApproachLOS:	*			*			E			*		

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

11-12pm Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[34.3]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	980	0	0	953	24	24	0	12	0	0	0
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:	12	980	0	0	953	24	24	0	12	0	0	0
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:	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 Volume:	12	980	0	0	953	24	24	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	980	0	0	953	24	24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	977 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1479	1969	489	xxxx	xxxx	xxxxx
Potent Cap.:	714 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	119	63	531	xxxx	xxxx	xxxxx
Move Cap.:	714 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	117	62	531	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.20	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	158	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.1 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	34.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			34.3			xxxxxx		
ApproachLOS:	*			*			D			*		

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

1:15-2:15 Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F[59.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1148		0	0 974		38	43	0	14	0	0	0
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:	27 1148		0	0 974		38	43	0	14	0	0	0
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:	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 Volume:	27 1148		0	0 974		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	27 1148		0	0 974		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1012 xxxx xxxxx			xxxx xxxx		xxxxx	1602	2176	487	xxxx	xxxx	xxxxx
Potent Cap.:	693 xxxx xxxxx			xxxx xxxx		xxxxx	98	47	532	xxxx	xxxx	xxxxx
Move Cap.:	693 xxxx xxxxx			xxxx xxxx		xxxxx	96	45	532	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.45	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.4 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	120	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	2.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	59.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			59.9			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15 Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: D[33.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1159		0	0 972		16	16	0	12	0	0	0
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:	12 1159		0	0 972		16	16	0	12	0	0	0
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:	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 Volume:	12 1159		0	0 972		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 1159		0	0 972		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	988 xxxx xxxxx			xxxx xxxx		xxxxx	1584	2163	494	xxxx	xxxx	xxxxx
Potent Cap.:	708 xxxx xxxxx			xxxx xxxx		xxxxx	101	48	526	xxxx	xxxx	xxxxx
Move Cap.:	708 xxxx xxxxx			xxxx xxxx		xxxxx	100	47	526	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.16	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.2 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	153	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.2 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	33.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			33.7			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[29.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1211		0	0 952		31	17	0	27	0	0	0
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:	29 1211		0	0 952		31	17	0	27	0	0	0
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:	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 Volume:	29 1211		0	0 952		31	17	0	27	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	29 1211		0	0 952		31	17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	983 xxxx xxxxx			xxxx xxxx xxxxx			1616	2221	476	xxxx xxxx xxxxx		
Potent Cap.:	711 xxxx xxxxx			xxxx xxxx xxxxx			96	44	541	xxxx xxxx xxxxx		
Move Cap.:	711 xxxx xxxxx			xxxx xxxx xxxxx			93	42	541	xxxx xxxx xxxxx		
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.18	0.00	0.05	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	190	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	29.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			29.6		xxxxxx			
ApproachLOS:	*			*			D		*			

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

4:45-5:45pm Peak Hour - Base 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: D[27.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1236		0	0 979		0	4	0	4	0	0	0
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 1236		0	0 979		0	4	0	4	0	0	0
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:	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 Volume:	0 1236		0	0 979		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1236		0	0 979		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1597	2215	490	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			99	44	530	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			99	44	530	xxxx xxxx xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.04	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	167	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	27.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		*	*		*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			27.6		xxxxxx			
ApproachLOS:	*			*			D		*			

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

9-10am Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 538		0	0 622		7	18		0	12		0
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:	9 538		0	0 622		7	18		0	12		0
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:	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 Volume:	9 538		0	0 622		7	18		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	9 538		0	0 622		7	18		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	629 xxxx xxxxx			xxxx xxxx xxxxx			909	1178		311 xxxx xxxx xxxxx		
Potent Cap.:	963 xxxx xxxxx			xxxx xxxx xxxxx			278	192		691 xxxx xxxx xxxxx		
Move Cap.:	963 xxxx xxxxx			xxxx xxxx xxxxx			276	191		691 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			391	313	xxxxx	361 309 xxxxx		
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	8.8 xxxx xxxxx			xxxxx 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	473	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	13.1	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.0]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 531		0	0 618		16	16		0	12		0
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:	12 531		0	0 618		16	16		0	12		0
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:	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 Volume:	12 531		0	0 618		16	16		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 531		0	0 618		16	16		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	634 xxxx xxxxx			xxxx xxxx xxxxx			916	1181		317 xxxx xxxx xxxxx		
Potent Cap.:	959 xxxx xxxxx			xxxx xxxx xxxxx			276	192		685 xxxx xxxx xxxxx		
Move Cap.:	959 xxxx xxxxx			xxxx xxxx xxxxx			273	189		685 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			388	312	xxxxx	361 307 xxxxx		
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.04	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	8.8 xxxx xxxxx			xxxxx 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	477	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	13.0	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14 822		0	0 804		24	28	0	9	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	14 822		0	0 804		24	28	0	9	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	14 822		0	0 804		24	28	0	9	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	14 822		0	0 804		24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	828 xxxx	xxxxx		xxxx	xxxx	xxxxx	1243	1654	402	xxxx	xxxx	xxxxx
Potent Cap.:	812 xxxx	xxxxx		xxxx	xxxx	xxxxx	169	99	604	xxxx	xxxx	xxxxx
Move Cap.:	812 xxxx	xxxxx		xxxx	xxxx	xxxxx	167	98	604	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	294	220	xxxxx 240	214	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx		xxxx	xxxx	xxxx	0.10	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.5 xxxx	xxxxx	xxxxx	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	336	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.3]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 820		0	0 797		16	16	0	12	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	12 820		0	0 797		16	16	0	12	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	12 820		0	0 797		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 820		0	0 797		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	813 xxxx	xxxxx		xxxx	xxxx	xxxxx	1239	1649	407	xxxx	xxxx	xxxxx
Potent Cap.:	823 xxxx	xxxxx		xxxx	xxxx	xxxxx	170	100	600	xxxx	xxxx	xxxxx
Move Cap.:	823 xxxx	xxxxx		xxxx	xxxx	xxxxx	169	99	600	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	295	222	xxxxx 242	218	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx		xxxx	xxxx	xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.4 xxxx	xxxxx	xxxxx	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	377	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.4]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	18	963	0	0	806	23	12	0	18	0	0	0				
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:	18	963	0	0	806	23	12	0	18	0	0	0				
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:	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 Volume:	18	963	0	0	806	23	12	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	18	963	0	0	806	23	12	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	829	xxxx	xxxxx	xxxx	xxxx	xxxxx	1324	1805	403	xxxx	xxxx	xxxxx				
Potent Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx	150	80	603	xxxx	xxxx	xxxxx				
Move Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx	148	78	603	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	279	196	xxxxx	198	190	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.5	xxxx	xxxxx	xxxxx	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	411	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.4	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			14.4			xxxxxx						
ApproachLOS:	*			*			B			*						

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

1:15-2:15pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[15.7]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	8	969	0	0	812	12	12	0	8	0	0	0				
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:	8	969	0	0	812	12	12	0	8	0	0	0				
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:	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 Volume:	8	969	0	0	812	12	12	0	8	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	8	969	0	0	812	12	12	0	8	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	824	xxxx	xxxxx	xxxx	xxxx	xxxxx	1319	1803	412	xxxx	xxxx	xxxxx				
Potent Cap.:	815	xxxx	xxxxx	xxxx	xxxx	xxxxx	151	80	595	xxxx	xxxx	xxxxx				
Move Cap.:	815	xxxx	xxxxx	xxxx	xxxx	xxxxx	150	80	595	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	280	198	xxxxx	205	196	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.5	xxxx	xxxxx	xxxxx	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	355	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.7	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			15.7			xxxxxx						
ApproachLOS:	*			*			C			*						

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

4:45-5:45pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.3]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	1019		0 0	800			20	11		0	18	0		0	0
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	1.00
Initial Bse:	19	1019		0 0	800			20	11		0	18	0		0	0
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	1.00
PHF 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	1.00
PHF Volume:	19	1019		0 0	800			20	11		0	18	0		0	0
Reduct Vol:	0	0		0 0	0			0	0		0	0	0		0	0
FinalVolume:	19	1019		0 0	800			20	11		0	18	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	820	xxxx	xxxxx	xxxx xxxx	xxxxx				1348		1857	400	xxxx	xxxx	xxxxx	
Potent Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				145		74	605	xxxx	xxxx	xxxxx	
Move Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				142		73	605	xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				275		188	xxxxx	185		183	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.04		0.00	0.03	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	9.5	xxxx	xxxxx	xxxxx 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		416	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.2	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		14.3	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	* *	*			*	B		*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx					14.3				xxxxxx			
ApproachLOS:	*			*					B				*			

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

4:45-5:45pm Peak Hour - Base 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.7]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1034		0 0	818			0	4		0	4	0		0	0
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	1.00
Initial Bse:	0	1034		0 0	818			0	4		0	4	0		0	0
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	1.00
PHF 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	1.00
PHF Volume:	0	1034		0 0	818			0	4		0	4	0		0	0
Reduct Vol:	0	0		0 0	0			0	0		0	0	0		0	0
FinalVolume:	0	1034		0 0	818			0	4		0	4	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1335		1852	409	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148		75	597	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148		75	597	xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				278		192	xxxxx	195		192	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.01		0.00	0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	* *	*			*	*	*	*		*	*	*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		380	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		14.7	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	* *	*			*	B		*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx					14.7				xxxxxx			
ApproachLOS:	*			*					B				*			

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

9-10am Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[11.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 423	0	0	487	7		18	0	12	0	0	0
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	1.00
Initial Bse:	9 423	0	0	487	7		18	0	12	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	9 423	0	0	487	7		18	0	12	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	9 423	0	0	487	7		18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	494 xxxx	xxxxx	xxxx	xxxx	xxxxx		717	928	244	xxxx	xxxx	xxxxx
Potent Cap.:	1080 xxxx	xxxxx	xxxx	xxxx	xxxxx		369	270	763	xxxx	xxxx	xxxxx
Move Cap.:	1080 xxxx	xxxxx	xxxx	xxxx	xxxxx		367	268	763	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		467	380	xxxxx 436	375	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.04	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx	xxxxx	xxxxx	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	553	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	11.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.9			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[12.2]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 408	0	0	475	24		24	0	12	0	0	0
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	1.00
Initial Bse:	12 408	0	0	475	24		24	0	12	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	12 408	0	0	475	24		24	0	12	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	12 408	0	0	475	24		24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	499 xxxx	xxxxx	xxxx	xxxx	xxxxx		715	919	250	xxxx	xxxx	xxxxx
Potent Cap.:	1075 xxxx	xxxxx	xxxx	xxxx	xxxxx		370	273	757	xxxx	xxxx	xxxxx
Move Cap.:	1075 xxxx	xxxxx	xxxx	xxxx	xxxxx		367	270	757	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		467	382	xxxxx 442	375	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx	xxxxx	xxxxx	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	536	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	12.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.2			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14 639		0	0 627		24	28	0	9	0	0	0
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:	14 639		0	0 627		24	28	0	9	0	0	0
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:	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 Volume:	14 639		0	0 627		24	28	0	9	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	14 639		0	0 627		24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	651 xxxx xxxxx			xxxx xxxx		xxxxx	975	1294	314	xxxx xxxx		xxxxx
Potent Cap.:	945 xxxx xxxxx			xxxx xxxx		xxxxx	253	164	688	xxxx xxxx		xxxxx
Move Cap.:	945 xxxx xxxxx			xxxx xxxx		xxxxx	250	162	688	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	373	286	xxxxx 316	278		xxxxx
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.08	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9 xxxx xxxxx			xxxxx 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	420	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.3	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	14.4	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.4			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.8]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 629		0	0 612		24	24	0	12	0	0	0
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:	12 629		0	0 612		24	24	0	12	0	0	0
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:	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 Volume:	12 629		0	0 612		24	24	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 629		0	0 612		24	24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	636 xxxx xxxxx			xxxx xxxx		xxxxx	963	1277	318	xxxx xxxx		xxxxx
Potent Cap.:	957 xxxx xxxxx			xxxx xxxx		xxxxx	257	168	684	xxxx xxxx		xxxxx
Move Cap.:	957 xxxx xxxxx			xxxx xxxx		xxxxx	255	166	684	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	377	290	xxxxx 323	285		xxxxx
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.06	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8 xxxx xxxxx			xxxxx 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	443	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.3	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	13.8	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.8			xxxxxx		
ApproachLOS:	*			*			B			*		

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

1:15-2:15 Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.8]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	18	742		0	0		631		24			28		0		9	0		0		0
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:	18	742		0	0		631		24			28		0		9	0		0		0
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:	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 Volume:	18	742		0	0		631		24			28		0		9	0		0		0
Reduct Vol:	0	0		0	0		0		0			0		0		0	0		0		0
FinalVolume:	18	742		0	0		631		24			28		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	655	xxxx	xxxxx	xxxx	xxxx	xxxxx						1038		1409		316	xxxx	xxxx	xxxxx		
Potent Cap.:	942	xxxx	xxxxx	xxxx	xxxx	xxxxx						230		140		686	xxxx	xxxx	xxxxx		
Move Cap.:	942	xxxx	xxxxx	xxxx	xxxx	xxxxx						227		137		686	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						355		261	xxxxx		275	254	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.08		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	403	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.8	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			14.8			xxxxxx											
ApproachLOS:	*			*			B			*											

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

1:15-2:15 Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[13.5]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	12	744		0	0		624		16			16		0		12	0		0		0
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:	12	744		0	0		624		16			16		0		12	0		0		0
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:	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 Volume:	12	744		0	0		624		16			16		0		12	0		0		0
Reduct Vol:	0	0		0	0		0		0			0		0		0	0		0		0
FinalVolume:	12	744		0	0		624		16			16		0		12	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	640	xxxx	xxxxx	xxxx	xxxx	xxxxx						1028		1400		320	xxxx	xxxx	xxxxx		
Potent Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx						233		142		682	xxxx	xxxx	xxxxx		
Move Cap.:	954	xxxx	xxxxx	xxxx	xxxx	xxxxx						231		140		682	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						359		264	xxxxx		280	261	xxxxx		
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.04		0.00		0.02	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	450	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.5	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			13.5			xxxxxx											
ApproachLOS:	*			*			B			*											

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

4:45-5:45pm Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.5]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	779	0	0	610	20	11	0	18	0	0	0				
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:	19	779	0	0	610	20	11	0	18	0	0	0				
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:	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 Volume:	19	779	0	0	610	20	11	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	19	779	0	0	610	20	11	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	630	xxxx	xxxxx	xxxx	xxxx	xxxxx	1038	1427	305	xxxx	xxxx	xxxxx				
Potent Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	230	136	697	xxxx	xxxx	xxxxx				
Move Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	134	697	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	357	256	xxxxx	262	250	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	512	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.5			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Base 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.7]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	794	0	0	628	0	4	0	4	0	0	0				
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	794	0	0	628	0	4	0	4	0	0	0				
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:	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 Volume:	0	794	0	0	628	0	4	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	794	0	0	628	0	4	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1025	1422	314	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	362	262	xxxxx	276	262	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	475	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.7	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.7			xxxxxx						
ApproachLOS:	*			*			B			*						

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

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9-10am Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.7]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	586	0	0	675	7			19	0	13		0	0	0	
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:	9	586	0	0	675	7			19	0	13		0	0	0	
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:	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 Volume:	9	586	0	0	675	7			19	0	13		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	9	586	0	0	675	7			19	0	13		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	682	xxxx	xxxxx	xxxx	xxxx	xxxxx			986	1279	338		xxxx	xxxx	xxxxx	
Potent Cap.:	920	xxxx	xxxxx	xxxx	xxxx	xxxxx			248	167	664		xxxx	xxxx	xxxxx	
Move Cap.:	920	xxxx	xxxxx	xxxx	xxxx	xxxxx			246	166	664		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			364	290	xxxxx		335	287	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.05	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	446	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.7	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.7			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.9]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	4	571	0	0	664	24			24	0	4		0	0	0	
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:	4	571	0	0	664	24			24	0	4		0	0	0	
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:	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 Volume:	4	571	0	0	664	24			24	0	4		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	4	571	0	0	664	24			24	0	4		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	688	xxxx	xxxxx	xxxx	xxxx	xxxxx			970	1255	344		xxxx	xxxx	xxxxx	
Potent Cap.:	916	xxxx	xxxxx	xxxx	xxxx	xxxxx			254	173	658		xxxx	xxxx	xxxxx	
Move Cap.:	916	xxxx	xxxxx	xxxx	xxxx	xxxxx			254	172	658		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			369	296	xxxxx		350	292	xxxxx	
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx			0.07	0.00	0.01		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	393	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.9	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			14.9			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.4]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	15	890		0		0	871		26		30		0		9		0		0		0
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		1.00
Initial Bse:	15	890		0		0	871		26		30		0		9		0		0		0
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		1.00
PHF 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		1.00
PHF Volume:	15	890		0		0	871		26		30		0		9		0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0
FinalVolume:	15	890		0		0	871		26		30		0		9		0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	897	xxxx	xxxxx	xxxx	xxxx	xxxxx					1346	1791		436	xxxx	xxxx	xxxxx				
Potent Cap.:	765	xxxx	xxxxx	xxxx	xxxx	xxxxx					145	82		574	xxxx	xxxx	xxxxx				
Move Cap.:	765	xxxx	xxxxx	xxxx	xxxx	xxxxx					143	80		574	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					269	200	xxxxx	216	193	xxxxx					
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					0.11	0.00	0.02	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.8	xxxx	xxxxx	xxxxx	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	307	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.4	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			18.4			xxxxxx											
ApproachLOS:	*			*			C			*											

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[18.3]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	4	881		0		0	856		24		24		0		4		0		0		0
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		1.00
Initial Bse:	4	881		0		0	856		24		24		0		4		0		0		0
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		1.00
PHF 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		1.00
PHF Volume:	4	881		0		0	856		24		24		0		4		0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0		0		0		0
FinalVolume:	4	881		0		0	856		24		24		0		4		0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	880	xxxx	xxxxx	xxxx	xxxx	xxxxx					1317	1757		440	xxxx	xxxx	xxxxx				
Potent Cap.:	777	xxxx	xxxxx	xxxx	xxxx	xxxxx					152	86		570	xxxx	xxxx	xxxxx				
Move Cap.:	777	xxxx	xxxxx	xxxx	xxxx	xxxxx					151	85		570	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					276	207	xxxxx	229	204	xxxxx					
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx					0.09	0.00	0.01	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	298	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.3	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			18.3			xxxxxx											
ApproachLOS:	*			*			C			*											

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1038		0	0 870		25	13	0	19	0	0	0
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:	19 1038		0	0 870		25	13	0	19	0	0	0
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:	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 Volume:	19 1038		0	0 870		25	13	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1038		0	0 870		25	13	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	895 xxxx xxxxx			xxxx xxxx xxxxx			1427	1946	435	xxxx xxxx xxxxx		
Potent Cap.:	767 xxxx xxxxx			xxxx xxxx xxxxx			128	66	575	xxxx xxxx xxxxx		
Move Cap.:	767 xxxx xxxxx			xxxx xxxx xxxxx			126	64	575	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			256	178	xxxxx 177	171	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.8 xxxx xxxxx			xxxxx 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	381	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.3	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[18.3]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	4 1041		0	0 873		16	16	0	4	0	0	0
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:	4 1041		0	0 873		16	16	0	4	0	0	0
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:	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 Volume:	4 1041		0	0 873		16	16	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	4 1041		0	0 873		16	16	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	889 xxxx xxxxx			xxxx xxxx xxxxx			1410	1930	445	xxxx xxxx xxxxx		
Potent Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			132	67	567	xxxx xxxx xxxxx		
Move Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			131	67	567	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			260	182	xxxxx 188	181	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.06	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.7 xxxx xxxxx			xxxxx 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	291	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	18.3	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1095		0	0 860		21	12	0	19	0	0	0
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:	20 1095		0	0 860		21	12	0	19	0	0	0
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:	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 Volume:	20 1095		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1095		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	881 xxxx	xxxxx	xxxx	xxxx	xxxxx		1448	1995	430	xxxx	xxxx	xxxxx
Potent Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		124	61	579	xxxx	xxxx	xxxxx
Move Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		122	59	579	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		253	170	xxxxx	165	165	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxxx	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	386	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	4	0	4	0	0	0
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 1111		0	0 879		0	4	0	4	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1435	1990	440	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		256	175	xxxxx	175	175	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	354	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.3]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	461	0	0	529	7			19	0	13		0	0	0	
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:	9	461	0	0	529	7			19	0	13		0	0	0	
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:	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 Volume:	9	461	0	0	529	7			19	0	13		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	9	461	0	0	529	7			19	0	13		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	536	xxxx	xxxxx	xxxx	xxxx	xxxxx			778	1008	265		xxxx	xxxx	xxxxx	
Potent Cap.:	1042	xxxx	xxxxx	xxxx	xxxx	xxxxx			338	242	740		xxxx	xxxx	xxxxx	
Move Cap.:	1042	xxxx	xxxxx	xxxx	xxxx	xxxxx			335	240	740		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			442	357	xxxxx		410	353	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	528	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.3	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.3			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[13.1]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	8	438	0	0	510	32			32	0	8		0	0	0	
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:	8	438	0	0	510	32			32	0	8		0	0	0	
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:	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 Volume:	8	438	0	0	510	32			32	0	8		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	8	438	0	0	510	32			32	0	8		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	542	xxxx	xxxxx	xxxx	xxxx	xxxxx			761	980	271		xxxx	xxxx	xxxxx	
Potent Cap.:	1037	xxxx	xxxxx	xxxx	xxxx	xxxxx			346	252	733		xxxx	xxxx	xxxxx	
Move Cap.:	1037	xxxx	xxxxx	xxxx	xxxx	xxxxx			344	250	733		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			447	365	xxxxx		427	358	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.07	0.00	0.01		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	485	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.1			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.3]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	15	693		0		0	680		26			30		0		9	0		0		0
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:	15	693		0		0	680		26			30		0		9	0		0		0
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:	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 Volume:	15	693		0		0	680		26			30		0		9	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	15	693		0		0	680		26			30		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	706	xxxx	xxxxx	xxxx	xxxx	xxxxx						1057		1403		340	xxxx	xxxx	xxxxx		
Potent Cap.:	902	xxxx	xxxxx	xxxx	xxxx	xxxxx						224		141		662	xxxx	xxxx	xxxxx		
Move Cap.:	902	xxxx	xxxxx	xxxx	xxxx	xxxxx						221		139		662	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						347		264	xxxxx		290	256	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	389	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx											
ApproachLOS:	*			*			C			*											

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

11-12pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.2]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	8	676		0		0	657		32			32		0		8	0		0		0
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:	8	676		0		0	657		32			32		0		8	0		0		0
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:	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 Volume:	8	676		0		0	657		32			32		0		8	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	8	676		0		0	657		32			32		0		8	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	689	xxxx	xxxxx	xxxx	xxxx	xxxxx						1027		1365		345	xxxx	xxxx	xxxxx		
Potent Cap.:	915	xxxx	xxxxx	xxxx	xxxx	xxxxx						234		149		657	xxxx	xxxx	xxxxx		
Move Cap.:	915	xxxx	xxxxx	xxxx	xxxx	xxxxx						232		147		657	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						355		273	xxxxx		305	268	xxxxx		
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	391	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			15.2			xxxxxx											
ApproachLOS:	*			*			C			*											

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.8]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	19	804		0		0	685		26			30		0		9	0		0		0
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:	19	804		0		0	685		26			30		0		9	0		0		0
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:	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 Volume:	19	804		0		0	685		26			30		0		9	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	19	804		0		0	685		26			30		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	711	xxxx	xxxxx	xxxx	xxxx	xxxxx						1125		1527		343	xxxx	xxxx	xxxxx		
Potent Cap.:	898	xxxx	xxxxx	xxxx	xxxx	xxxxx						202		119		659	xxxx	xxxx	xxxxx		
Move Cap.:	898	xxxx	xxxxx	xxxx	xxxx	xxxxx						199		116		659	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						330		239	xxxxx	250		232	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	373	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.8	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				15.8			xxxxxx										
ApproachLOS:	*			*				C			*										

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

1:15-2:15pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.7]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	4	799		0		0	670		24			24		0		4	0		0		0
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:	4	799		0		0	670		24			24		0		4	0		0		0
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:	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 Volume:	4	799		0		0	670		24			24		0		4	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	4	799		0		0	670		24			24		0		4	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	694	xxxx	xxxxx	xxxx	xxxx	xxxxx						1090		1489		347	xxxx	xxxx	xxxxx		
Potent Cap.:	911	xxxx	xxxxx	xxxx	xxxx	xxxxx						213		125		655	xxxx	xxxx	xxxxx		
Move Cap.:	911	xxxx	xxxxx	xxxx	xxxx	xxxxx						212		125		655	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						341		249	xxxxx	267		246	xxxxx		
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx						0.07		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	366	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.7	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				15.7			xxxxxx										
ApproachLOS:	*			*				C			*										

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	837	0	0	656	21	12	0	19	0	0	0				
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:	20	837	0	0	656	21	12	0	19	0	0	0				
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:	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 Volume:	20	837	0	0	656	21	12	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	837	0	0	656	21	12	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1115	1533	328	xxxx	xxxx	xxxxx				
Potent Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	205	118	674	xxxx	xxxx	xxxxx				
Move Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	115	674	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	237	xxxxx	240	230	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	483	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Base 2014 w/ Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	853	0	0	675	0	4	0	4	0	0	0				
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	853	0	0	675	0	4	0	4	0	0	0				
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:	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 Volume:	0	853	0	0	675	0	4	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	853	0	0	675	0	4	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1528	338	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	339	242	xxxxx	253	242	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	449	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	578	0	0	667	7			19	0	13		0	0	0	
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:	9	578	0	0	667	7			19	0	13		0	0	0	
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:	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 Volume:	9	578	0	0	667	7			19	0	13		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	9	578	0	0	667	7			19	0	13		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	674	xxxx	xxxxx	xxxx	xxxx	xxxxx			974	1263	334		xxxx	xxxx	xxxxx	
Potent Cap.:	927	xxxx	xxxxx	xxxx	xxxx	xxxxx			253	171	668		xxxx	xxxx	xxxxx	
Move Cap.:	927	xxxx	xxxxx	xxxx	xxxx	xxxxx			251	170	668		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			368	294	xxxxx		339	290	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.05	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	450	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.6			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.5]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	571	0	0	664	16			16	0	12		0	0	0	
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:	12	571	0	0	664	16			16	0	12		0	0	0	
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:	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 Volume:	12	571	0	0	664	16			16	0	12		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	12	571	0	0	664	16			16	0	12		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	680	xxxx	xxxxx	xxxx	xxxx	xxxxx			982	1267	340		xxxx	xxxx	xxxxx	
Potent Cap.:	922	xxxx	xxxxx	xxxx	xxxx	xxxxx			250	170	662		xxxx	xxxx	xxxxx	
Move Cap.:	922	xxxx	xxxxx	xxxx	xxxx	xxxxx			248	168	662		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			365	292	xxxxx		339	287	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	452	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.5			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.3]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	15	882		0		0	863		26			30		0		9	0		0		0
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:	15	882		0		0	863		26			30		0		9	0		0		0
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:	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 Volume:	15	882		0		0	863		26			30		0		9	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	15	882		0		0	863		26			30		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	889	xxxx	xxxxx	xxxx	xxxx	xxxxx						1334		1775		432	xxxx	xxxx	xxxxx		
Potent Cap.:	771	xxxx	xxxxx	xxxx	xxxx	xxxxx						148		84		578	xxxx	xxxx	xxxxx		
Move Cap.:	771	xxxx	xxxxx	xxxx	xxxx	xxxxx						146		82		578	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						272		202	xxxxx		218		195	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.11		0.00		0.02	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.8	xxxx	xxxxx	xxxxx	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	310	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.3	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				18.3			xxxxxx										
ApproachLOS:	*			*				C			*										

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[16.1]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	12	881		0		0	856		16			16		0		12	0		0		0
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:	12	881		0		0	856		16			16		0		12	0		0		0
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:	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 Volume:	12	881		0		0	856		16			16		0		12	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	12	881		0		0	856		16			16		0		12	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	872	xxxx	xxxxx	xxxx	xxxx	xxxxx						1329		1769		436	xxxx	xxxx	xxxxx		
Potent Cap.:	782	xxxx	xxxxx	xxxx	xxxx	xxxxx						149		84		574	xxxx	xxxx	xxxxx		
Move Cap.:	782	xxxx	xxxxx	xxxx	xxxx	xxxxx						147		83		574	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						273		204	xxxxx		221		200	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.06		0.00		0.02	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	353	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.1	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				16.1			xxxxxx										
ApproachLOS:	*			*				C			*										

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1034		0	0 866		25	13	0	19	0	0	0
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:	19 1034		0	0 866		25	13	0	19	0	0	0
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:	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 Volume:	19 1034		0	0 866		25	13	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1034		0	0 866		25	13	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	891 xxxx xxxxx			xxxx xxxx xxxxx			1421	1938	433	xxxx xxxx xxxxx		
Potent Cap.:	769 xxxx xxxxx			xxxx xxxx xxxxx			130	66	576	xxxx xxxx xxxxx		
Move Cap.:	769 xxxx xxxxx			xxxx xxxx xxxxx			127	65	576	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			257	178	xxxxx 178	172	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.8 xxxx xxxxx			xxxxx 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	383	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.3	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[16.6]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	8 1041		0	0 873		12	12	0	8	0	0	0
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:	8 1041		0	0 873		12	12	0	8	0	0	0
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:	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 Volume:	8 1041		0	0 873		12	12	0	8	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	8 1041		0	0 873		12	12	0	8	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	885 xxxx xxxxx			xxxx xxxx xxxxx			1416	1936	443	xxxx xxxx xxxxx		
Potent Cap.:	773 xxxx xxxxx			xxxx xxxx xxxxx			131	66	568	xxxx xxxx xxxxx		
Move Cap.:	773 xxxx xxxxx			xxxx xxxx xxxxx			130	66	568	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			258	181	xxxxx 185	179	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.7 xxxx xxxxx			xxxxx 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	330	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	16.6	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1095		0	0 860		21	12	0	19	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	20 1095		0	0 860		21	12	0	19	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	20 1095		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1095		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	881 xxxx xxxxx			xxxx xxxx xxxxx			1448	1995	430	xxxx xxxx xxxxx		
Potent Cap.:	776 xxxx xxxxx			xxxx xxxx xxxxx			124	61	579	xxxx xxxx xxxxx		
Move Cap.:	776 xxxx xxxxx			xxxx xxxx xxxxx			122	59	579	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			253	170	xxxxx 165	165	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	9.8 xxxx xxxxx			xxxxx 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	386	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.1	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass July Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	4	0	4	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	0 1111		0	0 879		0	4	0	4	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	0 1111		0	0 879		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1435	1990	440	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			256	175	xxxxx 175	175	xxxxx	
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.02	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	354	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.1	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.4	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.2]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	453	0	0	521	7			19	0	13		0	0	0	
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:	9	453	0	0	521	7			19	0	13		0	0	0	
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:	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 Volume:	9	453	0	0	521	7			19	0	13		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	9	453	0	0	521	7			19	0	13		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	528	xxxx	xxxxx	xxxx	xxxx	xxxxx			766	992	261		xxxx	xxxx	xxxxx	
Potent Cap.:	1049	xxxx	xxxxx	xxxx	xxxx	xxxxx			343	248	744		xxxx	xxxx	xxxxx	
Move Cap.:	1049	xxxx	xxxxx	xxxx	xxxx	xxxxx			341	246	744		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			446	361	xxxxx		415	357	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	533	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.5]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	438	0	0	510	24			24	0	12		0	0	0	
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:	12	438	0	0	510	24			24	0	12		0	0	0	
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:	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 Volume:	12	438	0	0	510	24			24	0	12		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	12	438	0	0	510	24			24	0	12		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	534	xxxx	xxxxx	xxxx	xxxx	xxxxx			765	984	267		xxxx	xxxx	xxxxx	
Potent Cap.:	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx			344	250	737		xxxx	xxxx	xxxxx	
Move Cap.:	1044	xxxx	xxxxx	xxxx	xxxx	xxxxx			341	248	737		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			446	363	xxxxx		420	356	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.05	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	514	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.5			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15 685	0	0	672	26		30	0	9	0	0	0
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:	15 685	0	0	672	26		30	0	9	0	0	0
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:	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 Volume:	15 685	0	0	672	26		30	0	9	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	15 685	0	0	672	26		30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	698 xxxx	xxxxx	xxxx	xxxx	xxxxx		1045	1387	336	xxxx	xxxx	xxxxx
Potent Cap.:	908 xxxx	xxxxx	xxxx	xxxx	xxxxx		228	144	666	xxxx	xxxx	xxxxx
Move Cap.:	908 xxxx	xxxxx	xxxx	xxxx	xxxxx		225	142	666	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		350	267	xxxxx 293	259	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.09	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	393	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[14.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 676	0	0	657	24		24	0	12	0	0	0
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:	12 676	0	0	657	24		24	0	12	0	0	0
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:	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 Volume:	12 676	0	0	657	24		24	0	12	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	12 676	0	0	657	24		24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	681 xxxx	xxxxx	xxxx	xxxx	xxxxx		1031	1369	341	xxxx	xxxx	xxxxx
Potent Cap.:	921 xxxx	xxxxx	xxxx	xxxx	xxxxx		232	148	661	xxxx	xxxx	xxxxx
Move Cap.:	921 xxxx	xxxxx	xxxx	xxxx	xxxxx		230	146	661	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		354	271	xxxxx 300	266	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	419	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	14.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.4			xxxxxx		
ApproachLOS:	*			*			B			*		

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.7]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	19	796	0	0	677	26	30	0	9	0	0	0						
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:	19	796	0	0	677	26	30	0	9	0	0	0						
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:	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 Volume:	19	796	0	0	677	26	30	0	9	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	19	796	0	0	677	26	30	0	9	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	703	xxxx	xxxxx	xxxx	xxxx	xxxxx	1113	1511	339	xxxx	xxxx	xxxxx						
Potent Cap.:	904	xxxx	xxxxx	xxxx	xxxx	xxxxx	206	121	663	xxxx	xxxx	xxxxx						
Move Cap.:	904	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	119	663	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	333	242	xxxxx	253	234	xxxxx						
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.01	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	376	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.7	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			15.7			xxxxxx								
ApproachLOS:	*			*			C			*								

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

1:15-2:15pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.0]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	12	799	0	0	670	16	16	0	12	0	0	0						
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:	12	799	0	0	670	16	16	0	12	0	0	0						
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:	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 Volume:	12	799	0	0	670	16	16	0	12	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	12	799	0	0	670	16	16	0	12	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	686	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1501	343	xxxx	xxxx	xxxxx						
Potent Cap.:	917	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	123	659	xxxx	xxxx	xxxxx						
Move Cap.:	917	xxxx	xxxxx	xxxx	xxxx	xxxxx	207	121	659	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	337	245	xxxxx	258	242	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	426	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.0	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			14.0			xxxxxx								
ApproachLOS:	*			*			B			*								

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	837	0	0	656	21	12	0	19	0	0	0				
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:	20	837	0	0	656	21	12	0	19	0	0	0				
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:	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 Volume:	20	837	0	0	656	21	12	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	837	0	0	656	21	12	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1115	1533	328	xxxx	xxxx	xxxxx				
Potent Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	205	118	674	xxxx	xxxx	xxxxx				
Move Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	115	674	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	237	xxxxx	240	230	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	483	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Base 2014 w/o Willits Bypass October Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	853	0	0	675	0	4	0	4	0	0	0				
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	853	0	0	675	0	4	0	4	0	0	0				
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:	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 Volume:	0	853	0	0	675	0	4	0	4	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	853	0	0	675	0	4	0	4	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1528	338	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	339	242	xxxxx	253	242	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	449	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

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9-10am Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	733	0	0	847	9	24	0	17	0	0	0
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:	12	733	0	0	847	9	24	0	17	0	0	0
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:	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 Volume:	12	733	0	0	847	9	24	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	733	0	0	847	9	24	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	856 xxxx	xxxxx	xxxx	xxxx	xxxxx		1238	1604	424	xxxx	xxxx	xxxxx
Potent Cap.:	793 xxxx	xxxxx	xxxx	xxxx	xxxxx		171	107	585	xxxx	xxxx	xxxxx
Move Cap.:	793 xxxx	xxxxx	xxxx	xxxx	xxxxx		169	105	585	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		290	228	xxxxx 262	224	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.08	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6 xxxx	xxxxx	xxxxx	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	367	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.6]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	729	0	0	848	16	16	0	12	0	0	0
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:	12	729	0	0	848	16	16	0	12	0	0	0
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:	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 Volume:	12	729	0	0	848	16	16	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	729	0	0	848	16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	864 xxxx	xxxxx	xxxx	xxxx	xxxxx		1245	1609	432	xxxx	xxxx	xxxxx
Potent Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		169	106	577	xxxx	xxxx	xxxxx
Move Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		167	104	577	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		288	228	xxxxx 264	223	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6 xxxx	xxxxx	xxxxx	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	367	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[24.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1121		0	0 1097		33	38	0	12	0	0	0
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:	20 1121		0	0 1097		33	38	0	12	0	0	0
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:	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 Volume:	20 1121		0	0 1097		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1121		0	0 1097		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1130 xxxx xxxxx			xxxx xxxx xxxxx			1698	2258	549	xxxx xxxx xxxxx		
Potent Cap.:	626 xxxx xxxxx			xxxx xxxx xxxxx			85	42	485	xxxx xxxx xxxxx		
Move Cap.:	626 xxxx xxxxx			xxxx xxxx xxxxx			83	40	485	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			200	145	xxxxx 150	137	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.19	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	10.9 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	233	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.8	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	24.6	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[19.9]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1125		0	0 1093		16	16	0	12	0	0	0
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:	12 1125		0	0 1093		16	16	0	12	0	0	0
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:	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 Volume:	12 1125		0	0 1093		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 1125		0	0 1093		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1109 xxxx xxxxx			xxxx xxxx xxxxx			1688	2250	555	xxxx xxxx xxxxx		
Potent Cap.:	637 xxxx xxxxx			xxxx xxxx xxxxx			86	42	481	xxxx xxxx xxxxx		
Move Cap.:	637 xxxx xxxxx			xxxx xxxx xxxxx			85	41	481	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			202	147	xxxxx 155	143	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.08	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	10.8 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	269	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	19.9	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.3]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	24	1308		0 0	1102		32		17		0		24		0	0
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	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	1308		0 0	1102		32		17		0		24		0	0
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	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	1308		0 0	1102		32		17		0		24		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	24	1308		0 0	1102		32		17		0		24		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8	6.5		6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5	4.0		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1134	xxxx	xxxxx	xxxx xxxx	xxxxx				1804	2458		551	xxxx	xxxx	xxxxx	
Potent Cap.:	623	xxxx	xxxxx	xxxx xxxx	xxxxx				72	31		483	xxxx	xxxx	xxxxx	
Move Cap.:	623	xxxx	xxxxx	xxxx xxxx	xxxxx				70	30		483	xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				188	125	xxxxx		117	118	xxxxx	
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx				0.09	0.00		0.05	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	11.0	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	B	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	292	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	19.3	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	* *	*	*	C	*	*	*	*					
ApproachDel:	xxxxxx			xxxxxx			19.3		xxxxxx							
ApproachLOS:	*			*			C		*							

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

1:15-2:15pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[20.7]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	8	1329		0 0	1114		12		12		0		8		0	0
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	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	1329		0 0	1114		12		12		0		8		0	0
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	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	1329		0 0	1114		12		12		0		8		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	8	1329		0 0	1114		12		12		0		8		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8	6.5		6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5	4.0		3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	1126	xxxx	xxxxx	xxxx xxxx	xxxxx				1801	2465		563	xxxx	xxxx	xxxxx	
Potent Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				73	31		475	xxxx	xxxx	xxxxx	
Move Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				72	30		475	xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				189	127	xxxxx		123	125	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx xxxx	xxxx				0.06	0.00		0.02	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	10.8	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	B	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	249	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx					
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	20.7	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	* *	*	*	C	*	*	*	*					
ApproachDel:	xxxxxx			xxxxxx			20.7		xxxxxx							
ApproachLOS:	*			*			C		*							

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

4:45-5:45pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	26	1396		0 0	1098		27		15		0	24	0		0	0
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:	26	1396		0 0	1098		27		15		0	24	0		0	0
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:	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 Volume:	26	1396		0 0	1098		27		15		0	24	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	26	1396		0 0	1098		27		15		0	24	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	1125	xxxx	xxxxx	xxxx xxxx	xxxxx				1848	2546		549	xxxx		xxxx	xxxxx
Potent Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				68		27	485	xxxx		xxxx	xxxxx
Move Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				65		26	485	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				183		116	xxxxx	105		111	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx				0.08	0.00		0.05	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	11.0	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	B	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx			297	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		0.4	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		19.0	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*	*	*		C	*	*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					19.0			xxxxxx				
ApproachLOS:	*			*					C			*				

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

4:45-5:45pm Peak Hour - Base 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[18.8]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1418		0 0	1122		0		4		0	4	0		0	0
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	1418		0 0	1122		0		4		0	4	0		0	0
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:	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 Volume:	0	1418		0 0	1122		0		4		0	4	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	0	1418		0 0	1122		0		4		0	4	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1831	2540		561	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx		xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				186		121	xxxxx	114		121	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.02	0.00		0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx			268	xxxxx		xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		18.8	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*	*	*		C	*	*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					18.8			xxxxxx				
ApproachLOS:	*			*					C			*				

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

9-10am Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.7]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	12	571		0		0	659		9			24		0		17	0		0		0
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:	12	571		0		0	659		9			24		0		17	0		0		0
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:	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 Volume:	12	571		0		0	659		9			24		0		17	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	12	571		0		0	659		9			24		0		17	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	668	xxxx	xxxxx	xxxx	xxxx	xxxxx						969		1254		330	xxxx	xxxx	xxxxx		
Potent Cap.:	931	xxxx	xxxxx	xxxx	xxxx	xxxxx						255		173		672	xxxx	xxxx	xxxxx		
Move Cap.:	931	xxxx	xxxxx	xxxx	xxxx	xxxxx						252		171		672	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						370		295	xxxxx	338		290	xxxxx		
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.06	0.00		0.03	xxxx	xxxx	xxxx			
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	455	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.7	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			13.7			xxxxxx											
ApproachLOS:	*			*			B			*											

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

9-10am Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.0]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	12	559		0		0	652		24			24		0		12	0		0		0
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:	12	559		0		0	652		24			24		0		12	0		0		0
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:	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 Volume:	12	559		0		0	652		24			24		0		12	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	12	559		0		0	652		24			24		0		12	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	676	xxxx	xxxxx	xxxx	xxxx	xxxxx						968		1247		338	xxxx	xxxx	xxxxx		
Potent Cap.:	925	xxxx	xxxxx	xxxx	xxxx	xxxxx						255		175		664	xxxx	xxxx	xxxxx		
Move Cap.:	925	xxxx	xxxxx	xxxx	xxxx	xxxxx						253		173		664	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						370		297	xxxxx	345		291	xxxxx		
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx						0.06	0.00		0.02	xxxx	xxxx	xxxx			
Level Of Service Module:																					
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	434	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.0	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			14.0			xxxxxx											
ApproachLOS:	*			*			B			*											

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

11-12pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[18.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	867	0	0	851	33	38	0	12	0	0	0				
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:	20	867	0	0	851	33	38	0	12	0	0	0				
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:	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 Volume:	20	867	0	0	851	33	38	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	867	0	0	851	33	38	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	884	xxxx	xxxxx	xxxx	xxxx	xxxxx	1325	1758	426	xxxx	xxxx	xxxxx				
Potent Cap.:	774	xxxx	xxxxx	xxxx	xxxx	xxxxx	150	86	583	xxxx	xxxx	xxxxx				
Move Cap.:	774	xxxx	xxxxx	xxxx	xxxx	xxxxx	147	83	583	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	274	204	xxxxx	218	195	xxxxx				
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.8	xxxx	xxxxx	xxxxx	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	314	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			18.6			xxxxxx						
ApproachLOS:	*			*			C			*						

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

11-12pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.0]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	863	0	0	839	24	24	0	12	0	0	0				
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:	12	863	0	0	839	24	24	0	12	0	0	0				
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:	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 Volume:	12	863	0	0	839	24	24	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	863	0	0	839	24	24	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	863	xxxx	xxxxx	xxxx	xxxx	xxxxx	1307	1738	432	xxxx	xxxx	xxxxx				
Potent Cap.:	788	xxxx	xxxxx	xxxx	xxxx	xxxxx	154	88	578	xxxx	xxxx	xxxxx				
Move Cap.:	788	xxxx	xxxxx	xxxx	xxxx	xxxxx	152	87	578	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	278	208	xxxxx	227	204	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	337	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			17.0			xxxxxx						
ApproachLOS:	*			*			C			*						

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

1:15-2:15pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1013		0	0 860		33	38	0	12	0	0	0
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:	24 1013		0	0 860		33	38	0	12	0	0	0
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:	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 Volume:	24 1013		0	0 860		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1013		0	0 860		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	893 xxxx xxxxx			xxxx xxxx		xxxxx	1415	1921	430	xxxx xxxx		xxxxx
Potent Cap.:	768 xxxx xxxxx			xxxx xxxx		xxxxx	131	68	579	xxxx xxxx		xxxxx
Move Cap.:	768 xxxx xxxxx			xxxx xxxx		xxxxx	128	66	579	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	258	180	xxxxx 180		172	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.15	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx xxxxx			xxxxx 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	297	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	19.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[16.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1021		0	0 856		16	16	0	12	0	0	0
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:	12 1021		0	0 856		16	16	0	12	0	0	0
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:	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 Volume:	12 1021		0	0 856		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 1021		0	0 856		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	872 xxxx xxxxx			xxxx xxxx		xxxxx	1399	1909	436	xxxx xxxx		xxxxx
Potent Cap.:	782 xxxx xxxxx			xxxx xxxx		xxxxx	134	69	574	xxxx xxxx		xxxxx
Move Cap.:	782 xxxx xxxxx			xxxx xxxx		xxxxx	132	68	574	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	262	184	xxxxx 187		181	xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx	xxxx		0.06	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx xxxxx			xxxxx 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	341	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	16.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	26 1067		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
Initial Bse:	26 1067		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	26 1067		0	0 838		27	15	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	26 1067		0	0 838		27	15	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	865 xxxx	xxxxx	xxxx	xxxx	xxxxx		1424	1957	419	xxxx	xxxx	xxxxx
Potent Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		129	64	589	xxxx	xxxx	xxxxx
Move Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		126	62	589	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		257	174	xxxxx	167	167	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	394	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.2]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1089		0	0 862		0	4	0	4	0	0	0
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	1.00	1.00
Initial Bse:	0 1089		0	0 862		0	4	0	4	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	0 1089		0	0 862		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1089		0	0 862		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1407	1951	431	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		262	180	xxxxx	181	180	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	361	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	828		0 0	960		10		27		0		19		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	14	828		0 0	960		10		27		0		19		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	14	828		0 0	960		10		27		0		19		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	14	828		0 0	960		10		27		0		19		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	970	xxxx	xxxxx	xxxx	xxxx	xxxxx			1402		1816		480	xxxx	xxxx	xxxxx
Potent Cap.:	719	xxxx	xxxxx	xxxx	xxxx	xxxxx			133		79		537	xxxx	xxxx	xxxxx
Move Cap.:	719	xxxx	xxxxx	xxxx	xxxx	xxxxx			131		77		537	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			251		196	xxxxx	224		191	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx			0.11		0.00		0.04	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	322	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			18.0			xxxxxx						
ApproachLOS:	*			*			C			*						

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

9-10am Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[17.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	828		0 0	963		16		16		0		12		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	12	828		0 0	963		16		16		0		12		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	12	828		0 0	963		16		16		0		12		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	12	828		0 0	963		16		16		0		12		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	979	xxxx	xxxxx	xxxx	xxxx	xxxxx			1409		1823		490	xxxx	xxxx	xxxxx
Potent Cap.:	713	xxxx	xxxxx	xxxx	xxxx	xxxxx			132		78		530	xxxx	xxxx	xxxxx
Move Cap.:	713	xxxx	xxxxx	xxxx	xxxx	xxxxx			130		77		530	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			249		196	xxxxx	226		191	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx			0.06		0.00		0.02	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	10.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	322	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			17.2			xxxxxx						
ApproachLOS:	*			*			C			*						

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

11-12pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[30.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22 1259		0	0 1243		38	43		0	14		0
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:	22 1259		0	0 1243		38	43		0	14		0
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:	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 Volume:	22 1259		0	0 1243		38	43		0	14		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	22 1259		0	0 1243		38	43		0	14		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5		6.9 xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0		3.3 xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1281 xxxx xxxxx			xxxx xxxx		xxxxx	1917	2546		622 xxxx	xxxx	xxxxx
Potent Cap.:	549 xxxx xxxxx			xxxx xxxx		xxxxx	61	27		435 xxxx	xxxx	xxxxx
Move Cap.:	549 xxxx xxxxx			xxxx xxxx		xxxxx	59	26		435 xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	167	119		xxxxx 122	112	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx		xxxx	0.26	0.00		0.03 xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Control Del:	11.8 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx		xxxxx xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*		* *	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	197		xxxxx xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	1.1		xxxxx xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	30.6		xxxxx xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*		*	D		* *	*	*
ApproachDel:	xxxxxx			xxxxxx			30.6			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[23.1]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1277		0	0 1241		16	16		0	12		0
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:	12 1277		0	0 1241		16	16		0	12		0
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:	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 Volume:	12 1277		0	0 1241		16	16		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	12 1277		0	0 1241		16	16		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5		6.9 xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0		3.3 xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1257 xxxx xxxxx			xxxx xxxx		xxxxx	1912	2550		629 xxxx	xxxx	xxxxx
Potent Cap.:	560 xxxx xxxxx			xxxx xxxx		xxxxx	61	27		430 xxxx	xxxx	xxxxx
Move Cap.:	560 xxxx xxxxx			xxxx xxxx		xxxxx	60	27		430 xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	168	120		xxxxx 125	117	xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx xxxx		xxxx	0.10	0.00		0.03 xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Control Del:	11.6 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx		xxxxx xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*		* *	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	227		xxxxx xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.4		xxxxx xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	23.1		xxxxx xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*		*	C		* *	*	*
ApproachDel:	xxxxxx			xxxxxx			23.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1494		0	0 1250		36	19		0	27		0
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:	27 1494		0	0 1250		36	19		0	27		0
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:	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 Volume:	27 1494		0	0 1250		36	19		0	27		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	27 1494		0	0 1250		36	19		0	27		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8		6.5	6.9 xxxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5		4.0	3.3 xxxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1286 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2051 2798		625	xxxx		xxxxx
Potent Cap.:	546 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	49		19	433		xxxxx
Move Cap.:	546 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	47		18	433		xxxxx
Total Cap:	xxxx xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	154		99	xxxxx		93 xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx xxxx		xxxx	0.12 0.00		0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	248	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	22.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: C[24.1]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	8 1509		0	0 1265		12	12		0	8		0
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:	8 1509		0	0 1265		12	12		0	8		0
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:	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 Volume:	8 1509		0	0 1265		12	12		0	8		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	8 1509		0	0 1265		12	12		0	8		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8		6.5	6.9 xxxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5		4.0	3.3 xxxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1277 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2042 2796		639	xxxx		xxxxx
Potent Cap.:	550 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	50		19	424		xxxxx
Move Cap.:	550 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	49		19	424		xxxxx
Total Cap:	xxxx xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	156		102	xxxxx		96 100 xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx xxxx		xxxx	0.08 0.00		0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.6 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	209	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	24.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1585		0	0 1247		31	17	0	27	0	0	0
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:	29 1585		0	0 1247		31	17	0	27	0	0	0
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:	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 Volume:	29 1585		0	0 1247		31	17	0	27	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	29 1585		0	0 1247		31	17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1278 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	2098	2890	624	xxxx	xxxx	xxxxx
Potent Cap.:	550 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	46	16	434	xxxx	xxxx	xxxxx
Move Cap.:	550 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	44	15	434	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	150	92	xxxxx	79	87	xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B *		*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	251	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	22.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *		*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[21.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1610		0	0 1274		0	4	0	4	0	0	0
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 1610		0	0 1274		0	4	0	4	0	0	0
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:	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 Volume:	0 1610		0	0 1274		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1610		0	0 1274		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		2079	2884	637	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		47	16	425	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		47	16	425	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		154	97	xxxxx	87	97	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *		*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	226	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx		xxxxx	21.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *		*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[14.9]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	645	0	0	745	10	27	0	19	0	0	0				
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:	14	645	0	0	745	10	27	0	19	0	0	0				
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:	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 Volume:	14	645	0	0	745	10	27	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	14	645	0	0	745	10	27	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	755	xxxx	xxxxx	xxxx	xxxx	xxxxx	1096	1418	373	xxxx	xxxx	xxxxx				
Potent Cap.:	865	xxxx	xxxxx	xxxx	xxxx	xxxxx	211	138	631	xxxx	xxxx	xxxxx				
Move Cap.:	865	xxxx	xxxxx	xxxx	xxxx	xxxxx	208	136	631	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	330	261	xxxxx	298	256	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	411	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.9	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			14.9			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.1]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	635	0	0	740	24	24	0	12	0	0	0				
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:	12	635	0	0	740	24	24	0	12	0	0	0				
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:	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 Volume:	12	635	0	0	740	24	24	0	12	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	635	0	0	740	24	24	0	12	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	764	xxxx	xxxxx	xxxx	xxxx	xxxxx	1094	1411	382	xxxx	xxxx	xxxxx				
Potent Cap.:	858	xxxx	xxxxx	xxxx	xxxx	xxxxx	212	140	622	xxxx	xxxx	xxxxx				
Move Cap.:	858	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	138	622	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	330	263	xxxxx	306	257	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.3	xxxx	xxxxx	xxxxx	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	391	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx						
ApproachLOS:	*			*			C			*						

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

11-12pm Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[21.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22	982	0	0	963	38	43	0	14	0	0	0
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:	22	982	0	0	963	38	43	0	14	0	0	0
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:	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 Volume:	22	982	0	0	963	38	43	0	14	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	22	982	0	0	963	38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1001 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1498	1989	482	xxxx	xxxx	xxxxx
Potent Cap.:	700 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	115	62	536	xxxx	xxxx	xxxxx
Move Cap.:	700 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	113	60	536	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	237	173	xxxxx	183	164	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	274	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.0]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	980	0	0	953	24	24	0	12	0	0	0
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:	12	980	0	0	953	24	24	0	12	0	0	0
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:	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 Volume:	12	980	0	0	953	24	24	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	980	0	0	953	24	24	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	977 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1479	1969	489	xxxx	xxxx	xxxxx
Potent Cap.:	714 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	119	63	531	xxxx	xxxx	xxxxx
Move Cap.:	714 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	117	62	531	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	240	177	xxxxx	191	173	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.1 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	294	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15 Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1148		0	0 974		38	43	0	14	0	0	0
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	1.00	1.00
Initial Bse:	27 1148		0	0 974		38	43	0	14	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	27 1148		0	0 974		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	27 1148		0	0 974		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1012 xxxx	xxxxx		xxxx	xxxx	xxxxx	1602	2176	487	xxxx	xxxx	xxxxx
Potent Cap.:	693 xxxx	xxxxx		xxxx	xxxx	xxxxx	98	47	532	xxxx	xxxx	xxxxx
Move Cap.:	693 xxxx	xxxxx		xxxx	xxxx	xxxxx	96	45	532	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	221	150	xxxxx	146	142	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx	xxxx	xxxx	0.19	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.4 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	258	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	22.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				22.9		xxxxxx		
ApproachLOS:	*			*				C		*		

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

1:15-2:15 Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[18.3]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12 1159		0	0 972		16	16	0	12	0	0	0
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	1.00	1.00
Initial Bse:	12 1159		0	0 972		16	16	0	12	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	12 1159		0	0 972		16	16	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	12 1159		0	0 972		16	16	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	988 xxxx	xxxxx		xxxx	xxxx	xxxxx	1584	2163	494	xxxx	xxxx	xxxxx
Potent Cap.:	708 xxxx	xxxxx		xxxx	xxxx	xxxxx	101	48	526	xxxx	xxxx	xxxxx
Move Cap.:	708 xxxx	xxxxx		xxxx	xxxx	xxxxx	100	47	526	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	225	154	xxxxx	154	151	xxxxx
Volume/Cap:	0.02 xxxx	xxxx		xxxx	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	298	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	18.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				18.3		xxxxxx		
ApproachLOS:	*			*				C		*		

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

4:45-5:45pm Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1211		0	0 952		31	17	0	27	0	0	0
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	1.00	1.00
Initial Bse:	29 1211		0	0 952		31	17	0	27	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	29 1211		0	0 952		31	17	0	27	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	29 1211		0	0 952		31	17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	983 xxxx	xxxxx	xxxx	xxxx	xxxxx		1616	2221	476	xxxx	xxxx	xxxxx
Potent Cap.:	711 xxxx	xxxxx	xxxx	xxxx	xxxxx		96	44	541	xxxx	xxxx	xxxxx
Move Cap.:	711 xxxx	xxxxx	xxxx	xxxx	xxxxx		93	42	541	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		220	144	xxxxx	134	137	xxxxx
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx		0.08	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B *	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	346	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Base 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.7]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1236		0	0 979		0	4	0	4	0	0	0
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	1.00	1.00
Initial Bse:	0 1236		0	0 979		0	4	0	4	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	0 1236		0	0 979		0	4	0	4	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1236		0	0 979		0	4	0	4	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1597	2215	490	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		99	44	530	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		99	44	530	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		225	150	xxxxx	147	150	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	316	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	16.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9	554	0	0	638	7	18	0	12	0	0	0
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:	9	554	0	0	638	7	18	0	12	0	0	0
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:	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 Volume:	9	554	0	0	638	7	18	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	554	0	0	638	7	18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	645 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	933	1210	319	xxxx	xxxx	xxxxx
Potent Cap.:	950 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	269	184	683	xxxx	xxxx	xxxxx
Move Cap.:	950 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	267	182	683	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	353	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[16.8]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	531	0	0	618	32	32	0	44	0	0	0
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:	44	531	0	0	618	32	32	0	44	0	0	0
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:	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 Volume:	44	531	0	0	618	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	531	0	0	618	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	650 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	988	1253	325	xxxx	xxxx	xxxxx
Potent Cap.:	946 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	248	174	677	xxxx	xxxx	xxxxx
Move Cap.:	946 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	239	165	677	xxxx	xxxx	xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	382	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	16.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[27.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14	838	0	0	820	24	28	0	9	0	0	0
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:	14	838	0	0	820	24	28	0	9	0	0	0
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:	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 Volume:	14	838	0	0	820	24	28	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	838	0	0	820	24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	844 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1267	1686	410	xxxx	xxxx	xxxxx
Potent Cap.:	801 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	163	95	596	xxxx	xxxx	xxxxx
Move Cap.:	801 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	161	93	596	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.17	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	196	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	27.6	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	D	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			27.6			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[24.5]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	820	0	0	797	32	32	0	44	0	0	0
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:	44	820	0	0	797	32	32	0	44	0	0	0
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:	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 Volume:	44	820	0	0	797	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	820	0	0	797	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	829 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1311	1721	415	xxxx	xxxx	xxxxx
Potent Cap.:	811 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	153	90	592	xxxx	xxxx	xxxxx
Move Cap.:	811 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	146	85	592	xxxx	xxxx	xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	260	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	9.7 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	24.5	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			24.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[20.5]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	18	979	0	0	822	23	12	0	18	0	0	0				
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:	18	979	0	0	822	23	12	0	18	0	0	0				
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:	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 Volume:	18	979	0	0	822	23	12	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	18	979	0	0	822	23	12	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	845	xxxx	xxxxx	xxxx	xxxx	xxxxx	1348	1837	411	xxxx	xxxx	xxxxx				
Potent Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	145	77	596	xxxx	xxxx	xxxxx				
Move Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	142	75	596	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	262	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			20.5		xxxxxx							
ApproachLOS:	*			*			C		*							

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

1:15-2:15pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: D[26.2]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	32	969	0	0	812	28	28	0	32	0	0	0				
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:	32	969	0	0	812	28	28	0	32	0	0	0				
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:	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 Volume:	32	969	0	0	812	28	28	0	32	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	32	969	0	0	812	28	28	0	32	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	840	xxxx	xxxxx	xxxx	xxxx	xxxxx	1375	1859	420	xxxx	xxxx	xxxxx				
Potent Cap.:	804	xxxx	xxxxx	xxxx	xxxx	xxxxx	139	74	588	xxxx	xxxx	xxxxx				
Move Cap.:	804	xxxx	xxxxx	xxxx	xxxx	xxxxx	135	71	588	xxxx	xxxx	xxxxx				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	0.00	0.05	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	229	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	26.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			26.2		xxxxxx							
ApproachLOS:	*			*			D		*							

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

4:45-5:45pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.7]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	17	1013		0 0	800			20	11		0	18	0		0	0
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:	17	1013		0 0	800			20	11		0	18	0		0	0
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:	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 Volume:	17	1013		0 0	800			20	11		0	18	0		0	0
Reduct Vol:	0	0		0 0	0			0	0		0	0	0		0	0
FinalVolume:	17	1013		0 0	800			20	11		0	18	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	820	xxxx	xxxxx	xxxx xxxx	xxxxx				1341	1847		400	xxxx	xxxx	xxxxx	
Potent Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				146		75	605	xxxx	xxxx	xxxxx	
Move Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				144		74	605	xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.08	0.00		0.03	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	9.5	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	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		273	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		0.4	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		19.7	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*		C	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					19.7			xxxxxx				
ApproachLOS:	*			*					C			*				

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

4:45-5:45pm Peak Hour - Project 2010 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[21.0]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1034		0 0	818			0	6		0	6	0		0	0
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	1034		0 0	818			0	6		0	6	0		0	0
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:	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 Volume:	0	1034		0 0	818			0	6		0	6	0		0	0
Reduct Vol:	0	0		0 0	0			0	0		0	0	0		0	0
FinalVolume:	0	1034		0 0	818			0	6		0	6	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1335	1852		409	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148		75	597	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148		75	597	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.04	0.00		0.01	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*		*	*	*	
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx		237	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		0.2	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		21.0	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	A	*	*	*	*	*	*		C	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					21.0			xxxxxx				
ApproachLOS:	*			*					C			*				

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

9-10am Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 443		0	0 507		7	18	0	12	0	0	0
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	1.00	1.00
Initial Bse:	9 443		0	0 507		7	18	0	12	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	9 443		0	0 507		7	18	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	9 443		0	0 507		7	18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	514 xxxx	xxxxx		xxxx xxxx		xxxxx	747	968	254	xxxx	xxxx	xxxxx
Potent Cap.:	1062 xxxx	xxxxx		xxxx xxxx		xxxxx	353	256	752	xxxx	xxxx	xxxxx
Move Cap.:	1062 xxxx	xxxxx		xxxx xxxx		xxxxx	351	254	752	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx		xxxx xxxx		xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx	xxxxx		xxxxx 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	446	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	13.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.7			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[15.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 408		0	0 475		44	44	0	56	0	0	0
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	1.00	1.00
Initial Bse:	56 408		0	0 475		44	44	0	56	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	56 408		0	0 475		44	44	0	56	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	56 408		0	0 475		44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	519 xxxx	xxxxx		xxxx xxxx		xxxxx	813	1017	260	xxxx	xxxx	xxxxx
Potent Cap.:	1057 xxxx	xxxxx		xxxx xxxx		xxxxx	320	239	745	xxxx	xxxx	xxxxx
Move Cap.:	1057 xxxx	xxxxx		xxxx xxxx		xxxxx	307	226	745	xxxx	xxxx	xxxxx
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx		xxxx	0.14	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.6 xxxx	xxxxx		xxxxx 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	458	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.6 xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	15.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14	659	0	0	647	24	28	0	9	0	0	0
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:	14	659	0	0	647	24	28	0	9	0	0	0
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:	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 Volume:	14	659	0	0	647	24	28	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	659	0	0	647	24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	671 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1005	1334	324	xxxx	xxxx	xxxxx
Potent Cap.:	929 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	242	155	678	xxxx	xxxx	xxxxx
Move Cap.:	929 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	239	153	678	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9 xxxx	xxxxx	xxxxx	xxxx	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	284	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[19.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56	629	0	0	612	44	44	0	56	0	0	0
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:	56	629	0	0	612	44	44	0	56	0	0	0
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:	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 Volume:	56	629	0	0	612	44	44	0	56	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	629	0	0	612	44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	656 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1061	1375	328	xxxx	xxxx	xxxxx
Potent Cap.:	941 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	222	147	674	xxxx	xxxx	xxxxx
Move Cap.:	941 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	212	138	674	xxxx	xxxx	xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1 xxxx	xxxxx	xxxxx	xxxx	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	344	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx	19.7		xxxxxx		
ApproachLOS:	*			*			*	C		*		

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

1:15-2:15 Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[21.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	18	758	0	0	647	24	28	0	9	0	0	0
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:	18	758	0	0	647	24	28	0	9	0	0	0
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:	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 Volume:	18	758	0	0	647	24	28	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	18	758	0	0	647	24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	671	xxxx	xxxxx	xxxx	xxxx	xxxxx	1062	1441	324	xxxx	xxxx	xxxxx
Potent Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx	222	134	678	xxxx	xxxx	xxxxx
Move Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx	219	131	678	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	262	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15 Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[18.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	744	0	0	624	32	32	0	44	0	0	0
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:	44	744	0	0	624	32	32	0	44	0	0	0
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:	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 Volume:	44	744	0	0	624	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	744	0	0	624	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	656	xxxx	xxxxx	xxxx	xxxx	xxxxx	1100	1472	328	xxxx	xxxx	xxxxx
Potent Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx	210	128	674	xxxx	xxxx	xxxxx
Move Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	122	674	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.16	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	340	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[15.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	781		0 0	610			20	11			0	18			0
Growth Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
Initial Bse:	19	781		0 0	610			20	11			0	18			0
User Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
PHF Volume:	19	781		0 0	610			20	11			0	18			0
Reduct Vol:	0	0		0 0	0			0	0			0	0			0
FinalVolume:	19	781		0 0	610			20	11			0	18			0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	630	xxxx	xxxxx	xxxx xxxx	xxxxx				1039		1429		305	xxxx	xxxx	xxxxx
Potent Cap.:	962	xxxx	xxxxx	xxxx xxxx	xxxxx				230		136		697	xxxx	xxxx	xxxxx
Move Cap.:	962	xxxx	xxxxx	xxxx xxxx	xxxxx				226		133		697	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.05		0.00		0.03	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx	xxxx	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		390	xxxxx	xxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.2	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		15.0	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shared LOS:	*	*		* *	*			*	B			*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx					15.0				xxxxxx			
ApproachLOS:	*			*					B				*			

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

4:45-5:45pm Peak Hour - Project 2010 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.7]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	794		0 0	628			0	6			0	6			0
Growth Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
Initial Bse:	0	794		0 0	628			0	6			0	6			0
User Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00			1.00	1.00			1.00	1.00			1.00
PHF Volume:	0	794		0 0	628			0	6			0	6			0
Reduct Vol:	0	0		0 0	0			0	0			0	0			0
FinalVolume:	0	794		0 0	628			0	6			0	6			0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1025		1422		314	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				234		137		688	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				234		137		688	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.03		0.00		0.01	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	*	*		* *	*			*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		350	xxxxx	xxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.1	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		15.7	xxxxx	xxxxx	xxxx	xxxx	xxxxx
Shared LOS:	A	*		* *	*			*	C			*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx					15.7				xxxxxx			
ApproachLOS:	*			*					C				*			

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[17.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 610	0	0	699	7		19	0	13	0	0	0
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	1.00
Initial Bse:	9 610	0	0	699	7		19	0	13	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	9 610	0	0	699	7		19	0	13	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	9 610	0	0	699	7		19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	706 xxxx xxxxx		xxxx	xxxx	xxxxx		1022	1327	350	xxxx	xxxx	xxxxx
Potent Cap.:	902 xxxx xxxxx		xxxx	xxxx	xxxxx		235	157	652	xxxx	xxxx	xxxxx
Move Cap.:	902 xxxx xxxxx		xxxx	xxxx	xxxxx		234	155	652	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.08	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx xxxxx		xxxxx	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	316	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	17.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[21.1]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	28 571	0	0	664	48		48	0	28	0	0	0
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	1.00
Initial Bse:	28 571	0	0	664	48		48	0	28	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	28 571	0	0	664	48		48	0	28	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	28 571	0	0	664	48		48	0	28	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	712 xxxx xxxxx		xxxx	xxxx	xxxxx		1030	1315	356	xxxx	xxxx	xxxxx
Potent Cap.:	897 xxxx xxxxx		xxxx	xxxx	xxxxx		233	159	646	xxxx	xxxx	xxxxx
Move Cap.:	897 xxxx xxxxx		xxxx	xxxx	xxxxx		227	154	646	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.21	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1 xxxx xxxxx		xxxxx	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	299	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	21.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[33.6]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	15	914		0 0	895		26		30		0		9		0	0		0
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:	15	914		0 0	895		26		30		0		9		0	0		0
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:	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 Volume:	15	914		0 0	895		26		30		0		9		0	0		0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0		0
FinalVolume:	15	914		0 0	895		26		30		0		9		0	0		0
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8		6.5		6.9	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5		4.0		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	921	xxxx	xxxxx	xxxx	xxxx	xxxxx		1382		1839		448	xxxx	xxxx	xxxxx			
Potent Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx		137		76		564	xxxx	xxxx	xxxxx			
Move Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx		135		75		564	xxxx	xxxx	xxxxx			
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx		0.22		0.00		0.02	xxxx	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.9	xxxx	xxxxx	xxxxx	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	164	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	33.6	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx				33.6		xxxxxx								
ApproachLOS:	*			*				D		*								

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: E[36.9]

Street Name:	US 101									Quarry Access								
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	28	881		0 0	856		48		48		0		28		0	0		0
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:	28	881		0 0	856		48		48		0		28		0	0		0
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:	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 Volume:	28	881		0 0	856		48		48		0		28		0	0		0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0		0
FinalVolume:	28	881		0 0	856		48		48		0		28		0	0		0
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8		6.5		6.9	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5		4.0		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																		
Cnflict Vol:	904	xxxx	xxxxx	xxxx	xxxx	xxxxx		1377		1817		452	xxxx	xxxx	xxxxx			
Potent Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx		139		79		560	xxxx	xxxx	xxxxx			
Move Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx		135		76		560	xxxx	xxxx	xxxxx			
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx		0.36		0.00		0.05	xxxx	xxxx	xxxx			
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.9	xxxx	xxxxx	xxxxx	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	187	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.8	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	36.9	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	A	*	*	*	*	*	*	E	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx				36.9		xxxxxx								
ApproachLOS:	*			*				E		*								

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[23.7]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	1062		0 0	894		25		13		0	19	0		0	0
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:	19	1062		0 0	894		25		13		0	19	0		0	0
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:	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 Volume:	19	1062		0 0	894		25		13		0	19	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	19	1062		0 0	894		25		13		0	19	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	919	xxxx	xxxxx	xxxx xxxx	xxxxx				1463		1994	447	xxxx	xxxx	xxxxx	
Potent Cap.:	751	xxxx	xxxxx	xxxx xxxx	xxxxx				122		61	564	xxxx	xxxx	xxxxx	
Move Cap.:	751	xxxx	xxxxx	xxxx xxxx	xxxxx				119		60	564	xxxx	xxxx	xxxxx	
Volume/Cap:	0.03	xxxx	xxxx	xxxx xxxx	xxxx				0.11		0.00	0.03	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.9	xxxx	xxxxx	xxxxx 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		224	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.5	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		23.7	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					23.7				xxxxxx			
ApproachLOS:	*			*					C				*			

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: E[39.3]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	1041		0 0	873		40		40		0	20	0		0	0
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:	20	1041		0 0	873		40		40		0	20	0		0	0
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:	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 Volume:	20	1041		0 0	873		40		40		0	20	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	20	1041		0 0	873		40		40		0	20	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	913	xxxx	xxxxx	xxxx xxxx	xxxxx				1454		1974	457	xxxx	xxxx	xxxxx	
Potent Cap.:	755	xxxx	xxxxx	xxxx xxxx	xxxxx				123		63	557	xxxx	xxxx	xxxxx	
Move Cap.:	755	xxxx	xxxxx	xxxx xxxx	xxxxx				121		61	557	xxxx	xxxx	xxxxx	
Volume/Cap:	0.03	xxxx	xxxx	xxxx xxxx	xxxx				0.33		0.00	0.04	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.9	xxxx	xxxxx	xxxxx 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		164	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	0.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		1.6	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	9.9	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		39.3	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	A	*		* *	*		*		E		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					39.3				xxxxxx			
ApproachLOS:	*			*					E				*			

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[22.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1097		0	0 860		21	12	0	19	0	0	0
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:	20 1097		0	0 860		21	12	0	19	0	0	0
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:	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 Volume:	20 1097		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1097		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	881 xxxx	xxxxx	xxxx	xxxx	xxxxx		1449	1997	430	xxxx	xxxx	xxxxx
Potent Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		124	61	579	xxxx	xxxx	xxxxx
Move Cap.:	776 xxxx	xxxxx	xxxx	xxxx	xxxxx		122	59	579	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.10	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	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	236	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[23.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	6	0	6	0	0	0
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 1111		0	0 879		0	6	0	6	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1435	1990	440	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		127	61	571	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.05	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT		LT - LTR	- RT	
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	208	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	23.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 493	0	0	561	7		19	0	13	0	0	0
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	1.00
Initial Bse:	9 493	0	0	561	7		19	0	13	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	9 493	0	0	561	7		19	0	13	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	9 493	0	0	561	7		19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	568 xxxx	xxxxx	xxxx	xxxx	xxxxx		826	1072	281	xxxx	xxxx	xxxxx
Potent Cap.:	1014 xxxx	xxxxx	xxxx	xxxx	xxxxx		315	222	723	xxxx	xxxx	xxxxx
Move Cap.:	1014 xxxx	xxxxx	xxxx	xxxx	xxxxx		312	220	723	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.6 xxxx	xxxxx	xxxxx	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	406	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.6			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[17.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	36 438	0	0	510	64		64	0	36	0	0	0
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	1.00
Initial Bse:	36 438	0	0	510	64		64	0	36	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	36 438	0	0	510	64		64	0	36	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	36 438	0	0	510	64		64	0	36	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	574 xxxx	xxxxx	xxxx	xxxx	xxxxx		833	1052	287	xxxx	xxxx	xxxxx
Potent Cap.:	1009 xxxx	xxxxx	xxxx	xxxx	xxxxx		311	228	716	xxxx	xxxx	xxxxx
Move Cap.:	1009 xxxx	xxxxx	xxxx	xxxx	xxxxx		302	220	716	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx		0.21	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.7 xxxx	xxxxx	xxxxx	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	382	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	8.7 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	17.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15	725	0	0	712	26	30	0	9	0	0	0
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:	15	725	0	0	712	26	30	0	9	0	0	0
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:	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 Volume:	15	725	0	0	712	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	725	0	0	712	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	738 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1105	1467	356	xxxx	xxxx	xxxxx
Potent Cap.:	877 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	208	129	646	xxxx	xxxx	xxxxx
Move Cap.:	877 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	206	127	646	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2 xxxx	xxxxx	xxxxx	xxxx	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	244	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	22.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: D[26.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	36	676	0	0	657	64	64	0	36	0	0	0
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:	36	676	0	0	657	64	64	0	36	0	0	0
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:	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 Volume:	36	676	0	0	657	64	64	0	36	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	36	676	0	0	657	64	64	0	36	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	721 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1099	1437	361	xxxx	xxxx	xxxxx
Potent Cap.:	890 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	210	135	642	xxxx	xxxx	xxxxx
Move Cap.:	890 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	203	129	642	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.31	0.00	0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2 xxxx	xxxxx	xxxxx	xxxx	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	270	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	26.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			26.0			xxxxxx		
ApproachLOS:	*			*			D			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing L
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[24.3]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	19	828		0		0	709		26			30		0		9	0		0		0
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:	19	828		0		0	709		26			30		0		9	0		0		0
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:	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 Volume:	19	828		0		0	709		26			30		0		9	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	19	828		0		0	709		26			30		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	735	xxxx	xxxxx	xxxx	xxxx	xxxxx						1161		1575		355	xxxx	xxxx	xxxxx		
Potent Cap.:	879	xxxx	xxxxx	xxxx	xxxx	xxxxx						191		111		648	xxxx	xxxx	xxxxx		
Move Cap.:	879	xxxx	xxxxx	xxxx	xxxx	xxxxx						188		109		648	xxxx	xxxx	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.16		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	225	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	24.3	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				24.3			xxxxxx										
ApproachLOS:	*			*				C			*										

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing L
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[24.8]

Street Name:	US 101									Quarry Access								
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	1	1	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	28	799		0		0	670		48			48		0		28	0		0		0
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:	28	799		0		0	670		48			48		0		28	0		0		0
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:	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 Volume:	28	799		0		0	670		48			48		0		28	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	28	799		0		0	670		48			48		0		28	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	718	xxxx	xxxxx	xxxx	xxxx	xxxxx						1150		1549		359	xxxx	xxxx	xxxxx		
Potent Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx						195		115		643	xxxx	xxxx	xxxxx		
Move Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx						190		111		643	xxxx	xxxx	xxxxx		
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx						0.25		0.00		0.04	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	257	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	24.8	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				24.8			xxxxxx										
ApproachLOS:	*			*				C			*										

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing L
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 839	0	0	656	21		12	0	19	0	0	0
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:	20 839	0	0	656	21		12	0	19	0	0	0
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:	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 Volume:	20 839	0	0	656	21		12	0	19	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	20 839	0	0	656	21		12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	677 xxxx	xxxxx	xxxx	xxxx	xxxxx		1116	1535	328	xxxx	xxxx	xxxxx
Potent Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		205	117	674	xxxx	xxxx	xxxxx
Move Cap.:	924 xxxx	xxxxx	xxxx	xxxx	xxxxx		202	115	674	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	353	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Existing L
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.8]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 853	0	0	675	0		6	0	6	0	0	0
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:	0 853	0	0	675	0		6	0	6	0	0	0
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:	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 Volume:	0 853	0	0	675	0		6	0	6	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	0 853	0	0	675	0		6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1102	1528	338	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		209	119	664	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.03	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	318	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	16.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[17.2]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	594	0	0	683	7	19	0	13	0	0	0				
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:	9	594	0	0	683	7	19	0	13	0	0	0				
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:	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 Volume:	9	594	0	0	683	7	19	0	13	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	9	594	0	0	683	7	19	0	13	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	690	xxxx	xxxxx	xxxx	xxxx	xxxxx	998	1295	342	xxxx	xxxx	xxxxx				
Potent Cap.:	914	xxxx	xxxxx	xxxx	xxxx	xxxxx	244	164	660	xxxx	xxxx	xxxxx				
Move Cap.:	914	xxxx	xxxxx	xxxx	xxxx	xxxxx	242	162	660	xxxx	xxxx	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	326	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				17.2			xxxxxx					
ApproachLOS:	*			*				C			*					

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[18.0]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	44	571	0	0	664	32	32	0	44	0	0	0				
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:	44	571	0	0	664	32	32	0	44	0	0	0				
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:	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 Volume:	44	571	0	0	664	32	32	0	44	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	44	571	0	0	664	32	32	0	44	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	696	xxxx	xxxxx	xxxx	xxxx	xxxxx	1054	1339	348	xxxx	xxxx	xxxxx				
Potent Cap.:	909	xxxx	xxxxx	xxxx	xxxx	xxxxx	225	154	654	xxxx	xxxx	xxxxx				
Move Cap.:	909	xxxx	xxxxx	xxxx	xxxx	xxxxx	216	147	654	xxxx	xxxx	xxxxx				
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	0.00	0.07	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	353	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				18.0			xxxxxx					
ApproachLOS:	*			*				C			*					

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[32.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15	898	0	0	879	26	30	0	9	0	0	0
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:	15	898	0	0	879	26	30	0	9	0	0	0
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:	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 Volume:	15	898	0	0	879	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	898	0	0	879	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	905 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1358	1807	440	xxxx	xxxx	xxxxx
Potent Cap.:	760 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	143	80	571	xxxx	xxxx	xxxxx
Move Cap.:	760 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	140	78	571	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	170	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	32.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			32.4			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: D[28.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	881	0	0	856	32	32	0	44	0	0	0
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:	44	881	0	0	856	32	32	0	44	0	0	0
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:	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 Volume:	44	881	0	0	856	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	881	0	0	856	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	888 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1401	1841	444	xxxx	xxxx	xxxxx
Potent Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	134	76	567	xxxx	xxxx	xxxxx
Move Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	128	72	567	xxxx	xxxx	xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0 xxxx	xxxxx	xxxxx	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	xxxx	xxxxx	xxxx	232	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.0 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	28.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			28.0			xxxxxx		
ApproachLOS:	*			*			D			*		

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

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1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[23.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1050		0	0 882		25	13	0	19	0	0	0
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:	19 1050		0	0 882		25	13	0	19	0	0	0
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:	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 Volume:	19 1050		0	0 882		25	13	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1050		0	0 882		25	13	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	907 xxxx xxxxx			xxxx xxxx xxxxx			1445	1970	441	xxxx xxxx xxxxx		
Potent Cap.:	759 xxxx xxxxx			xxxx xxxx xxxxx			125	63	570	xxxx xxxx xxxxx		
Move Cap.:	759 xxxx xxxxx			xxxx xxxx xxxxx			123	62	570	xxxx xxxx xxxxx		
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.11	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	230	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	23.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: D[30.3]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	32 1041		0	0 873		28	28	0	32	0	0	0
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:	32 1041		0	0 873		28	28	0	32	0	0	0
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:	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 Volume:	32 1041		0	0 873		28	28	0	32	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	32 1041		0	0 873		28	28	0	32	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	901 xxxx xxxxx			xxxx xxxx xxxxx			1472	1992	451	xxxx xxxx xxxxx		
Potent Cap.:	763 xxxx xxxxx			xxxx xxxx xxxxx			120	61	562	xxxx xxxx xxxxx		
Move Cap.:	763 xxxx xxxxx			xxxx xxxx xxxxx			116	59	562	xxxx xxxx xxxxx		
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.24	0.00	0.06	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	201	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.9 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	30.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			30.3			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[21.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1097		0	0 830		21	12	0	19	0	0	0
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:	20 1097		0	0 830		21	12	0	19	0	0	0
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:	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 Volume:	20 1097		0	0 830		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1097		0	0 830		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	851 xxxx xxxxx			xxxx xxxx xxxxx			1419	1967	415	xxxx xxxx xxxxx		
Potent Cap.:	796 xxxx xxxxx			xxxx xxxx xxxxx			130	64	592	xxxx xxxx xxxxx		
Move Cap.:	796 xxxx xxxxx			xxxx xxxx xxxxx			128	62	592	xxxx xxxx xxxxx		
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.09	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6 xxxx xxxxx			xxxxx 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	246	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	21.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Existing Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[23.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	6	0	6	0	0	0
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 1111		0	0 879		0	6	0	6	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1435	1990	440	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	208	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	23.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.2]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	9	473	0	0	541	7	19	0	13	0	0	0						
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:	9	473	0	0	541	7	19	0	13	0	0	0						
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:	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 Volume:	9	473	0	0	541	7	19	0	13	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	9	473	0	0	541	7	19	0	13	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	548	xxxx	xxxxx	xxxx	xxxx	xxxxx	796	1032	271	xxxx	xxxx	xxxxx						
Potent Cap.:	1032	xxxx	xxxxx	xxxx	xxxx	xxxxx	329	235	733	xxxx	xxxx	xxxxx						
Move Cap.:	1032	xxxx	xxxxx	xxxx	xxxx	xxxxx	327	233	733	xxxx	xxxx	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.02	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	422	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.2	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx				14.2			xxxxxx							
ApproachLOS:	*			*				B			*							

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[15.8]

Street Name:	US 101									Quarry Access								
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	56	438	0	0	510	44	44	0	56	0	0	0						
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:	56	438	0	0	510	44	44	0	56	0	0	0						
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:	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 Volume:	56	438	0	0	510	44	44	0	56	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	56	438	0	0	510	44	44	0	56	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	554	xxxx	xxxxx	xxxx	xxxx	xxxxx	863	1082	277	xxxx	xxxx	xxxxx						
Potent Cap.:	1026	xxxx	xxxxx	xxxx	xxxx	xxxxx	298	219	726	xxxx	xxxx	xxxxx						
Move Cap.:	1026	xxxx	xxxxx	xxxx	xxxx	xxxxx	285	207	726	xxxx	xxxx	xxxxx						
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	0.00	0.08	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	8.7	xxxx	xxxxx	xxxxx	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	432	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.8	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx				15.8			xxxxxx							
ApproachLOS:	*			*				C			*							

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[21.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15	705	0	0	692	26	30	0	9	0	0	0
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:	15	705	0	0	692	26	30	0	9	0	0	0
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:	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 Volume:	15	705	0	0	692	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	705	0	0	692	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	718	xxxx	xxxxx	xxxx	xxxx	xxxxx	1075	1427	346	xxxx	xxxx	xxxxx
Potent Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx	218	136	656	xxxx	xxxx	xxxxx
Move Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx	215	134	656	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	254	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: C[21.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56	676	0	0	657	44	44	0	56	0	0	0
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:	56	676	0	0	657	44	44	0	56	0	0	0
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:	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 Volume:	56	676	0	0	657	44	44	0	56	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	676	0	0	657	44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	701	xxxx	xxxxx	xxxx	xxxx	xxxxx	1129	1467	351	xxxx	xxxx	xxxxx
Potent Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx	201	129	652	xxxx	xxxx	xxxxx
Move Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx	191	121	652	xxxx	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.23	0.00	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	316	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	21.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			21.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19	812	0	0	593	26	30	0	9	0	0	0
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:	19	812	0	0	593	26	30	0	9	0	0	0
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:	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 Volume:	19	812	0	0	593	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	19	812	0	0	593	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	619	xxxx	xxxxx	xxxx	xxxx	xxxxx	1037	1443	297	xxxx	xxxx	xxxxx
Potent Cap.:	971	xxxx	xxxxx	xxxx	xxxx	xxxxx	230	133	706	xxxx	xxxx	xxxxx
Move Cap.:	971	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	131	706	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	269	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[20.3]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	799	0	0	670	32	32	0	44	0	0	0
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:	44	799	0	0	670	32	32	0	44	0	0	0
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:	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 Volume:	44	799	0	0	670	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	799	0	0	670	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	702	xxxx	xxxxx	xxxx	xxxx	xxxxx	1174	1573	351	xxxx	xxxx	xxxxx
Potent Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx	188	111	651	xxxx	xxxx	xxxxx
Move Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx	181	106	651	xxxx	xxxx	xxxxx
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	311	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.2]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	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 Volume:	20	839	0	0	656	21	12	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	839	0	0	656	21	12	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1116	1535	328	xxxx	xxxx	xxxxx				
Potent Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	205	117	674	xxxx	xxxx	xxxxx				
Move Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	115	674	xxxx	xxxx	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	353	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				16.2			xxxxxx					
ApproachLOS:	*			*				C			*					

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Existing
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.8]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	853	0	0	675	0	6	0	6	0	0	0				
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	853	0	0	675	0	6	0	6	0	0	0				
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:	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 Volume:	0	853	0	0	675	0	6	0	6	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	853	0	0	675	0	6	0	6	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1528	338	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	318	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.8	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				16.8			xxxxxx					
ApproachLOS:	*			*				C			*					

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

9-10am Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[23.8]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	749	0	0	863	9	24	0	17	0	0	0
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:	12	749	0	0	863	9	24	0	17	0	0	0
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:	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 Volume:	12	749	0	0	863	9	24	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	749	0	0	863	9	24	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	872 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1262	1636	432	xxxx	xxxx	xxxxx
Potent Cap.:	782 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	165	102	578	xxxx	xxxx	xxxxx
Move Cap.:	782 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	163	100	578	xxxx	xxxx	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	232	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	23.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.8			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C[25.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	729	0	0	848	32	32	0	44	0	0	0
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:	44	729	0	0	848	32	32	0	44	0	0	0
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:	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 Volume:	44	729	0	0	848	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	729	0	0	848	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	880 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1317	1681	440	xxxx	xxxx	xxxxx
Potent Cap.:	777 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	152	96	570	xxxx	xxxx	xxxxx
Move Cap.:	777 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	145	90	570	xxxx	xxxx	xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	255	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.9 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	25.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			25.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F[72.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1137		0	0 1113		33	38	0	12	0	0	0
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:	20 1137		0	0 1113		33	38	0	12	0	0	0
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:	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 Volume:	20 1137		0	0 1113		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1137		0	0 1113		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1146 xxxx xxxxx			xxxx xxxx xxxxx			1722	2290	557	xxxx xxxx xxxxx		
Potent Cap.:	617 xxxx xxxxx			xxxx xxxx xxxxx			82	40	479	xxxx xxxx xxxxx		
Move Cap.:	617 xxxx xxxxx			xxxx xxxx xxxxx			80	38	479	xxxx xxxx xxxxx		
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.48	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	100	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	2.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	72.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			72.6			xxxxxx		
ApproachLOS:	*			*			F			*		

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

11-12pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: F[55.4]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1125		0	0 1093		32	32	0	44	0	0	0
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:	44 1125		0	0 1093		32	32	0	44	0	0	0
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:	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 Volume:	44 1125		0	0 1093		32	32	0	44	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	44 1125		0	0 1093		32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1125 xxxx xxxxx			xxxx xxxx xxxxx			1760	2322	563	xxxx xxxx xxxxx		
Potent Cap.:	628 xxxx xxxxx			xxxx xxxx xxxxx			77	38	475	xxxx xxxx xxxxx		
Move Cap.:	628 xxxx xxxxx			xxxx xxxx xxxxx			73	35	475	xxxx xxxx xxxxx		
Volume/Cap:	0.07 xxxx	xxxx		xxxx xxxx	xxxx		0.44	0.00	0.09	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	143	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	2.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	55.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			55.4			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: E[42.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1333		0	0 1118		32	17	0	24	0	0	0
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:	24 1333		0	0 1118		32	17	0	24	0	0	0
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:	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 Volume:	24 1333		0	0 1118		32	17	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1333		0	0 1118		32	17	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1150 xxxx xxxxx			xxxx xxxx xxxxx			1833	2499	559	xxxx xxxx xxxxx		
Potent Cap.:	615 xxxx xxxxx			xxxx xxxx xxxxx			69	29	478	xxxx xxxx xxxxx		
Move Cap.:	615 xxxx xxxxx			xxxx xxxx xxxxx			67	28	478	xxxx xxxx xxxxx		
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.25	0.00	0.05	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	11.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	135	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.2	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	42.9	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			42.9			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: F[63.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	32 1329		0	0 1114		28	28	0	32	0	0	0
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:	32 1329		0	0 1114		28	28	0	32	0	0	0
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:	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 Volume:	32 1329		0	0 1114		28	28	0	32	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	32 1329		0	0 1114		28	28	0	32	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1142 xxxx xxxxx			xxxx xxxx xxxxx			1857	2521	571	xxxx xxxx xxxxx		
Potent Cap.:	619 xxxx xxxxx			xxxx xxxx xxxxx			67	28	469	xxxx xxxx xxxxx		
Move Cap.:	619 xxxx xxxxx			xxxx xxxx xxxxx			64	27	469	xxxx xxxx xxxxx		
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx	xxxx		0.44	0.00	0.07	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	11.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	119	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	0.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	2.3	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	11.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	63.0	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			63.0			xxxxxx		
ApproachLOS:	*			*			F			*		

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

4:45-5:45pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: E[40.5]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	26 1398		0	0 1098		27	15	0	24	0	0	0
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:	26 1398		0	0 1098		27	15	0	24	0	0	0
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:	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 Volume:	26 1398		0	0 1098		27	15	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	26 1398		0	0 1098		27	15	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1125 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1849	2548	549	xxxx	xxxx	xxxxx
Potent Cap.:	628 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	67	27	485	xxxx	xxxx	xxxxx
Move Cap.:	628 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	65	26	485	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.23	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	140	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	40.5	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	E	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			40.5			xxxxxx		
ApproachLOS:	*			*			E			*		

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

4:45-5:45pm Peak Hour - Project 2030 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: E[38.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1418		0	0 1122		0	6	0	6	0	0	0
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 1418		0	0 1122		0	6	0	6	0	0	0
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:	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 Volume:	0 1418		0	0 1122		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1418		0	0 1122		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1831	2540	561	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		69	28	476	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		69	28	476	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.09	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	121	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	38.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			38.0			xxxxxx		
ApproachLOS:	*			*			E			*		

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

9-10am Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[17.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	591	0	0	679	9	24	0	17	0	0	0
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:	12	591	0	0	679	9	24	0	17	0	0	0
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:	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 Volume:	12	591	0	0	679	9	24	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	591	0	0	679	9	24	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	688 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	999	1294	340	xxxx	xxxx	xxxxx
Potent Cap.:	916 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	244	164	662	xxxx	xxxx	xxxxx
Move Cap.:	916 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	241	162	662	xxxx	xxxx	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.0 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	328	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	17.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.8 Worst Case Level Of Service: C[20.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56	559	0	0	652	44	44	0	56	0	0	0
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:	56	559	0	0	652	44	44	0	56	0	0	0
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:	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 Volume:	56	559	0	0	652	44	44	0	56	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	559	0	0	652	44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	696 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1066	1345	348	xxxx	xxxx	xxxxx
Potent Cap.:	909 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	221	153	654	xxxx	xxxx	xxxxx
Move Cap.:	909 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	210	143	654	xxxx	xxxx	xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.21	0.00	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.2 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	339	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	1.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.2 xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx	20.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: D[34.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20	887	0	0	871	33	38	0	12	0	0	0
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:	20	887	0	0	871	33	38	0	12	0	0	0
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:	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 Volume:	20	887	0	0	871	33	38	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	887	0	0	871	33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	904	xxxx	xxxxx	xxxx	xxxx	xxxxx	1355	1798	436	xxxx	xxxx	xxxxx
Potent Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx	143	81	574	xxxx	xxxx	xxxxx
Move Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx	140	79	574	xxxx	xxxx	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	0.27	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9	xxxx	xxxxx	xxxxx	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	171	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	34.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			34.4			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: D[33.8]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56	863	0	0	839	44	44	0	56	0	0	0
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:	56	863	0	0	839	44	44	0	56	0	0	0
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:	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 Volume:	56	863	0	0	839	44	44	0	56	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	863	0	0	839	44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	883	xxxx	xxxxx	xxxx	xxxx	xxxxx	1405	1836	442	xxxx	xxxx	xxxxx
Potent Cap.:	775	xxxx	xxxxx	xxxx	xxxx	xxxxx	133	77	569	xxxx	xxxx	xxxxx
Move Cap.:	775	xxxx	xxxxx	xxxx	xxxx	xxxxx	125	71	569	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	0.00	0.10	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	222	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	33.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			33.8			xxxxxx		
ApproachLOS:	*			*			D			*		

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

1:15-2:15pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: E[40.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1029		0	0 876		33	38	0	12	0	0	0
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:	24 1029		0	0 876		33	38	0	12	0	0	0
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:	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 Volume:	24 1029		0	0 876		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1029		0	0 876		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	909 xxxx xxxxx			xxxx xxxx xxxxx			1439	1953	438	xxxx xxxx xxxxx		
Potent Cap.:	757 xxxx xxxxx			xxxx xxxx xxxxx			126	65	572	xxxx xxxx xxxxx		
Move Cap.:	757 xxxx xxxxx			xxxx xxxx xxxxx			123	63	572	xxxx xxxx xxxxx		
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.31	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	152	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	40.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			40.0			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: D[30.9]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1021		0	0 856		32	32	0	44	0	0	0
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:	44 1021		0	0 856		32	32	0	44	0	0	0
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:	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 Volume:	44 1021		0	0 856		32	32	0	44	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	44 1021		0	0 856		32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	888 xxxx xxxxx			xxxx xxxx xxxxx			1471	1981	444	xxxx xxxx xxxxx		
Potent Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			120	62	567	xxxx xxxx xxxxx		
Move Cap.:	771 xxxx xxxxx			xxxx xxxx xxxxx			115	59	567	xxxx xxxx xxxxx		
Volume/Cap:	0.06 xxxx	xxxx		xxxx xxxx	xxxx		0.28	0.00	0.08	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0 xxxx xxxxx			xxxxx 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	213	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	30.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			30.9			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[22.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	26 1069		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
Initial Bse:	26 1069		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	26 1069		0	0 838		27	15	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	26 1069		0	0 838		27	15	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxx xxxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	865 xxxx xxxxx		xxxx	xxxx xxxxx		xxxxx	1425	1959	419	xxxx	xxxx	xxxxx
Potent Cap.:	787 xxxx xxxxx		xxxx	xxxx xxxxx		xxxxx	129	64	589	xxxx	xxxx	xxxxx
Move Cap.:	787 xxxx xxxxx		xxxx	xxxx xxxxx		xxxxx	126	62	589	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx	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	243	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	22.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2030 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[22.7]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1089		0	0 862		0	6	0	6	0	0	0
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	1.00	1.00
Initial Bse:	0 1089		0	0 862		0	6	0	6	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	0 1089		0	0 862		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1089		0	0 862		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			1407	1951	431	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			132	65	578	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			132	65	578	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx		xxxx	xxxx xxxxx		xxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx xxxxx		xxxxx	xxxx xxxxx		xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	216	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	22.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[30.9]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	846		0 0	976		10		27		0	19	0		0	0
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:	14	846		0 0	976		10		27		0	19	0		0	0
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:	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 Volume:	14	846		0 0	976		10		27		0	19	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	14	846		0 0	976		10		27		0	19	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	986	xxxx	xxxxx	xxxx	xxxx	xxxxx			1427		1850	488	xxxx	xxxx	xxxxx	
Potent Cap.:	709	xxxx	xxxxx	xxxx	xxxx	xxxxx			128		75	531	xxxx	xxxx	xxxxx	
Move Cap.:	709	xxxx	xxxxx	xxxx	xxxx	xxxxx			126		74	531	xxxx	xxxx	xxxxx	
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx			0.21		0.00	0.04	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx xxxxx					xxxx	xxxx	xxxxx	
Control Del:	10.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx xxxxx					xxxxx	xxxx	xxxxx	
LOS by Move:	B	*		*	*		*	*	*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	185 xxxxx					xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9 xxxxx					xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	30.9 xxxxx					xxxxx	xxxx	xxxxx	
Shared LOS:	*	*		*	*		*	D	*		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx				30.9					xxxxxx			
ApproachLOS:	*			*				D					*			

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

9-10am Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: D[32.3]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	44	828		0 0	963		32		32		0	44	0		0	0
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:	44	828		0 0	963		32		32		0	44	0		0	0
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:	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 Volume:	44	828		0 0	963		32		32		0	44	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	44	828		0 0	963		32		32		0	44	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8		6.5	6.9	xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5		4.0	3.3	xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	995	xxxx	xxxxx	xxxx	xxxx	xxxxx			1481		1895	498	xxxx	xxxx	xxxxx	
Potent Cap.:	703	xxxx	xxxxx	xxxx	xxxx	xxxxx			118		70	524	xxxx	xxxx	xxxxx	
Move Cap.:	703	xxxx	xxxxx	xxxx	xxxx	xxxxx			113		66	524	xxxx	xxxx	xxxxx	
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx			0.28		0.00	0.08	xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx xxxxx					xxxx	xxxx	xxxxx	
Control Del:	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx xxxxx					xxxxx	xxxx	xxxxx	
LOS by Move:	B	*		*	*		*	*	*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	206 xxxxx					xxxx	xxxx	xxxxx	
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.6 xxxxx					xxxxx	xxxx	xxxxx	
Shrd ConDel:	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	32.3 xxxxx					xxxxx	xxxx	xxxxx	
Shared LOS:	B	*		*	*		*	D	*		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx				32.3					xxxxxx			
ApproachLOS:	*			*				D					*			

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

11-12pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 3.3 Worst Case Level Of Service: F[151.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22 1287		0	0 1259		38	43		14	0		0
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:	22 1287		0	0 1259		38	43		14	0		0
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:	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 Volume:	22 1287		0	0 1259		38	43		14	0		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	22 1287		0	0 1259		38	43		14	0		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1297 xxxx	xxxxx		xxxx	xxxx	xxxxx	1947	2590	630	xxxx	xxxx	xxxxx
Potent Cap.:	541 xxxx	xxxxx		xxxx	xxxx	xxxxx	58	26	430	xxxx	xxxx	xxxxx
Move Cap.:	541 xxxx	xxxxx		xxxx	xxxx	xxxxx	56	25	430	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx	xxxx	xxxx	0.77	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	71	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	3.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	152	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			151.9			xxxxxx		
ApproachLOS:	*			*			F			*		

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

11-12pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: F[100.6]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1277		0	0 1241		32	32		44	0		0
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:	44 1277		0	0 1241		32	32		44	0		0
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:	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 Volume:	44 1277		0	0 1241		32	32		44	0		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	44 1277		0	0 1241		32	32		44	0		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1273 xxxx	xxxxx		xxxx	xxxx	xxxxx	1984	2622	637	xxxx	xxxx	xxxxx
Potent Cap.:	552 xxxx	xxxxx		xxxx	xxxx	xxxxx	55	24	425	xxxx	xxxx	xxxxx
Move Cap.:	552 xxxx	xxxxx		xxxx	xxxx	xxxxx	51	22	425	xxxx	xxxx	xxxxx
Volume/Cap:	0.08 xxxx	xxxx		xxxx	xxxx	xxxx	0.62	0.00	0.10	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	12.1 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	105	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	3.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	12.1 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	101	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*		*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			100.6			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: F[73.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1510		0	0 1266		36	19		0	27		0
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:	27 1510		0	0 1266		36	19		0	27		0
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:	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 Volume:	27 1510		0	0 1266		36	19		0	27		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	27 1510		0	0 1266		36	19		0	27		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1302 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2075	2830		633 xxxx xxxx		xxxxx
Potent Cap.:	539 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	48	18		427 xxxx xxxx		xxxxx
Move Cap.:	539 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	46	17		427 xxxx xxxx		xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.42	0.00	0.06	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx xxxx		xxxxx
Control Del:	12.0 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx xxxx		xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	96	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	2.1	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	73.0	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			73.0			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: F[118.0]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	32 1509		0	0 1265		28	28		0	32		0
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:	32 1509		0	0 1265		28	28		0	32		0
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:	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 Volume:	32 1509		0	0 1265		28	28		0	32		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	32 1509		0	0 1265		28	28		0	32		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	6.8	6.5		6.9 xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx		xxxxx	xxxxx xxxx		xxxxx	3.5	4.0		3.3 xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	1293 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	2098	2852		647 xxxx xxxx		xxxxx
Potent Cap.:	543 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	46	17		419 xxxx xxxx		xxxxx
Move Cap.:	543 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	44	16		419 xxxx xxxx		xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.64	0.00	0.08	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx		xxxx	xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx xxxx		xxxxx
Control Del:	12.0 xxxx xxxxx		xxxxx	xxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx xxxx		xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	84	xxxxx	xxxx xxxx		xxxxx
SharedQueue:	0.2 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	3.5	xxxxx	xxxxx xxxx		xxxxx
Shrd ConDel:	12.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	118	xxxxx	xxxxx xxxx		xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			118.0			xxxxxx		
ApproachLOS:	*			*			F			*		

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

4:45-5:45pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: F[68.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1587		0	0 1247		31	17		0	27		0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
Initial Bse:	29 1587		0	0 1247		31	17		0	27		0
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
PHF Volume:	29 1587		0	0 1247		31	17		0	27		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	29 1587		0	0 1247		31	17		0	27		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	1278 xxxx	xxxxx	xxxx	xxxx	xxxxx		2099	2892		624	xxxx	xxxx xxxxx
Potent Cap.:	550 xxxx	xxxxx	xxxx	xxxx	xxxxx		46	16		434	xxxx	xxxx xxxxx
Move Cap.:	550 xxxx	xxxxx	xxxx	xxxx	xxxxx		44	15		434	xxxx	xxxx xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx		0.39	0.00		0.06	xxxx	xxxx xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	98	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	68.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			68.7			xxxxxx		
ApproachLOS:	*			*			F			*		

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

4:45-5:45pm Peak Hour - Project 2040 July Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: F[54.2]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1610		0	0 1274		0	6		0	6		0
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
Initial Bse:	0 1610		0	0 1274		0	6		0	6		0
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00		1.00	1.00		1.00
PHF Volume:	0 1610		0	0 1274		0	6		0	6		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	0 1610		0	0 1274		0	6		0	6		0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		2079	2884		637	xxxx	xxxx xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		47	16		425	xxxx	xxxx xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		47	16		425	xxxx	xxxx xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.13	0.00		0.01	xxxx	xxxx xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxx	xxxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx	xxxxx		xxxx	85	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx	xxxxx		xxxxx xxxx	xxxxx		xxxxx	54.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*	*	*	*		*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			54.2			xxxxxx		
ApproachLOS:	*			*			F			*		

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

9-10am Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[20.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	665		0 0	765		10		27		0		19		0	0 0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	14	665		0 0	765		10		27		0		19		0	0 0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	14	665		0 0	765		10		27		0		19		0	0 0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0 0
FinalVolume:	14	665		0 0	765		10		27		0		19		0	0 0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	775	xxxx	xxxxx	xxxx xxxx	xxxxx				1126		1458		383	xxxx	xxxx	xxxxx
Potent Cap.:	850	xxxx	xxxxx	xxxx xxxx	xxxxx				202		131		621	xxxx	xxxx	xxxxx
Move Cap.:	850	xxxx	xxxxx	xxxx xxxx	xxxxx				199		129		621	xxxx	xxxx	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.14		0.00		0.03	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx		xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.3	xxxx	xxxxx	xxxxx 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	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx		277	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		0.6	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		20.6	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	*	*	*	*		C	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					20.6		xxxxxx					
ApproachLOS:	*			*					C		*					

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

9-10am Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.9 Worst Case Level Of Service: C[23.8]

Street Name:	US 101								Quarry Access							
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	1	1	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	56	635		0 0	740		44		44		0		56		0	0 0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	56	635		0 0	740		44		44		0		56		0	0 0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	56	635		0 0	740		44		44		0		56		0	0 0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0 0
FinalVolume:	56	635		0 0	740		44		44		0		56		0	0 0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	784	xxxx	xxxxx	xxxx xxxx	xxxxx				1192		1509		392	xxxx	xxxx	xxxxx
Potent Cap.:	843	xxxx	xxxxx	xxxx xxxx	xxxxx				183		122		613	xxxx	xxxx	xxxxx
Move Cap.:	843	xxxx	xxxxx	xxxx xxxx	xxxxx				173		113		613	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	xxxx	xxxx	xxxx xxxx	xxxx				0.25		0.00		0.09	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx		xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.6	xxxx	xxxxx	xxxxx 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	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx		290	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		1.5	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx		23.8	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	A	*		*	*	*	*		C	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx					23.8		xxxxxx					
ApproachLOS:	*			*					C		*					

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

11-12pm Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: F[50.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22 1002		0	0 983		38	43	0	14	0	0	0
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	1.00	1.00
Initial Bse:	22 1002		0	0 983		38	43	0	14	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	22 1002		0	0 983		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	22 1002		0	0 983		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1021 xxxx	xxxxx		xxxx	xxxx	xxxxx	1528	2029	492	xxxx	xxxx	xxxxx
Potent Cap.:	688 xxxx	xxxxx		xxxx	xxxx	xxxxx	110	58	528	xxxx	xxxx	xxxxx
Move Cap.:	688 xxxx	xxxxx		xxxx	xxxx	xxxxx	107	56	528	xxxx	xxxx	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx	xxxx	xxxx	0.40	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.4 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	134	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	50.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			50.6			xxxxxx		
ApproachLOS:	*			*			F			*		

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

11-12pm Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: E[49.1]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 980		0	0 953		44	44	0	56	0	0	0
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	1.00	1.00
Initial Bse:	56 980		0	0 953		44	44	0	56	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	56 980		0	0 953		44	44	0	56	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	56 980		0	0 953		44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	997 xxxx	xxxxx		xxxx	xxxx	xxxxx	1577	2067	499	xxxx	xxxx	xxxxx
Potent Cap.:	702 xxxx	xxxxx		xxxx	xxxx	xxxxx	102	55	523	xxxx	xxxx	xxxxx
Move Cap.:	702 xxxx	xxxxx		xxxx	xxxx	xxxxx	96	50	523	xxxx	xxxx	xxxxx
Volume/Cap:	0.08 xxxx	xxxx		xxxx	xxxx	xxxx	0.46	0.00	0.11	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.6 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	177	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.3 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	3.0	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.6 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	49.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*		*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			49.1			xxxxxx		
ApproachLOS:	*			*			E			*		

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

1:15-2:15 Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: F[63.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1164		0	0 990		38	43	0	14	0	0	0
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:	27 1164		0	0 990		38	43	0	14	0	0	0
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:	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 Volume:	27 1164		0	0 990		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	27 1164		0	0 990		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1028 xxxx	xxxxx		xxxx	xxxx	xxxxx	1626	2208	495	xxxx	xxxx	xxxxx
Potent Cap.:	683 xxxx	xxxxx		xxxx	xxxx	xxxxx	95	45	525	xxxx	xxxx	xxxxx
Move Cap.:	683 xxxx	xxxxx		xxxx	xxxx	xxxxx	92	43	525	xxxx	xxxx	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx	xxxx	xxxx	0.47	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.5 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	115	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	2.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	63.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			63.4			xxxxxx		
ApproachLOS:	*			*			F			*		

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

1:15-2:15 Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: E[43.5]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1159		0	0 972		32	32	0	44	0	0	0
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:	44 1159		0	0 972		32	32	0	44	0	0	0
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:	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 Volume:	44 1159		0	0 972		32	32	0	44	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	44 1159		0	0 972		32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1004 xxxx	xxxxx		xxxx	xxxx	xxxxx	1656	2235	502	xxxx	xxxx	xxxxx
Potent Cap.:	698 xxxx	xxxxx		xxxx	xxxx	xxxxx	91	43	520	xxxx	xxxx	xxxxx
Move Cap.:	698 xxxx	xxxxx		xxxx	xxxx	xxxxx	86	40	520	xxxx	xxxx	xxxxx
Volume/Cap:	0.06 xxxx	xxxx		xxxx	xxxx	xxxx	0.37	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.5 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	167	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	2.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	10.5 xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	43.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*		*	*	*	*	E	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			43.5			xxxxxx		
ApproachLOS:	*			*			E			*		

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

4:45-5:45pm Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[29.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1213		0	0 952		31	17	0	27	0	0	0
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:	29 1213		0	0 952		31	17	0	27	0	0	0
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:	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 Volume:	29 1213		0	0 952		31	17	0	27	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	29 1213		0	0 952		31	17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	983 xxxx xxxxx			xxxx xxxx xxxxx			1617	2223	476	xxxx xxxx xxxxx		
Potent Cap.:	711 xxxx xxxxx			xxxx xxxx xxxxx			96	44	541	xxxx xxxx xxxxx		
Move Cap.:	711 xxxx xxxxx			xxxx xxxx xxxxx			93	42	541	xxxx xxxx xxxxx		
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.18	0.00	0.05	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.3 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	190	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	29.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			29.6		xxxxxx			
ApproachLOS:	*			*			D		*			

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

4:45-5:45pm Peak Hour - Project 2040 October Peak (Existing Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: D[28.2]

Street Name:	US 101						Quarry Access					
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 1 1	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1236		0	0 979		0	6	0	6	0	0	0
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 1236		0	0 979		0	6	0	6	0	0	0
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:	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 Volume:	0 1236		0	0 979		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1236		0	0 979		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1597	2215	490	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			99	44	530	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			99	44	530	xxxx xxxx xxxxx		
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.06	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*		*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	167	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	9.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	28.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	A	*		*	*		*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			28.2		xxxxxx			
ApproachLOS:	*			*			D		*			

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

9-10am Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.3]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	9	554	0	0	638	7	18	0	12	0	0	0						
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:	9	554	0	0	638	7	18	0	12	0	0	0						
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:	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 Volume:	9	554	0	0	638	7	18	0	12	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	9	554	0	0	638	7	18	0	12	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	645	xxxx	xxxxx	xxxx	xxxx	xxxxx	933	1210	319	xxxx	xxxx	xxxxx						
Potent Cap.:	950	xxxx	xxxxx	xxxx	xxxx	xxxxx	269	184	683	xxxx	xxxx	xxxxx						
Move Cap.:	950	xxxx	xxxxx	xxxx	xxxx	xxxxx	267	182	683	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	382	306	xxxxx	352	302	xxxxx						
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	464	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.3	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			13.3			xxxxxx								
ApproachLOS:	*			*			B			*								

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

9-10am Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[13.6]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0	0	
Volume Module:																		
Base Vol:	44	531	0	0	618	32	32	0	44	0	0	0						
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:	44	531	0	0	618	32	32	0	44	0	0	0						
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:	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 Volume:	44	531	0	0	618	32	32	0	44	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	44	531	0	0	618	32	32	0	44	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	650	xxxx	xxxxx	xxxx	xxxx	xxxxx	988	1253	325	xxxx	xxxx	xxxxx						
Potent Cap.:	946	xxxx	xxxxx	xxxx	xxxx	xxxxx	248	174	677	xxxx	xxxx	xxxxx						
Move Cap.:	946	xxxx	xxxxx	xxxx	xxxx	xxxxx	239	166	677	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	289	xxxxx	315	275	xxxxx						
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.07	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	496	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.6	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			13.6			xxxxxx								
ApproachLOS:	*			*			B			*								

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

11-12pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[17.3]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	14	838	0	0	820	24	28	0	9	0	0	0				
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:	14	838	0	0	820	24	28	0	9	0	0	0				
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:	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 Volume:	14	838	0	0	820	24	28	0	9	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	14	838	0	0	820	24	28	0	9	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	844	xxxx	xxxxx	xxxx	xxxx	xxxxx	1267	1686	410	xxxx	xxxx	xxxxx				
Potent Cap.:	801	xxxx	xxxxx	xxxx	xxxx	xxxxx	163	95	596	xxxx	xxxx	xxxxx				
Move Cap.:	801	xxxx	xxxxx	xxxx	xxxx	xxxxx	161	93	596	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	288	215	xxxxx	234	209	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.10	0.00	0.02	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	330	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.3	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			17.3			xxxxxx						
ApproachLOS:	*			*			C			*						

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

11-12pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[16.1]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	44	820	0	0	797	32	32	0	44	0	0	0				
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:	44	820	0	0	797	32	32	0	44	0	0	0				
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:	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 Volume:	44	820	0	0	797	32	32	0	44	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	44	820	0	0	797	32	32	0	44	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	829	xxxx	xxxxx	xxxx	xxxx	xxxxx	1311	1721	415	xxxx	xxxx	xxxxx				
Potent Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx	153	90	592	xxxx	xxxx	xxxxx				
Move Cap.:	811	xxxx	xxxxx	xxxx	xxxx	xxxxx	147	85	592	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	276	205	xxxxx	210	194	xxxxx				
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.07	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	400	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.1	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			16.1			xxxxxx						
ApproachLOS:	*			*			C			*						

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

1:15-2:15pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	18	979	0	0	822	23	12	0	18	0	0	0				
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:	18	979	0	0	822	23	12	0	18	0	0	0				
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:	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 Volume:	18	979	0	0	822	23	12	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	18	979	0	0	822	23	12	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	845	xxxx	xxxxx	xxxx	xxxx	xxxxx	1348	1837	411	xxxx	xxxx	xxxxx				
Potent Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	145	77	596	xxxx	xxxx	xxxxx				
Move Cap.:	800	xxxx	xxxxx	xxxx	xxxx	xxxxx	142	75	596	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	273	192	xxxxx	194	186	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.6	xxxx	xxxxx	xxxxx	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	405	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.6	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			14.6			xxxxxx						
ApproachLOS:	*			*			B			*						

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

1:15-2:15pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[16.4]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	32	969	0	0	812	28	28	0	32	0	0	0				
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:	32	969	0	0	812	28	28	0	32	0	0	0				
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:	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 Volume:	32	969	0	0	812	28	28	0	32	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	32	969	0	0	812	28	28	0	32	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	840	xxxx	xxxxx	xxxx	xxxx	xxxxx	1375	1859	420	xxxx	xxxx	xxxxx				
Potent Cap.:	804	xxxx	xxxxx	xxxx	xxxx	xxxxx	139	74	588	xxxx	xxxx	xxxxx				
Move Cap.:	804	xxxx	xxxxx	xxxx	xxxx	xxxxx	135	71	588	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	266	186	xxxxx	185	179	xxxxx				
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.05	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.7	xxxx	xxxxx	xxxxx	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	376	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.4	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			16.4			xxxxxx						
ApproachLOS:	*			*			C			*						

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

4:45-5:45pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: B[14.3]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	17	1023		0 0	800			20	11			0 18	0			0 0
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:	17	1023		0 0	800			20	11			0 18	0			0 0
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:	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 Volume:	17	1023		0 0	800			20	11			0 18	0			0 0
Reduct Vol:	0	0		0 0	0			0	0			0 0	0			0 0
FinalVolume:	17	1023		0 0	800			20	11			0 18	0			0 0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8	6.5		6.9 xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5	4.0		3.3 xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	820	xxxx	xxxxx	xxxx xxxx	xxxxx				1346	1857		400 xxxx	xxxx	xxxxx		
Potent Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				145	74		605 xxxx	xxxx	xxxxx		
Move Cap.:	818	xxxx	xxxxx	xxxx xxxx	xxxxx				143	73		605 xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				275	188	xxxxx	185	183	xxxxx		
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.04	0.00		0.03 xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	9.5	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	A	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	416	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.3	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				14.3			xxxxxx					
ApproachLOS:	*			*				B			*					

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

4:45-5:45pm Peak Hour - Project 2010 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[14.8]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1034		0 0	818			0	6			0 6	0			0 0
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	1034		0 0	818			0	6			0 6	0			0 0
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:	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 Volume:	0	1034		0 0	818			0	6			0 6	0			0 0
Reduct Vol:	0	0		0 0	0			0	0			0 0	0			0 0
FinalVolume:	0	1034		0 0	818			0	6			0 6	0			0 0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8	6.5		6.9 xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5	4.0		3.3 xxxxx	xxxx	xxxxx		
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1335	1852		409 xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148	75		597 xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				148	75		597 xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				278	192	xxxxx	195	192	xxxxx		
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.02	0.00		0.01 xxxx	xxxx	xxxx		
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	380	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.8	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx				14.8			xxxxxx					
ApproachLOS:	*			*				B			*					

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

9-10am Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 443		0	0 507		7	18	0	12	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	9 443		0	0 507		7	18	0	12	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	9 443		0	0 507		7	18	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	9 443		0	0 507		7	18	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	514 xxxx	xxxxx	xxxx	xxxx	xxxxx		747	968	254	xxxx	xxxx	xxxxx
Potent Cap.:	1062 xxxx	xxxxx	xxxx	xxxx	xxxxx		353	256	752	xxxx	xxxx	xxxxx
Move Cap.:	1062 xxxx	xxxxx	xxxx	xxxx	xxxxx		351	254	752	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		455	368	xxxxx 423	364	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.04	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.4 xxxx	xxxxx	xxxxx	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	540	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	12.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[12.8]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 408		0	0 475		44	44	0	56	0	0	0
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	1.00 1.00	1.00	1.00
Initial Bse:	56 408		0	0 475		44	44	0	56	0	0	0
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	1.00 1.00	1.00	1.00
PHF 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	1.00 1.00	1.00	1.00
PHF Volume:	56 408		0	0 475		44	44	0	56	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	56 408		0	0 475		44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	519 xxxx	xxxxx	xxxx	xxxx	xxxxx		813	1017	260	xxxx	xxxx	xxxxx
Potent Cap.:	1057 xxxx	xxxxx	xxxx	xxxx	xxxxx		320	239	745	xxxx	xxxx	xxxxx
Move Cap.:	1057 xxxx	xxxxx	xxxx	xxxx	xxxxx		307	227	745	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		425	344	xxxxx 369	325	xxxxx	
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx		0.10	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.6 xxxx	xxxxx	xxxxx	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	560	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	12.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			12.8			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[14.7]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14	659	0	0	647	24	28	0	9	0	0	0
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:	14	659	0	0	647	24	28	0	9	0	0	0
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:	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 Volume:	14	659	0	0	647	24	28	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	659	0	0	647	24	28	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	671	xxxx	xxxxx	xxxx	xxxx	xxxxx	1005	1334	324	xxxx	xxxx	xxxxx
Potent Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx	242	155	678	xxxx	xxxx	xxxxx
Move Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx	239	153	678	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	278	xxxxx	306	270	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.9	xxxx	xxxxx	xxxxx	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	409	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.7			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[14.7]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56	629	0	0	612	44	44	0	56	0	0	0
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:	56	629	0	0	612	44	44	0	56	0	0	0
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:	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 Volume:	56	629	0	0	612	44	44	0	56	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	56	629	0	0	612	44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	656	xxxx	xxxxx	xxxx	xxxx	xxxxx	1061	1375	328	xxxx	xxxx	xxxxx
Potent Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx	222	147	674	xxxx	xxxx	xxxxx
Move Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx	212	138	674	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	342	261	xxxxx	268	246	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	473	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.7			xxxxxx		
ApproachLOS:	*			*			B			*		

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

1:15-2:15 Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.1]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	18	758		0	0		647		24		28		0		9		0	0		0	
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:	18	758		0	0		647		24		28		0		9		0	0		0	
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:	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 Volume:	18	758		0	0		647		24		28		0		9		0	0		0	
Reduct Vol:	0	0		0	0		0		0		0		0		0		0	0		0	
FinalVolume:	18	758		0	0		647		24		28		0		9		0	0		0	
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	671	xxxx	xxxxx	xxxx	xxxx	xxxxx					1062	1441		324	xxxx	xxxx	xxxxx				
Potent Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx					222	134		678	xxxx	xxxx	xxxxx				
Move Cap.:	929	xxxx	xxxxx	xxxx	xxxx	xxxxx					219	131		678	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					348	255	xxxxx	268	248	xxxxx					
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					0.08	0.00	0.01	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	395	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx											
ApproachLOS:	*			*			C			*											

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

1:15-2:15 Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[14.1]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	44	744		0	0		624		32		32		0		44		0	0		0	
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:	44	744		0	0		624		32		32		0		44		0	0		0	
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:	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 Volume:	44	744		0	0		624		32		32		0		44		0	0		0	
Reduct Vol:	0	0		0	0		0		0		0		0		0		0	0		0	
FinalVolume:	44	744		0	0		624		32		32		0		44		0	0		0	
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	656	xxxx	xxxxx	xxxx	xxxx	xxxxx					1100	1472		328	xxxx	xxxx	xxxxx				
Potent Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx					210	128		674	xxxx	xxxx	xxxxx				
Move Cap.:	941	xxxx	xxxxx	xxxx	xxxx	xxxxx					202	122		674	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					334	244	xxxxx	245	234	xxxxx					
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx					0.10	0.00	0.07	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	472	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.1	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			14.1			xxxxxx											
ApproachLOS:	*			*			B			*											

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

4:45-5:45pm Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.5]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	781	0	0	610	20	11	0	18	0	0	0				
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:	19	781	0	0	610	20	11	0	18	0	0	0				
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:	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 Volume:	19	781	0	0	610	20	11	0	18	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	19	781	0	0	610	20	11	0	18	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	630	xxxx	xxxxx	xxxx	xxxx	xxxxx	1039	1429	305	xxxx	xxxx	xxxxx				
Potent Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	230	136	697	xxxx	xxxx	xxxxx				
Move Cap.:	962	xxxx	xxxxx	xxxx	xxxx	xxxxx	226	133	697	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	357	256	xxxxx	261	250	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.8	xxxx	xxxxx	xxxxx	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	512	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.5	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.5			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Project 2010 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[12.8]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	794	0	0	628	0	6	0	6	0	0	0				
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	794	0	0	628	0	6	0	6	0	0	0				
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:	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 Volume:	0	794	0	0	628	0	6	0	6	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	794	0	0	628	0	6	0	6	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1025	1422	314	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	234	137	688	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	362	262	xxxxx	275	262	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	475	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.8	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.8			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[14.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9	610	0	0	699	7	19	0	13	0	0	0
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:	9	610	0	0	699	7	19	0	13	0	0	0
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:	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 Volume:	9	610	0	0	699	7	19	0	13	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	610	0	0	699	7	19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	706 xxxx	xxxxx	xxxx	xxxx	xxxxx	1022	1327	350	xxxx	xxxx	xxxxx	
Potent Cap.:	902 xxxx	xxxxx	xxxx	xxxx	xxxxx	235	157	652	xxxx	xxxx	xxxxx	
Move Cap.:	902 xxxx	xxxxx	xxxx	xxxx	xxxxx	234	155	652	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	353	280	xxxxx	323	276	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	434	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	14.0	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	B	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.0			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[15.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	28	571	0	0	664	48	48	0	28	0	0	0
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:	28	571	0	0	664	48	48	0	28	0	0	0
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:	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 Volume:	28	571	0	0	664	48	48	0	28	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	28	571	0	0	664	48	48	0	28	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	712 xxxx	xxxxx	xxxx	xxxx	xxxxx	1030	1315	356	xxxx	xxxx	xxxxx	
Potent Cap.:	897 xxxx	xxxxx	xxxx	xxxx	xxxxx	233	159	646	xxxx	xxxx	xxxxx	
Move Cap.:	897 xxxx	xxxxx	xxxx	xxxx	xxxxx	227	154	646	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	349	279	xxxxx	316	267	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.04	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.1 xxxx	xxxxx	xxxxx	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	421	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.9]

Street Name:	US 101									Black Bart								
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	15	914	0	0	895	26	30	0	9	0	0	0						
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:	15	914	0	0	895	26	30	0	9	0	0	0						
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:	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 Volume:	15	914	0	0	895	26	30	0	9	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	15	914	0	0	895	26	30	0	9	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	921	xxxx	xxxxx	xxxx	xxxx	xxxxx	1382	1839	448	xxxx	xxxx	xxxxx						
Potent Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx	137	76	564	xxxx	xxxx	xxxxx						
Move Cap.:	750	xxxx	xxxxx	xxxx	xxxx	xxxxx	135	75	564	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	261	193	xxxxx	208	187	xxxxx						
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.02	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.9	xxxx	xxxxx	xxxxx	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	298	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.9	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			18.9			xxxxxx								
ApproachLOS:	*			*			C			*								

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[19.4]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0		
Volume Module:																		
Base Vol:	28	881	0	0	856	48	48	0	28	0	0	0						
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:	28	881	0	0	856	48	48	0	28	0	0	0						
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:	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 Volume:	28	881	0	0	856	48	48	0	28	0	0	0						
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0						
FinalVolume:	28	881	0	0	856	48	48	0	28	0	0	0						
Critical Gap Module:																		
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx						
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx						
Capacity Module:																		
Cnflict Vol:	904	xxxx	xxxxx	xxxx	xxxx	xxxxx	1377	1817	452	xxxx	xxxx	xxxxx						
Potent Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx	139	79	560	xxxx	xxxx	xxxxx						
Move Cap.:	761	xxxx	xxxxx	xxxx	xxxx	xxxxx	135	76	560	xxxx	xxxx	xxxxx						
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	262	194	xxxxx	206	185	xxxxx						
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	0.18	0.00	0.05	xxxx	xxxx	xxxx						
Level Of Service Module:																		
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						
Control Del:	9.9	xxxx	xxxxx	xxxxx	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	326	xxxxx	xxxx	xxxx	xxxxx						
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx						
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.4	xxxxx	xxxxx	xxxx	xxxxx						
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*						
ApproachDel:	xxxxxx			xxxxxx			19.4			xxxxxx								
ApproachLOS:	*			*			C			*								

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	19 1062		0	0 894		25	13	0	19	0	0	0
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:	19 1062		0	0 894		25	13	0	19	0	0	0
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:	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 Volume:	19 1062		0	0 894		25	13	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	19 1062		0	0 894		25	13	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	919 xxxx xxxxx			xxxx xxxx		xxxxx	1463	1994	447	xxxx xxxx		xxxxx
Potent Cap.:	751 xxxx xxxxx			xxxx xxxx		xxxxx	122	61	564	xxxx xxxx		xxxxx
Move Cap.:	751 xxxx xxxxx			xxxx xxxx		xxxxx	119	60	564	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	248	172	xxxxx	171	166	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	372	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	15.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.6]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1041		0	0 873		40	40	0	20	0	0	0
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:	20 1041		0	0 873		40	40	0	20	0	0	0
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:	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 Volume:	20 1041		0	0 873		40	40	0	20	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1041		0	0 873		40	40	0	20	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	913 xxxx xxxxx			xxxx xxxx		xxxxx	1454	1974	457	xxxx xxxx		xxxxx
Potent Cap.:	755 xxxx xxxxx			xxxx xxxx		xxxxx	123	63	557	xxxx xxxx		xxxxx
Move Cap.:	755 xxxx xxxxx			xxxx xxxx		xxxxx	121	61	557	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	249	174	xxxxx	175	169	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.16	0.00	0.04	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	306	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.1]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	1097		0 0	860		21		12		0	19	0		0	0
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	1.00
Initial Bse:	20	1097		0 0	860		21		12		0	19	0		0	0
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	1.00
PHF 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	1.00
PHF Volume:	20	1097		0 0	860		21		12		0	19	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	20	1097		0 0	860		21		12		0	19	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	881	xxxx	xxxxx	xxxx xxxx	xxxxx				1449		1997	430	xxxx		xxxx	xxxxx
Potent Cap.:	776	xxxx	xxxxx	xxxx xxxx	xxxxx				124		61	579	xxxx		xxxx	xxxxx
Move Cap.:	776	xxxx	xxxxx	xxxx xxxx	xxxxx				122		59	579	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				253		170	xxxxx	165		165	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx xxxx	xxxx				0.05		0.00	0.03	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	9.8	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	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			386		xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		0.3		xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		15.1		xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	* *	*	*	*		C		*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					15.1			xxxxxx				
ApproachLOS:	*			*					C			*				

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass July Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.5]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1111		0 0	879		0		6		0	6	0		0	0
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	1.00
Initial Bse:	0	1111		0 0	879		0		6		0	6	0		0	0
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	1.00
PHF 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	1.00
PHF Volume:	0	1111		0 0	879		0		6		0	6	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	0	1111		0 0	879		0		6		0	6	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1435		1990	440	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				127		61	571	xxxx		xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				127		61	571	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				256		175	xxxxx	175		175	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.02		0.00	0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	*	*	* *	*	*	*	*	*	*	*	*	*	*		
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx			354		xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		0.1		xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxxx		15.5		xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	* *	*	*	*		C		*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					15.5			xxxxxx				
ApproachLOS:	*			*					C			*				

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9 493	0	0	561	7		19	0	13	0	0	0
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	1.00
Initial Bse:	9 493	0	0	561	7		19	0	13	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	9 493	0	0	561	7		19	0	13	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	9 493	0	0	561	7		19	0	13	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	568 xxxx	xxxxx	xxxx	xxxx	xxxxx		826	1072	281	xxxx	xxxx	xxxxx
Potent Cap.:	1014 xxxx	xxxxx	xxxx	xxxx	xxxxx		315	222	723	xxxx	xxxx	xxxxx
Move Cap.:	1014 xxxx	xxxxx	xxxx	xxxx	xxxxx		312	220	723	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		423	340	xxxxx 390	336	xxxxx	
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx		0.04	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.6 xxxx	xxxxx	xxxxx	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	508	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	12.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*		B	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx				12.6		xxxxxx			
ApproachLOS:	*		*				B		*			

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

9-10am Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated Lanes
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: B[14.2]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	36 438	0	0	510	64		64	0	36	0	0	0
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	1.00
Initial Bse:	36 438	0	0	510	64		64	0	36	0	0	0
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	1.00
PHF 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	1.00
PHF Volume:	36 438	0	0	510	64		64	0	36	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
FinalVolume:	36 438	0	0	510	64		64	0	36	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	574 xxxx	xxxxx	xxxx	xxxx	xxxxx		833	1052	287	xxxx	xxxx	xxxxx
Potent Cap.:	1009 xxxx	xxxxx	xxxx	xxxx	xxxxx		311	228	716	xxxx	xxxx	xxxxx
Move Cap.:	1009 xxxx	xxxxx	xxxx	xxxx	xxxxx		303	220	716	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		418	339	xxxxx 380	322	xxxxx	
Volume/Cap:	0.04 xxxx	xxxx	xxxx	xxxx	xxxx		0.15	0.00	0.05	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.7 xxxx	xxxxx	xxxxx	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	492	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	14.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*		*	B	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx				14.2		xxxxxx			
ApproachLOS:	*		*				B		*			

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.7]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	15	725		0		0	712		26			30		0		9	0		0		
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
Initial Bse:	15	725		0		0	712		26			30		0		9	0		0		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
PHF Volume:	15	725		0		0	712		26			30		0		9	0		0		
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		
FinalVolume:	15	725		0		0	712		26			30		0		9	0		0		
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	738	xxxx	xxxxx	xxxx	xxxx	xxxxx						1105		1467		356	xxxx	xxxx	xxxxx		
Potent Cap.:	877	xxxx	xxxxx	xxxx	xxxx	xxxxx						208		129		646	xxxx	xxxx	xxxxx		
Move Cap.:	877	xxxx	xxxxx	xxxx	xxxx	xxxxx						206		127		646	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						332		252	xxxxx	276	244	xxxxx			
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	374	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.7	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				15.7			xxxxxx										
ApproachLOS:	*			*				C			*										

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

11-12pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[16.9]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	36	676		0		0	657		64			64		0		36	0		0		
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
Initial Bse:	36	676		0		0	657		64			64		0		36	0		0		
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00			1.00		1.00		1.00	1.00		1.00		
PHF Volume:	36	676		0		0	657		64			64		0		36	0		0		
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		
FinalVolume:	36	676		0		0	657		64			64		0		36	0		0		
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	721	xxxx	xxxxx	xxxx	xxxx	xxxxx						1099		1437		361	xxxx	xxxx	xxxxx		
Potent Cap.:	890	xxxx	xxxxx	xxxx	xxxx	xxxxx						210		135		642	xxxx	xxxx	xxxxx		
Move Cap.:	890	xxxx	xxxxx	xxxx	xxxx	xxxxx						204		129		642	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						332		253	xxxxx	271	240	xxxxx			
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx						0.19		0.00		0.06	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	402	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				16.9			xxxxxx										
ApproachLOS:	*			*				C			*										

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.2]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	828		0 0	709		26		30		0	9	0		0	0
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:	19	828		0 0	709		26		30		0	9	0		0	0
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:	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 Volume:	19	828		0 0	709		26		30		0	9	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	19	828		0 0	709		26		30		0	9	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	735	xxxx	xxxxx	xxxx xxxx	xxxxx				1161		1575	355	xxxx		xxxx	xxxxx
Potent Cap.:	879	xxxx	xxxxx	xxxx xxxx	xxxxx				191		111	648	xxxx		xxxx	xxxxx
Move Cap.:	879	xxxx	xxxxx	xxxx xxxx	xxxxx				188		109	648	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				319		231	xxxxx	241		224	xxxxx
Volume/Cap:	0.02	xxxx	xxxx	xxxx xxxx	xxxx				0.09		0.00	0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx 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		362	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.4	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		16.2	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*	*	* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					16.2				xxxxxx			
ApproachLOS:	*			*					C				*			

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

1:15-2:15pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[16.3]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	28	799		0 0	670		48		48		0	28	0		0	0
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:	28	799		0 0	670		48		48		0	28	0		0	0
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:	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 Volume:	28	799		0 0	670		48		48		0	28	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	28	799		0 0	670		48		48		0	28	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	718	xxxx	xxxxx	xxxx xxxx	xxxxx				1150		1549	359	xxxx		xxxx	xxxxx
Potent Cap.:	892	xxxx	xxxxx	xxxx xxxx	xxxxx				195		115	643	xxxx		xxxx	xxxxx
Move Cap.:	892	xxxx	xxxxx	xxxx xxxx	xxxxx				190		111	643	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				322		234	xxxxx	241		225	xxxxx
Volume/Cap:	0.03	xxxx	xxxx	xxxx xxxx	xxxx				0.15		0.00	0.04	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	9.2	xxxx	xxxxx	xxxxx 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		394	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.7	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		16.3	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*	*	* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					16.3				xxxxxx			
ApproachLOS:	*			*					C				*			

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	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 Volume:	20	839	0	0	656	21	12	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	839	0	0	656	21	12	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1116	1535	328	xxxx	xxxx	xxxxx				
Potent Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	205	117	674	xxxx	xxxx	xxxxx				
Move Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	115	674	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	237	xxxxx	239	230	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	483	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Project 2014 w/ Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	853	0	0	675	0	6	0	6	0	0	0				
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	853	0	0	675	0	6	0	6	0	0	0				
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:	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 Volume:	0	853	0	0	675	0	6	0	6	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	853	0	0	675	0	6	0	6	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1528	338	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	339	242	xxxxx	253	242	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	449	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	9	594	0	0	683	7	19	0	12	0	0	0
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:	9	594	0	0	683	7	19	0	12	0	0	0
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:	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 Volume:	9	594	0	0	683	7	19	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	594	0	0	683	7	19	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	690 xxxx	xxxxx	xxxx	xxxx	xxxxx		998	1295	342	xxxx	xxxx	xxxxx
Potent Cap.:	914 xxxx	xxxxx	xxxx	xxxx	xxxxx		244	164	660	xxxx	xxxx	xxxxx
Move Cap.:	914 xxxx	xxxxx	xxxx	xxxx	xxxxx		242	162	660	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		360	287	xxxxx	331	283	xxxxx
Volume/Cap:	0.01 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.0 xxxx	xxxxx	xxxxx	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	437	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx		
ApproachLOS:	*			*			B			*		

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[14.1]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	571	0	0	664	32	32	0	44	0	0	0
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:	44	571	0	0	664	32	32	0	44	0	0	0
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:	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 Volume:	44	571	0	0	664	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	571	0	0	664	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	696 xxxx	xxxxx	xxxx	xxxx	xxxxx		1054	1339	348	xxxx	xxxx	xxxxx
Potent Cap.:	909 xxxx	xxxxx	xxxx	xxxx	xxxxx		225	154	654	xxxx	xxxx	xxxxx
Move Cap.:	909 xxxx	xxxxx	xxxx	xxxx	xxxxx		216	147	654	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		342	271	xxxxx	295	257	xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.2 xxxx	xxxxx	xxxxx	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	473	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	15	898	0	0	879	26	30	0	9	0	0	0
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:	15	898	0	0	879	26	30	0	9	0	0	0
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:	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 Volume:	15	898	0	0	879	26	30	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	15	898	0	0	879	26	30	0	9	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	905 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1358	1807	440	xxxx	xxxx	xxxxx
Potent Cap.:	760 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	143	80	571	xxxx	xxxx	xxxxx
Move Cap.:	760 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	140	78	571	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	267	198	xxxxx	213	191	xxxxx
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	304	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.6			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[17.0]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	881	0	0	856	32	32	0	44	0	0	0
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:	44	881	0	0	856	32	32	0	44	0	0	0
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:	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 Volume:	44	881	0	0	856	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	881	0	0	856	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	888 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	1401	1841	444	xxxx	xxxx	xxxxx
Potent Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	134	76	567	xxxx	xxxx	xxxxx
Move Cap.:	771 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	128	72	567	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	256	188	xxxxx	191	177	xxxxx
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0 xxxx	xxxxx	xxxxx	xxxx	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	xxxx	xxxxx	xxxx	375	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.4]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	19	1050		0 0	882		24	13	0		19	0 0	0		0	0
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		1.00	1.00
Initial Bse:	19	1050		0 0	882		24	13	0		19	0 0	0		0	0
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		1.00	1.00
PHF 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		1.00	1.00
PHF Volume:	19	1050		0 0	882		24	13	0		19	0 0	0		0	0
Reduct Vol:	0	0		0 0	0		0	0	0		0	0 0	0		0	0
FinalVolume:	19	1050		0 0	882		24	13	0		19	0 0	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx			6.8	6.5		6.9	xxxxx xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx			3.5	4.0		3.3	xxxxx xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	906	xxxx	xxxxx	xxxx xxxx	xxxxx			1445	1970		441	xxxx xxxx	xxxxx			
Potent Cap.:	759	xxxx	xxxxx	xxxx xxxx	xxxxx			125	63		570	xxxx xxxx	xxxxx			
Move Cap.:	759	xxxx	xxxxx	xxxx xxxx	xxxxx			123	62		570	xxxx xxxx	xxxxx			
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx			252	175	xxxxx	174	169	xxxxx			
Volume/Cap:	0.03	xxxx	xxxx	xxxx xxxx	xxxx			0.05	0.00	0.03	xxxx	xxxx xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx xxxx	xxxxx			
Control Del:	9.9	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx 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	377	xxxxx	xxxx	xxxx xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	0.3	xxxxx	xxxxx	xxxx xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	15.4	xxxxx	xxxxx	xxxx xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*			*	C	*	*	* *	*			
ApproachDel:	xxxxxx			xxxxxx				15.4			xxxxxx					
ApproachLOS:	*			*				C			*					

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[17.4]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	32	1041		0 0	873		28	28	0		32	0 0	0		0	0
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		1.00	1.00
Initial Bse:	32	1041		0 0	873		28	28	0		32	0 0	0		0	0
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		1.00	1.00
PHF 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		1.00	1.00
PHF Volume:	32	1041		0 0	873		28	28	0		32	0 0	0		0	0
Reduct Vol:	0	0		0 0	0		0	0	0		0	0 0	0		0	0
FinalVolume:	32	1041		0 0	873		28	28	0		32	0 0	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx			6.8	6.5		6.9	xxxxx xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx			3.5	4.0		3.3	xxxxx xxxx	xxxxx			
Capacity Module:																
Cnflict Vol:	901	xxxx	xxxxx	xxxx xxxx	xxxxx			1472	1992		451	xxxx xxxx	xxxxx			
Potent Cap.:	763	xxxx	xxxxx	xxxx xxxx	xxxxx			120	61		562	xxxx xxxx	xxxxx			
Move Cap.:	763	xxxx	xxxxx	xxxx xxxx	xxxxx			116	59		562	xxxx xxxx	xxxxx			
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx			245	170	xxxxx	166	163	xxxxx			
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx			0.11	0.00	0.06	xxxx	xxxx xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx xxxx	xxxxx			
Control Del:	9.9	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx 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	351	xxxxx	xxxx	xxxx xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	0.6	xxxxx	xxxxx	xxxx xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx			xxxxx	17.4	xxxxx	xxxxx	xxxx xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*			*	C	*	*	* *	*			
ApproachDel:	xxxxxx			xxxxxx				17.4			xxxxxx					
ApproachLOS:	*			*				C			*					

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[15.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1097		0	0 860		21	12	0	19	0	0	0
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:	20 1097		0	0 860		21	12	0	19	0	0	0
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:	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 Volume:	20 1097		0	0 860		21	12	0	19	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	20 1097		0	0 860		21	12	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	881 xxxx xxxxx			xxxx xxxx xxxxx			1449	1997	430	xxxx xxxx xxxxx		
Potent Cap.:	776 xxxx xxxxx			xxxx xxxx xxxxx			124	61	579	xxxx xxxx xxxxx		
Move Cap.:	776 xxxx xxxxx			xxxx xxxx xxxxx			122	59	579	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			253	170	xxxxx 165	165	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.05	0.00	0.03	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.8 xxxx xxxxx			xxxxx 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	386	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass July Peak (Mitigated La
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1111		0	0 879		0	6	0	6	0	0	0
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 1111		0	0 879		0	6	0	6	0	0	0
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:	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 Volume:	0 1111		0	0 879		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1111		0	0 879		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			1435	1990	440	xxxx xxxx xxxxx		
Potent Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Move Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			127	61	571	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			256	175	xxxxx 175	175	xxxxx	
Volume/Cap:	xxxx xxxx	xxxx		xxxx xxxx	xxxx		0.02	0.00	0.01	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	354	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[12.4]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	9	473	0	0	541	7			19	0	13		0	0	0	
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:	9	473	0	0	541	7			19	0	13		0	0	0	
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:	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 Volume:	9	473	0	0	541	7			19	0	13		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	9	473	0	0	541	7			19	0	13		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	548	xxxx	xxxxx	xxxx	xxxx	xxxxx			796	1032	271		xxxx	xxxx	xxxxx	
Potent Cap.:	1032	xxxx	xxxxx	xxxx	xxxx	xxxxx			329	235	733		xxxx	xxxx	xxxxx	
Move Cap.:	1032	xxxx	xxxxx	xxxx	xxxx	xxxxx			327	233	733		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			434	350	xxxxx		402	346	xxxxx	
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx			0.04	0.00	0.02		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.5	xxxx	xxxxx	xxxxx	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	521	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.4	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			12.4			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated Lane
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[13.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	56	438	0	0	510	44			44	0	56		0	0	0	
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:	56	438	0	0	510	44			44	0	56		0	0	0	
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:	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 Volume:	56	438	0	0	510	44			44	0	56		0	0	0	
Reduct Vol:	0	0	0	0	0	0			0	0	0		0	0	0	
FinalVolume:	56	438	0	0	510	44			44	0	56		0	0	0	
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.8	6.5	6.9		xxxxx	xxxx	xxxxx	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx			3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	554	xxxx	xxxxx	xxxx	xxxx	xxxxx			863	1082	277		xxxx	xxxx	xxxxx	
Potent Cap.:	1026	xxxx	xxxxx	xxxx	xxxx	xxxxx			298	219	726		xxxx	xxxx	xxxxx	
Move Cap.:	1026	xxxx	xxxxx	xxxx	xxxx	xxxxx			285	207	726		xxxx	xxxx	xxxxx	
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			406	327	xxxxx		350	309	xxxxx	
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx			0.11	0.00	0.08		xxxx	xxxx	xxxx	
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	8.7	xxxx	xxxxx	xxxxx	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	539	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.4]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	15	705		0		0	692		26			30		0		9	0		0		0
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:	15	705		0		0	692		26			30		0		9	0		0		0
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:	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 Volume:	15	705		0		0	692		26			30		0		9	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	15	705		0		0	692		26			30		0		9	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	718	xxxx	xxxxx	xxxx	xxxx	xxxxx						1075		1427		346	xxxx	xxxx	xxxxx		
Potent Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx						218		136		656	xxxx	xxxx	xxxxx		
Move Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx						215		134		656	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						341		259	xxxxx	284	251	xxxxx			
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx						0.09		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	384	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			15.4			xxxxxx											
ApproachLOS:	*			*			C			*											

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

11-12pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated Lan
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[15.3]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	56	676		0		0	657		44			44		0		56	0		0		0
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:	56	676		0		0	657		44			44		0		56	0		0		0
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:	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 Volume:	56	676		0		0	657		44			44		0		56	0		0		0
Reduct Vol:	0	0		0		0	0		0			0		0		0	0		0		0
FinalVolume:	56	676		0		0	657		44			44		0		56	0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx						3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																					
Cnflict Vol:	701	xxxx	xxxxx	xxxx	xxxx	xxxxx						1129		1467		351	xxxx	xxxx	xxxxx		
Potent Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx						201		129		652	xxxx	xxxx	xxxxx		
Move Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx						191		121		652	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx						322		244	xxxxx	249	229	xxxxx			
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx						0.14		0.00		0.09	xxxx	xxxx	xxxx		
Level Of Service Module:																					
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx									
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	450	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx											
ApproachLOS:	*			*			C			*											

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[15.9]

Street Name:	US 101									Black Bart								
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:	1	0	2	0	0		0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	19	812		0	0		693		26		30		0		9		0		0		0
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		1.00
Initial Bse:	19	812		0	0		693		26		30		0		9		0		0		0
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		1.00
PHF 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		1.00
PHF Volume:	19	812		0	0		693		26		30		0		9		0		0		0
Reduct Vol:	0	0		0	0		0		0		0		0		0		0		0		0
FinalVolume:	19	812		0	0		693		26		30		0		9		0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	719	xxxx	xxxxx	xxxx	xxxx	xxxxx					1137	1543		347	xxxx	xxxx	xxxxx				
Potent Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx					198	116		655	xxxx	xxxx	xxxxx				
Move Cap.:	892	xxxx	xxxxx	xxxx	xxxx	xxxxx					195	114		655	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					326	237	xxxxx	247	229	xxxxx					
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx					0.09	0.00	0.01	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.1	xxxx	xxxxx	xxxxx	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	369	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.9	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				15.9			xxxxxx										
ApproachLOS:	*			*				C			*										

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

1:15-2:15pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[14.7]

Street Name:	US 101									Quarry Access								
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:	1	0	2	0	0		0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																					
Base Vol:	44	799		0	0		670		32		32		0		44		0		0		0
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		1.00
Initial Bse:	44	799		0	0		670		32		32		0		44		0		0		0
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		1.00
PHF 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		1.00
PHF Volume:	44	799		0	0		670		32		32		0		44		0		0		0
Reduct Vol:	0	0		0	0		0		0		0		0		0		0		0		0
FinalVolume:	44	799		0	0		670		32		32		0		44		0		0		0
Critical Gap Module:																					
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8	6.5		6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	4.0		3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																					
Cnflict Vol:	702	xxxx	xxxxx	xxxx	xxxx	xxxxx					1174	1573		351	xxxx	xxxx	xxxxx				
Potent Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx					188	111		651	xxxx	xxxx	xxxxx				
Move Cap.:	905	xxxx	xxxxx	xxxx	xxxx	xxxxx					181	106		651	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					314	226	xxxxx	226	216	xxxxx					
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx					0.10	0.00	0.07	xxxx	xxxx	xxxx					
Level Of Service Module:																					
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx								
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	448	xxxxx	xxxx	xxxx	xxxxx									
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx									
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.7	xxxxx	xxxxx	xxxx	xxxxx									
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*									
ApproachDel:	xxxxxx			xxxxxx				14.7			xxxxxx										
ApproachLOS:	*			*				B			*										

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[13.0]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	20	839	0	0	656	21	12	0	19	0	0	0				
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:	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 Volume:	20	839	0	0	656	21	12	0	19	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	20	839	0	0	656	21	12	0	19	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	677	xxxx	xxxxx	xxxx	xxxx	xxxxx	1116	1535	328	xxxx	xxxx	xxxxx				
Potent Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	205	117	674	xxxx	xxxx	xxxxx				
Move Cap.:	924	xxxx	xxxxx	xxxx	xxxx	xxxxx	202	115	674	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	334	237	xxxxx	239	230	xxxxx				
Volume/Cap:	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	483	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.0	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.0			xxxxxx						
ApproachLOS:	*			*			B			*						

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

4:45-5:45pm Peak Hour - Project 2014 w/o Willits Bypass October Peak (Mitigated
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[13.2]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	853	0	0	675	0	6	0	6	0	0	0				
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	853	0	0	675	0	6	0	6	0	0	0				
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:	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 Volume:	0	853	0	0	675	0	6	0	6	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	0	853	0	0	675	0	6	0	6	0	0	0				
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1102	1528	338	xxxx	xxxx	xxxxx				
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	209	119	664	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	339	242	xxxxx	253	242	xxxxx				
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	0.00	0.01	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*				
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	449	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.2	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.2			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	12	749	0	0	863	9	24	0	17	0	0	0
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:	12	749	0	0	863	9	24	0	17	0	0	0
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:	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 Volume:	12	749	0	0	863	9	24	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	12	749	0	0	863	9	24	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	872 xxxx	xxxxx	xxxx	xxxx	xxxxx	1262	1636	432	xxxx	xxxx	xxxxx	
Potent Cap.:	782 xxxx	xxxxx	xxxx	xxxx	xxxxx	165	102	578	xxxx	xxxx	xxxxx	
Move Cap.:	782 xxxx	xxxxx	xxxx	xxxx	xxxxx	163	100	578	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	284	223	xxxxx	256	219	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.03	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	360	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	16.3	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[16.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	729	0	0	848	32	32	0	44	0	0	0
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:	44	729	0	0	848	32	32	0	44	0	0	0
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:	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 Volume:	44	729	0	0	848	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	729	0	0	848	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	880 xxxx	xxxxx	xxxx	xxxx	xxxxx	1317	1681	440	xxxx	xxxx	xxxxx	
Potent Cap.:	777 xxxx	xxxxx	xxxx	xxxx	xxxxx	152	96	570	xxxx	xxxx	xxxxx	
Move Cap.:	777 xxxx	xxxxx	xxxx	xxxx	xxxxx	145	90	570	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	271	211	xxxxx	228	198	xxxxx	
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	0.12	0.00	0.08	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	9.9 xxxx	xxxxx	xxxxx	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	389	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	16.5	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: D[25.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 1137		0	0 1113		33	38		0	12		0
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:	20 1137		0	0 1113		33	38		0	12		0
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:	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 Volume:	20 1137		0	0 1113		33	38		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	20 1137		0	0 1113		33	38		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5		6.9 xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0		3.3 xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1146 xxxx xxxxx			xxxx xxxx		xxxxx	1722	2290		557 xxxx	xxxx	xxxxx
Potent Cap.:	617 xxxx xxxxx			xxxx xxxx		xxxxx	82	40		479 xxxx	xxxx	xxxxx
Move Cap.:	617 xxxx xxxxx			xxxx xxxx		xxxxx	80	38		479 xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	196	142		xxxxx 147	134	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx		xxxx	0.19	0.00		0.03 xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Control Del:	11.0 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx		xxxxx xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	229		xxxxx xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.8		xxxxx xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	25.1		xxxxx xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*		*	D		* *	*	
ApproachDel:	xxxxxx			xxxxxx			25.1			xxxxxx		
ApproachLOS:	*			*			D			*		

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

11-12pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[21.7]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1125		0	0 1093		32	32		0	44		0
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:	44 1125		0	0 1093		32	32		0	44		0
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:	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 Volume:	44 1125		0	0 1093		32	32		0	44		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	44 1125		0	0 1093		32	32		0	44		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5		6.9 xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxxx		xxxxx	3.5	4.0		3.3 xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1125 xxxx xxxxx			xxxx xxxx		xxxxx	1760	2322		563 xxxx	xxxx	xxxxx
Potent Cap.:	628 xxxx xxxxx			xxxx xxxx		xxxxx	77	38		475 xxxx	xxxx	xxxxx
Move Cap.:	628 xxxx xxxxx			xxxx xxxx		xxxxx	73	35		475 xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	190	135		xxxxx 133	125	xxxxx
Volume/Cap:	0.07 xxxx	xxxx		xxxx xxxx		xxxx	0.17	0.00		0.09 xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx		xxxxx xxxx	xxxx	xxxxx
Control Del:	11.2 xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	xxxx		xxxxx xxxxx	xxxx	xxxxx
LOS by Move:	B	*		*	*		*	*		* *	*	
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	291		xxxxx xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	1.0		xxxxx xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	21.7		xxxxx xxxxx	xxxx	xxxxx
Shared LOS:	*	*		*	*		*	C		* *	*	
ApproachDel:	xxxxxx			xxxxxx			21.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.6]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1333		0	0 1118		32	17	0	24	0	0	0
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:	24 1333		0	0 1118		32	17	0	24	0	0	0
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:	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 Volume:	24 1333		0	0 1118		32	17	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1333		0	0 1118		32	17	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1150 xxxx xxxxx			xxxx xxxx xxxxx			1833	2499	559	xxxx xxxx xxxxx		
Potent Cap.:	615 xxxx xxxxx			xxxx xxxx xxxxx			69	29	478	xxxx xxxx xxxxx		
Move Cap.:	615 xxxx xxxxx			xxxx xxxx xxxxx			67	28	478	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			184	121	xxxxx	113	115	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx	xxxx		0.09	0.00	0.05	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	287	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	19.6	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				19.6		xxxxxx		
ApproachLOS:	*			*				C		*		

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

1:15-2:15pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.3]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	32 1329		0	0 1114		28	28	0	32	0	0	0
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:	32 1329		0	0 1114		28	28	0	32	0	0	0
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:	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 Volume:	32 1329		0	0 1114		28	28	0	32	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	32 1329		0	0 1114		28	28	0	32	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1142 xxxx xxxxx			xxxx xxxx xxxxx			1857	2521	571	xxxx xxxx xxxxx		
Potent Cap.:	619 xxxx xxxxx			xxxx xxxx xxxxx			67	28	469	xxxx xxxx xxxxx		
Move Cap.:	619 xxxx xxxxx			xxxx xxxx xxxxx			64	27	469	xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			180	119	xxxxx	110	112	xxxxx
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx	xxxx		0.16	0.00	0.07	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	268	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	22.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				22.3		xxxxxx		
ApproachLOS:	*			*				C		*		

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

4:45-5:45pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[19.6]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	26	1398		0 0	1098		27		17		0	24	0		0	0
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:	26	1398		0 0	1098		27		17		0	24	0		0	0
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:	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 Volume:	26	1398		0 0	1098		27		17		0	24	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	26	1398		0 0	1098		27		17		0	24	0		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	1125	xxxx	xxxxx	xxxx xxxx	xxxxx				1849		2548	549	xxxx		xxxx	xxxxx
Potent Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				67		27	485	xxxx		xxxx	xxxxx
Move Cap.:	628	xxxx	xxxxx	xxxx xxxx	xxxxx				65		26	485	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				183		116	xxxxx	104		111	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx				0.09		0.00	0.05	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	11.0	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	B	*	*	* *	*		*		*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		288	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.5	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		19.6	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*	*	* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					19.6				xxxxxx			
ApproachLOS:	*			*					C				*			

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

4:45-5:45pm Peak Hour - Project 2030 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[19.1]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	0	1418		0 0	1122		0		6		0	6	0		0	0
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	1418		0 0	1122		0		6		0	6	0		0	0
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:	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 Volume:	0	1418		0 0	1122		0		6		0	6	0		0	0
Reduct Vol:	0	0		0 0	0		0		0		0	0	0		0	0
FinalVolume:	0	1418		0 0	1122		0		6		0	6	0		0	0
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5	6.9	xxxxx		xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0	3.3	xxxxx		xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				1831		2540	561	xxxx		xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx		xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				69		28	476	xxxx		xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				186		121	xxxxx	114		121	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx xxxx	xxxx				0.03		0.00	0.01	xxxx		xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		xxxx	xxxxx	xxxx		xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		xxxx	xxxxx	xxxxx		xxxx	xxxxx
LOS by Move:	*	*	*	* *	*		*		*		*	*	*		*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				xxxx		268	xxxxx	xxxx		xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		0.1	xxxxx	xxxxx		xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx				xxxxx		19.1	xxxxx	xxxxx		xxxx	xxxxx
Shared LOS:	*	*	*	* *	*		*		C		*	*	*		*	*
ApproachDel:	xxxxxx			xxxxxx					19.1				xxxxxx			
ApproachLOS:	*			*					C				*			

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

9-10am Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[13.9]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	12	591	0	0	679	9	24	0	17	0	0	0				
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:	12	591	0	0	679	9	24	0	17	0	0	0				
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:	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 Volume:	12	591	0	0	679	9	24	0	17	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	12	591	0	0	679	9	24	0	17	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	688	xxxx	xxxxx	xxxx	xxxx	xxxxx	999	1294	340	xxxx	xxxx	xxxxx				
Potent Cap.:	916	xxxx	xxxxx	xxxx	xxxx	xxxxx	244	164	662	xxxx	xxxx	xxxxx				
Move Cap.:	916	xxxx	xxxxx	xxxx	xxxx	xxxxx	241	162	662	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	360	287	xxxxx	328	282	xxxxx				
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.03	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.0	xxxx	xxxxx	xxxxx	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	444	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.9	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			13.9			xxxxxx						
ApproachLOS:	*			*			B			*						

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

9-10am Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[14.9]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	56	559	0	0	652	44	44	0	56	0	0	0				
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:	56	559	0	0	652	44	44	0	56	0	0	0				
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:	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 Volume:	56	559	0	0	652	44	44	0	56	0	0	0				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
FinalVolume:	56	559	0	0	652	44	44	0	56	0	0	0				
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx				
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	696	xxxx	xxxxx	xxxx	xxxx	xxxxx	1066	1345	348	xxxx	xxxx	xxxxx				
Potent Cap.:	909	xxxx	xxxxx	xxxx	xxxx	xxxxx	221	153	654	xxxx	xxxx	xxxxx				
Move Cap.:	909	xxxx	xxxxx	xxxx	xxxx	xxxxx	210	143	654	xxxx	xxxx	xxxxx				
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	338	267	xxxxx	285	250	xxxxx				
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	0.00	0.09	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	9.2	xxxx	xxxxx	xxxxx	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	463	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.9	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	*	*	*	*	B	*	*	*	*				
ApproachDel:	xxxxxx			xxxxxx			14.9			xxxxxx						
ApproachLOS:	*			*			B			*						

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

11-12pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.0]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	20 887		0	0 871		33	38		0	12		0
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:	20 887		0	0 871		33	38		0	12		0
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:	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 Volume:	20 887		0	0 871		33	38		0	12		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	20 887		0	0 871		33	38		0	12		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	904 xxxx	xxxxx		xxxx	xxxx	xxxxx	1355	1798		436	xxxx	xxxx xxxxx
Potent Cap.:	761 xxxx	xxxxx		xxxx	xxxx	xxxxx	143	81		574	xxxx	xxxx xxxxx
Move Cap.:	761 xxxx	xxxxx		xxxx	xxxx	xxxxx	140	79		574	xxxx	xxxx xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	267	198	xxxxx	212	189	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx	xxxx	xxxx	0.14	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	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	307	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.0	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.0			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[18.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 863		0	0 839		44	44		0	56		0
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:	56 863		0	0 839		44	44		0	56		0
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:	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 Volume:	56 863		0	0 839		44	44		0	56		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	56 863		0	0 839		44	44		0	56		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5		6.9	xxxxx	xxxx xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	883 xxxx	xxxxx		xxxx	xxxx	xxxxx	1405	1836		442	xxxx	xxxx xxxxx
Potent Cap.:	775 xxxx	xxxxx		xxxx	xxxx	xxxxx	133	77		569	xxxx	xxxx xxxxx
Move Cap.:	775 xxxx	xxxxx		xxxx	xxxx	xxxxx	126	71		569	xxxx	xxxx xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	254	187	xxxxx	186	173	xxxxx
Volume/Cap:	0.07 xxxx	xxxx		xxxx	xxxx	xxxx	0.17	0.00	0.10	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	B *	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	368	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	18.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[19.9]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	24 1029		0	0 876		33	38	0	12	0	0	0
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:	24 1029		0	0 876		33	38	0	12	0	0	0
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:	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 Volume:	24 1029		0	0 876		33	38	0	12	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	24 1029		0	0 876		33	38	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	909 xxxx xxxxx			xxxx xxxx		xxxxx	1439	1953	438	xxxx xxxx		xxxxx
Potent Cap.:	757 xxxx xxxxx			xxxx xxxx		xxxxx	126	65	572	xxxx xxxx		xxxxx
Move Cap.:	757 xxxx xxxxx			xxxx xxxx		xxxxx	123	63	572	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	253	176	xxxxx	176	168	xxxxx
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.15	0.00	0.02	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.9 xxxx xxxxx			xxxxx 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	292	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	19.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[17.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1021		0	0 856		32	32	0	44	0	0	0
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:	44 1021		0	0 856		32	32	0	44	0	0	0
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:	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 Volume:	44 1021		0	0 856		32	32	0	44	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	44 1021		0	0 856		32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx xxxx		xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx xxxx		xxxxx
Capacity Module:												
Cnflict Vol:	888 xxxx xxxxx			xxxx xxxx		xxxxx	1471	1981	444	xxxx xxxx		xxxxx
Potent Cap.:	771 xxxx xxxxx			xxxx xxxx		xxxxx	120	62	567	xxxx xxxx		xxxxx
Move Cap.:	771 xxxx xxxxx			xxxx xxxx		xxxxx	115	59	567	xxxx xxxx		xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx		xxxxx	245	169	xxxxx	162	160	xxxxx
Volume/Cap:	0.06 xxxx	xxxx		xxxx xxxx	xxxx		0.13	0.00	0.08	xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.0 xxxx xxxxx			xxxxx 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	365	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx		xxxxx	xxxxx	17.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			17.5			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[15.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	26 1069		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
Initial Bse:	26 1069		0	0 838		27	15	0	24	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	26 1069		0	0 838		27	15	0	24	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	26 1069		0	0 838		27	15	0	24	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	865 xxxx	xxxxx	xxxx	xxxx	xxxxx		1425	1959	419	xxxx	xxxx	xxxxx
Potent Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		129	64	589	xxxx	xxxx	xxxxx
Move Cap.:	787 xxxx	xxxxx	xxxx	xxxx	xxxxx		126	62	589	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		257	174	xxxxx	167	167	xxxxx
Volume/Cap:	0.03 xxxx	xxxx	xxxx	xxxx	xxxx		0.06	0.00	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	9.7 xxxx	xxxxx	xxxxx	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	394	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	15.2	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2030 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.3]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1089		0	0 862		0	6	0	6	0	0	0
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	1.00	1.00
Initial Bse:	0 1089		0	0 862		0	6	0	6	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	0 1089		0	0 862		0	6	0	6	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	0 1089		0	0 862		0	6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		1407	1951	431	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		132	65	578	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		262	180	xxxxx	180	180	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx	xxxx		0.02	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	361	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx		xxxxx	15.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[18.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14	846	0	0	976	10	27	0	19	0	0	0
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:	14	846	0	0	976	10	27	0	19	0	0	0
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:	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 Volume:	14	846	0	0	976	10	27	0	19	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	846	0	0	976	10	27	0	19	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	986 xxxx	xxxxx	xxxx	xxxx	xxxxx	1427	1850	488	xxxx	xxxx	xxxxx	
Potent Cap.:	709 xxxx	xxxxx	xxxx	xxxx	xxxxx	128	75	531	xxxx	xxxx	xxxxx	
Move Cap.:	709 xxxx	xxxxx	xxxx	xxxx	xxxxx	126	74	531	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	246	192	xxxxx	218	187	xxxxx	
Volume/Cap:	0.02 xxxx	xxxx	xxxx	xxxx	xxxx	0.11	0.00	0.04	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	10.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	316	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	18.3	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[18.4]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44	828	0	0	963	32	32	0	44	0	0	0
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:	44	828	0	0	963	32	32	0	44	0	0	0
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:	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 Volume:	44	828	0	0	963	32	32	0	44	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	828	0	0	963	32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	995 xxxx	xxxxx	xxxx	xxxx	xxxxx	1481	1895	498	xxxx	xxxx	xxxxx	
Potent Cap.:	703 xxxx	xxxxx	xxxx	xxxx	xxxxx	118	70	524	xxxx	xxxx	xxxxx	
Move Cap.:	703 xxxx	xxxxx	xxxx	xxxx	xxxxx	113	66	524	xxxx	xxxx	xxxxx	
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	234	181	xxxxx	195	168	xxxxx	
Volume/Cap:	0.06 xxxx	xxxx	xxxx	xxxx	xxxx	0.14	0.00	0.08	xxxx	xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	10.5 xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	345	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	18.4	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			18.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: D[31.4]

Street Name:	US 101								Black Bart							
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:	1	0	2	0 0	0	0	2	0 1	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	22	1287		0 0	1259		38		43		0		14		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	22	1287		0 0	1259		38		43		0		14		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	22	1287		0 0	1259		38		43		0		14		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	22	1287		0 0	1259		38		43		0		14		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	1297	xxxx	xxxxx	xxxx xxxx	xxxxx				1947		2590		630	xxxx	xxxx	xxxxx
Potent Cap.:	541	xxxx	xxxxx	xxxx xxxx	xxxxx				58		26		430	xxxx	xxxx	xxxxx
Move Cap.:	541	xxxx	xxxxx	xxxx xxxx	xxxxx				56		25		430	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				163		116	xxxxx	117		108	xxxxx
Volume/Cap:	0.04	xxxx	xxxx	xxxx xxxx	xxxx				0.26		0.00	0.03	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.1	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	11.9	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	B	*	*	* *	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx			192	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx			1.2	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx			31.4	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*	*	*		D	*	*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					31.4				xxxxxx			
ApproachLOS:	*			*					D				*			

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

11-12pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: D[25.8]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0 0	0	0	1	1 0	0	0	1!	0 0	0	0	0	0 0
Volume Module:																
Base Vol:	44	1277		0 0	1241		32		32		0		44		0	0
Growth Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
Initial Bse:	44	1277		0 0	1241		32		32		0		44		0	0
User Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Adj:	1.00	1.00		1.00 1.00	1.00		1.00		1.00		1.00		1.00		1.00	1.00
PHF Volume:	44	1277		0 0	1241		32		32		0		44		0	0
Reduct Vol:	0	0		0 0	0		0		0		0		0		0	0
FinalVolume:	44	1277		0 0	1241		32		32		0		44		0	0
Critical Gap Module:																
Critical Gp:	4.1	xxxx	xxxxx	xxxxx xxxx	xxxxx				6.8		6.5		6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx xxxx	xxxxx				3.5		4.0		3.3	xxxxx	xxxx	xxxxx
Capacity Module:																
Cnflict Vol:	1273	xxxx	xxxxx	xxxx xxxx	xxxxx				1984		2622		637	xxxx	xxxx	xxxxx
Potent Cap.:	552	xxxx	xxxxx	xxxx xxxx	xxxxx				55		24		425	xxxx	xxxx	xxxxx
Move Cap.:	552	xxxx	xxxxx	xxxx xxxx	xxxxx				51		22		425	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx				158		111	xxxxx	106		100	xxxxx
Volume/Cap:	0.08	xxxx	xxxx	xxxx xxxx	xxxx				0.20		0.00	0.10	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																
2Way95thQ:	0.3	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	12.1	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		
LOS by Move:	B	*	*	* *	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT				LT - LTR - RT				LT - LTR - RT				LT - LTR - RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx			248	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx			1.3	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx xxxx	xxxxx	xxxxx			25.8	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*	* *	*	*	*		D	*	*	*	*	*		
ApproachDel:	xxxxxx			xxxxxx					25.8				xxxxxx			
ApproachLOS:	*			*					D				*			

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

1:15-2:15pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[23.2]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1510		0	0 1266		36	19		0	27		0
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:	27 1510		0	0 1266		36	19		0	27		0
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:	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 Volume:	27 1510		0	0 1266		36	19		0	27		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	27 1510		0	0 1266		36	19		0	27		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1302 xxxx xxxxx			xxxx xxxx xxxxx			2075	2830		633 xxxx xxxx xxxxx		
Potent Cap.:	539 xxxx xxxxx			xxxx xxxx xxxxx			48	18		427 xxxx xxxx xxxxx		
Move Cap.:	539 xxxx xxxxx			xxxx xxxx xxxxx			46	17		427 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			152	97		xxxxx 87 91 xxxxx		
Volume/Cap:	0.05 xxxx	xxxx		xxxx xxxx	xxxx		0.13	0.00		0.06 xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	12.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	244	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.7	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	23.2	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: D[26.5]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	32 1509		0	0 1265		28	28		0	32		0
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:	32 1509		0	0 1265		28	28		0	32		0
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:	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 Volume:	32 1509		0	0 1265		28	28		0	32		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	32 1509		0	0 1265		28	28		0	32		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	1293 xxxx xxxxx			xxxx xxxx xxxxx			2098	2852		647 xxxx xxxx xxxxx		
Potent Cap.:	543 xxxx xxxxx			xxxx xxxx xxxxx			46	17		419 xxxx xxxx xxxxx		
Move Cap.:	543 xxxx xxxxx			xxxx xxxx xxxxx			44	16		419 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			148	95		xxxxx 85 89 xxxxx		
Volume/Cap:	0.06 xxxx	xxxx		xxxx xxxx	xxxx		0.19	0.00		0.08 xxxx xxxx	xxxx	
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	12.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx xxxx xxxxx		
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	226	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.0	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	26.5	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	D	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			26.5			xxxxxx		
ApproachLOS:	*			*			D			*		

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

4:45-5:45pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[22.4]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	29 1587	0	0	0 1247	31		17	0	27	0	0	0
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	1.00	1.00
Initial Bse:	29 1587	0	0	0 1247	31		17	0	27	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	29 1587	0	0	0 1247	31		17	0	27	0	0	0
Reduct Vol:	0 0	0	0	0 0	0		0	0	0	0	0	0
FinalVolume:	29 1587	0	0	0 1247	31		17	0	27	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1278 xxxx	xxxxx	xxxx	xxxx xxxxx			2099	2892	624	xxxx	xxxx	xxxxx
Potent Cap.:	550 xxxx	xxxxx	xxxx	xxxx xxxxx			46	16	434	xxxx	xxxx	xxxxx
Move Cap.:	550 xxxx	xxxxx	xxxx	xxxx xxxxx			44	15	434	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			150	92	xxxxx	78	87	xxxxx
Volume/Cap:	0.05 xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.11	0.00	0.06	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.9 xxxx	xxxxx	xxxxx	xxxx xxxxx	xxxxx		xxxx	xxxxx	xxxxx	xxxx	xxxx	xxxxx
LOS by Move:	B *	*	*	* *	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			xxxx	251	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	22.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	* *	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				22.4		xxxxxx		
ApproachLOS:	*			*				C		*		

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

4:45-5:45pm Peak Hour - Project 2040 July Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[21.8]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0 1610	0	0	0 1274	0		6	0	6	0	0	0
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	1.00	1.00
Initial Bse:	0 1610	0	0	0 1274	0		6	0	6	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	0 1610	0	0	0 1274	0		6	0	6	0	0	0
Reduct Vol:	0 0	0	0	0 0	0		0	0	0	0	0	0
FinalVolume:	0 1610	0	0	0 1274	0		6	0	6	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			2079	2884	637	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			47	16	425	xxxx	xxxx	xxxxx
Move Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			47	16	425	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			154	97	xxxxx	87	97	xxxxx
Volume/Cap:	xxxx xxxx	xxxx	xxxx	xxxx xxxx	xxxx		0.04	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx	xxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	* *	*	*	* *	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx			xxxx	226	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx	xxxxx	xxxxx xxxx	xxxxx		xxxxx	21.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	* *	*	*	* *	*		*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx				21.8		xxxxxx		
ApproachLOS:	*			*				C		*		

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

9-10am Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: C[15.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	14 665		0	0 765		10	27		0	19		0
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:	14 665		0	0 765		10	27		0	19		0
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:	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 Volume:	14 665		0	0 765		10	27		0	19		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	14 665		0	0 765		10	27		0	19		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	775 xxxx xxxxx			xxxx xxxx xxxxx			1126	1458		383 xxxx xxxx xxxxx		
Potent Cap.:	850 xxxx xxxxx			xxxx xxxx xxxxx			202	131		621 xxxx xxxx xxxxx		
Move Cap.:	850 xxxx xxxxx			xxxx xxxx xxxxx			199	129		621 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			321	254	xxxxx	289 248 xxxxx		
Volume/Cap:	0.02 xxxx xxxx			xxxx xxxx xxxx			0.08	0.00	0.03	xxxx xxxx xxxx		
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	9.3 xxxx xxxxx			xxxxx 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	401	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.4	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	15.1	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			15.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

9-10am Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: C[16.2]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 635		0	0 740		44	44		0	56		0
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:	56 635		0	0 740		44	44		0	56		0
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:	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 Volume:	56 635		0	0 740		44	44		0	56		0
Reduct Vol:	0 0		0	0 0		0	0		0	0		0
FinalVolume:	56 635		0	0 740		44	44		0	56		0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5		6.9 xxxxx xxxx xxxxx		
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0		3.3 xxxxx xxxx xxxxx		
Capacity Module:												
Cnflict Vol:	784 xxxx xxxxx			xxxx xxxx xxxxx			1192	1509		392 xxxx xxxx xxxxx		
Potent Cap.:	843 xxxx xxxxx			xxxx xxxx xxxxx			183	122		613 xxxx xxxx xxxxx		
Move Cap.:	843 xxxx xxxxx			xxxx xxxx xxxxx			174	114		613 xxxx xxxx xxxxx		
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			302	237	xxxxx	252 220 xxxxx		
Volume/Cap:	0.07 xxxx xxxx			xxxx xxxx xxxx			0.15	0.00	0.09	xxxx xxxx xxxx		
Level Of Service Module:												
2Way95thQ:	0.2 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx xxxx xxxxx		
Control Del:	9.6 xxxx xxxxx			xxxxx 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	422	xxxxx	xxxx xxxx xxxxx		
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.9	xxxxx	xxxxx xxxx xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	16.2	xxxxx	xxxxx xxxx xxxxx		
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			16.2			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[22.1]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	22 1002		0	0 983		38	43	0	14	0	0	0
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	1.00	1.00	1.00
Initial Bse:	22 1002		0	0 983		38	43	0	14	0	0	0
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	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00
PHF Volume:	22 1002		0	0 983		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	22 1002		0	0 983		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1021 xxxx xxxxx			xxxx xxxx xxxxx			1528	2029	492	xxxx	xxxx	xxxxx
Potent Cap.:	688 xxxx xxxxx			xxxx xxxx xxxxx			110	58	528	xxxx	xxxx	xxxxx
Move Cap.:	688 xxxx xxxxx			xxxx xxxx xxxxx			107	56	528	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			231	168	xxxxx 177	159	xxxxx	
Volume/Cap:	0.03 xxxx	xxxx		xxxx xxxx	xxxx		0.19	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.4 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	268	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	22.1	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			22.1			xxxxxx		
ApproachLOS:	*			*			C			*		

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

11-12pm Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: C[20.9]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	56 980		0	0 953		44	44	0	56	0	0	0
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	1.00	1.00	1.00
Initial Bse:	56 980		0	0 953		44	44	0	56	0	0	0
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	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00
PHF Volume:	56 980		0	0 953		44	44	0	56	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	56 980		0	0 953		44	44	0	56	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			xxxxx xxxx xxxxx			6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx xxxxx			xxxxx xxxx xxxxx			3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	997 xxxx xxxxx			xxxx xxxx xxxxx			1577	2067	499	xxxx	xxxx	xxxxx
Potent Cap.:	702 xxxx xxxxx			xxxx xxxx xxxxx			102	55	523	xxxx	xxxx	xxxxx
Move Cap.:	702 xxxx xxxxx			xxxx xxxx xxxxx			96	51	523	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			220	159	xxxxx 155	145	xxxxx	
Volume/Cap:	0.08 xxxx	xxxx		xxxx xxxx	xxxx		0.20	0.00	0.11	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.3 xxxx xxxxx			xxxx xxxx xxxxx			xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.6 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx	325	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	1.3	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	20.9	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15 Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[23.3]

Street Name:	US 101						Black Bart					
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:	1 0 2	0	0	0 0 2	0	1	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	27 1164		0	0 990		38	43	0	14	0	0	0
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	1.00	1.00
Initial Bse:	27 1164		0	0 990		38	43	0	14	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	27 1164		0	0 990		38	43	0	14	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	27 1164		0	0 990		38	43	0	14	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1028 xxxx	xxxxx		xxxx xxxx		xxxxx	1626	2208	495	xxxx	xxxx	xxxxx
Potent Cap.:	683 xxxx	xxxxx		xxxx xxxx		xxxxx	95	45	525	xxxx	xxxx	xxxxx
Move Cap.:	683 xxxx	xxxxx		xxxx xxxx		xxxxx	92	43	525	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx		xxxxx	216	147	xxxxx	143	139	xxxxx
Volume/Cap:	0.04 xxxx	xxxx		xxxx xxxx		xxxx	0.20	0.00	0.03	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.1 xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.5 xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	253	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	0.8	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	23.3	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

1:15-2:15 Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[19.7]

Street Name:	US 101						Quarry Access					
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:	1 0 2	0	0	0 0 1	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	44 1159		0	0 972		32	32	0	44	0	0	0
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	1.00	1.00
Initial Bse:	44 1159		0	0 972		32	32	0	44	0	0	0
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	1.00	1.00
PHF 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	1.00	1.00
PHF Volume:	44 1159		0	0 972		32	32	0	44	0	0	0
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
FinalVolume:	44 1159		0	0 972		32	32	0	44	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	6.8	6.5	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxxx xxxx		xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1004 xxxx	xxxxx		xxxx xxxx		xxxxx	1656	2235	502	xxxx	xxxx	xxxxx
Potent Cap.:	698 xxxx	xxxxx		xxxx xxxx		xxxxx	91	43	520	xxxx	xxxx	xxxxx
Move Cap.:	698 xxxx	xxxxx		xxxx xxxx		xxxxx	86	40	520	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx		xxxx xxxx		xxxxx	210	142	xxxxx	132	133	xxxxx
Volume/Cap:	0.06 xxxx	xxxx		xxxx xxxx		xxxx	0.15	0.00	0.08	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	10.5 xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx		xxxx xxxx		xxxxx	xxxx	321	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx xxxx	xxxxx		xxxxx xxxx		xxxxx	xxxxx	19.7	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.7			xxxxxx		
ApproachLOS:	*			*			C			*		

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

4:45-5:45pm Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #1 US 101/Black Bart

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: C[16.9]

Street Name:	US 101								Black Bart							
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:	1	0	2	0	0	0	0	2	0	1	0	0	1!	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	29	1213		0	0	952		31			17		0		27	0		0		0
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:	29	1213		0	0	952		31			17		0		27	0		0		0
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:	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 Volume:	29	1213		0	0	952		31			17		0		27	0		0		0
Reduct Vol:	0	0		0	0	0		0			0		0		0	0		0		0
FinalVolume:	29	1213		0	0	952		31			17		0		27	0		0		0
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	983	xxxx	xxxxx	xxxx	xxxx	xxxxx					1617		2223		476	xxxx	xxxx	xxxxx		
Potent Cap.:	711	xxxx	xxxxx	xxxx	xxxx	xxxxx					96		44		541	xxxx	xxxx	xxxxx		
Move Cap.:	711	xxxx	xxxxx	xxxx	xxxx	xxxxx					93		42		541	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					220		144	xxxxx		134		137	xxxxx	
Volume/Cap:	0.04	xxxx	xxxx	xxxx	xxxx	xxxx					0.08		0.00		0.05	xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx							
Control Del:	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT										
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	346	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*								
ApproachDel:	xxxxxx			xxxxxx			16.9			xxxxxx										
ApproachLOS:	*			*			C			*										

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

4:45-5:45pm Peak Hour - Project 2040 October Peak (Mitigated Lanes)
Harris Quarry EIR
County of Mendocino

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

Intersection #2 US 101/Quarry Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[16.9]

Street Name:	US 101								Quarry Access							
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:	1	0	2	0	0	0	0	1	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	0	1236		0	0	979		0			6		0		6	0		0		0
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	1236		0	0	979		0			6		0		6	0		0		0
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:	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 Volume:	0	1236		0	0	979		0			6		0		6	0		0		0
Reduct Vol:	0	0		0	0	0		0			0		0		0	0		0		0
FinalVolume:	0	1236		0	0	979		0			6		0		6	0		0		0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.8		6.5		6.9	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5		4.0		3.3	xxxxx	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					1597		2215		490	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					99		44		530	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					99		44		530	xxxx	xxxx	xxxxx		
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					225		150	xxxxx		147		150	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx					0.03		0.00		0.01	xxxx	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxx	xxxxx							
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*								
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT										
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	316	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.9	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*								
ApproachDel:	xxxxxx			xxxxxx			16.9			xxxxxx										
ApproachLOS:	*			*			C			*										

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

Appendix I

Caltrans Letters Regarding Turn Lanes

DEPARTMENT OF TRANSPORTATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 441-2009
FAX (707) 441-5869
TTY (Teletypewriter #707-445-6463)

Flex your power!
Be energy efficient!

August 8, 2006

1-MEN-101-40.88
Harris Quarry Access
APN: 147-180-07

Jason McConnell
Northern Aggregates, Inc
P.O. Box 1566
Willits, CA 95490

Dear Mr. McConnell,

Since our meeting on July 17, 2006, our office has had the chance to review the proposed access plan, traffic, and site distance data provided by Northern Aggregates for the Harris Quarry Expansion project. The project proposes to use the site's existing access for all Quarry traffic. Turn lanes would be constructed for left and right turn movements on US 101 to accommodate northbound and southbound traffic, respectively. The width of the existing access would remain the same, but would be relocated further to the north to decrease the slope of the driveway and better facilitate trucks turning on and off of US 101. We have the following comments:

- We agree with the need for a 200-foot (approximate) southbound right-turn lane at the Northern Aggregates access driveway.

- We agree with the provision of a left turn lane for northbound traffic at this location as it is likely to be an improvement over the existing situation, however, the 218-foot left turn lane does not provide adequate deceleration and storage lengths. A total of 591 feet will be required to accommodate both a deceleration lane length of 493 feet (per Table 405B of the Caltrans Highway Design Manual for 55 mile per hour traffic) and a storage length of 98 feet.

- The existing access opening serving the project is 30 feet wide. As discussed in our July 17th meeting, we will consider adjusting the location of the project access, however, the ultimate driveway width will be limited to 30 feet. The District will need to prepare a Director's Deed in order to modify the location of the access opening. The final location of the access opening will need to be determined and agreed upon before Northern Aggregates submits a formal encroachment permit application to the District.

- Any work within the Caltrans right of way will require an encroachment permit. As part of the permit review process, we will require an engineering report this project. Upon receipt of an encroachment permit application, our District Permit Engineer will determine which of the following engineering reports will need to be prepared: Permit Engineering Evaluation Report (PEER), Combined Project Study Report/Project Report (PSR/PR), or Project Report

(PR). These reports address issues affecting operation, maintenance, and tort liability on the State highway, as well as document conformance of proposed work to current Caltrans policies, practices, and standards. The type of engineering report selected will depend on a number of factors, including project cost and project complexity. PEER documents are typically prepared by Caltrans for non-complex, non-controversial State highway projects that cost under $1,000,000 for construction, while PSR/PR and PR documents are prepared by a registered engineer representing the applicant for complex projects that cost over $1,000,000. Please contact John Carson, Chief of the District 1 Permits Office, at (707) 445-6385 for more information about the permit requirements.

We look forward to continuing cooperation with you on this project. If you have questions or need further assistance, please contact me at the number above, or contact Lezlie Kimura of District 1 Community Planning at (707) 441-4542.

Sincerely,

Jesse Robertson
Associate Transportation Planner
District 1 Community Planning

c: Nash Gonzalez, County of Mendocino

DEPARTMENT OF TRANSPORTATION
DISTRICT 1, P. O. BOX 3700
EUREKA, CA 95502-3700
PHONE (707) 441-2009
FAX (707) 441-5869
TTY (Teletypewriter #707-445-6463)

Flex your power!
Be energy efficient!

September 18, 2006

1-MEN-101-40.88
Harris Quarry Access
APN: 147-180-07

Jason McConnell
Northern Aggregates, Inc
P.O. Box 1566
Willits, CA 95490

Dear Mr. McConnell,

At your request, we have revisited our previous written comments (August 8, 2006) requiring 591 feet for the proposed left turn lane at Northern Aggregates' access driveway, to be located on northbound US 101 near Black Bart Drive.

We will not support Northern Aggregates' proposal to construct a 218-foot left turn lane, based on the information we have now, as it does not meet State standards. We have, however, revised our requirement from August 8, and reduced the required left-turn lane length from 591 feet to 469 feet. The Highway Design Manual (HDM) allows for some deceleration (10-20 mph) to take place on the through lanes to reduce the length of the deceleration lane (HDM Index 405.2d). Using this criterion, we would support a reduced design speed from the posted 65 mph to minimum speed of 43.5 mph, resulting in a deceleration lane length of 371 feet. The total length of the 469-foot turn lane includes the revised 371 feet of deceleration lane length plus 98 feet of storage length.

If you wish to pursue an exception for a reduced deceleration lane length, you will have to demonstrate that the proposed length is either infeasible or appropriate, based on prevailing speeds, highway grade, widening constraints, etc. Any assertions made in support of reduced lane length must be based on substantive, independently verifiable information.

If you have questions or need further assistance, please contact me at the number above, or contact Lezlie Kimura of District 1 Community Planning at (707) 441-4542.

Sincerely,

Jesse Robertson
Associate Transportation Planner
District 1 Community Planning

c: Nash Gonzalez, County of Mendocino

bc: 1. CSWillis
2. RAJackman
3. IGR
DSCampbell
JPCarson
TAArseneau
1. RMMartinelli
2. DAMorgan
Correspondence File
CHRON

JGR/lmk

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Appendix J

Ramp Level of Service Calculations

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	531	0.95	Rolling	8	2	0.877	1.00	637
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 637 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	637	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	591	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	637	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = 5.2 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	820	0.95	Rolling	8	2	0.877	1.00	984
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 984 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	984	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	938	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	984	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = 8.2 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	969	0.95	Rolling	8	2	0.877	1.00	1163
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1163 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1163	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1129	Exhibit 25-14	4700	No
V_R	34	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1163	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 9.8 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1034	0.95	Rolling	8	2	0.877	1.00	1241
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1241 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1241	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1241	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1241	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 10.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	408	0.95	Rolling	8	2	0.877	1.00	490
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 490 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	490	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	431	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	490	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 4.0 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	629	0.95	Rolling	8	2	0.877	1.00	755
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 755 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	755	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	696	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	755	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 6.2 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	744	0.95	Rolling	8	2	0.877	1.00	893
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 893 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	893	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	847	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	893	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 7.4 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	794	0.95	Rolling	8	2	0.877	1.00	953
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 953 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	953	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	953	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	953	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 7.9 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	571	0.95	Rolling	8	2	0.877	1.00	685
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 685 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	685	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	639	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	685	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 5.6 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-Noon	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	881	0.95	Rolling	8	2	0.877	1.00	1057
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1057 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1057	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1011	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1057	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 8.8 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1041	0.95	Rolling	8	2	0.877	1.00	1249
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1249 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1249	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1215	Exhibit 25-14	4700	No
V_R	34	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1249	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 10.5 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1111	0.95	Rolling	8	2	0.877	1.00	1333
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1333 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1333	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1333	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1333	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 11.2 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	438	0.95	Rolling	8	2	0.877	1.00	526
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 526 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	526	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	467	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	526	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 4.3 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/15/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-Noon	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	676	0.95	Rolling	8	2	0.877	1.00	811
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	811	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	752	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	811	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 6.7 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	799	0.95	Rolling	8	2	0.877	1.00	959
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

	Actual	Capacity		LOS F?
V_F	959	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	913	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 959 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	959	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	913	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	959	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 8.0 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/15/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2014 without Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	853	0.95	Rolling	8	2	0.877	1.00	1024
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

	Actual	Capacity		LOS F?
V_F	1024	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1024	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1024 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1024	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1024	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1024	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 8.6 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	571	0.95	Rolling	8	2	0.877	1.00	685
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 685 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	685	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	656	Exhibit 25-14	4700	No
V_R	29	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	685	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = 5.6 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	881	0.95	Rolling	8	2	0.877	1.00	1057
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 1057 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1057	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1028	Exhibit 25-14	4700	No
V_R	29	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1057	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = 8.8 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1041	0.95	Rolling	8	2	0.877	1.00	1249
Ramp	20	0.95	Rolling	0	0	1.000	1.00	21
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1249 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1249	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1228	Exhibit 25-14	4700	No
V_R	21	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1249	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 10.5 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.430 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1111	0.95	Rolling	8	2	0.877	1.00	1333
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1333 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1333	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1333	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1333	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 11.2 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	438	0.95	Rolling	8	2	0.877	1.00	526
Ramp	36	0.95	Rolling	0	0	1.000	1.00	38
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 526 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	526	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	488	Exhibit 25-14	4700	No
V_R	38	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}	526	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 4.3 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	676	0.95	Rolling	8	2	0.877	1.00	811
Ramp	36	0.95	Rolling	0	0	1.000	1.00	38
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	811	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	773	Exhibit 25-14	4700	No
V_R	38	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}	811	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 6.7 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	799	0.95	Rolling	8	2	0.877	1.00	959
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 959 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	959	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	930	Exhibit 25-14	4700	No
V_R	29	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	959	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 8.0 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2014 with Willtis Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	853	0.95	Rolling	8	2	0.877	1.00	1024
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1024 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1024	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1024	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1024	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 8.6 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	729	0.95	Rolling	8	2	0.877	1.00	875
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 875 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	875	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	829	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	875	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 7.3 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1125	0.95	Rolling	8	2	0.877	1.00	1350
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 1350 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1350	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1304	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1350	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 11.4 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1329	0.95	Rolling	8	2	0.877	1.00	1595
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1595 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1595	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1561	Exhibit 25-14	4700	No
V_R	34	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1595	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 13.5 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1418	0.95	Rolling	8	2	0.877	1.00	1702
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1702 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1702	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1702	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1702	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 14.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	559	0.95	Rolling	8	2	0.877	1.00	671
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 671 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	671	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	612	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	671	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 5.5 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	863	0.95	Rolling	8	2	0.877	1.00	1036
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1036 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1036	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	977	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1036	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 8.7 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1021	0.95	Rolling	8	2	0.877	1.00	1225
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1225 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1225	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1179	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1225	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 10.3 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1089	0.95	Rolling	8	2	0.877	1.00	1307
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1307 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1307	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1307	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1307	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 11.0 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	828	0.95	Rolling	8	2	0.877	1.00	994
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 994 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	994	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	948	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	994	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D
D_R = 8.3 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft
V_u = veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1277	0.95	Rolling	8	2	0.877	1.00	1532
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = using Equation (Exhibit 25-5)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = 1.000 using Equation (Exhibit 25-12)
V_{12} = 1532 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1532	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1486	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1532	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D
D_R = 12.9 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)
S_R = 55.1 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1509	0.95	Rolling	8	2	0.877	1.00	1811
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ v_R - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1811	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1777	Exhibit 25-14	4700	No
V_R	34	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1811	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 15.3 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.431 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1610	0.95	Rolling	8	2	0.877	1.00	1932
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_{12} + 0.0078\ v_R - 0.00627\ L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1932 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1932	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1932	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1932	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = 16.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	635	0.95	Rolling	8	2	0.877	1.00	762
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 762 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	762	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	703	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}	762	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 6.3 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	980	0.95	Rolling	8	2	0.877	1.00	1176
Ramp	56	0.95	Rolling	0	0	1.000	1.00	59
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1176 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1176	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1117	Exhibit 25-14	4700	No
V_R	59	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}	1176	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 9.9 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

D_s = 0.433 (Exhibit 25-19)

S_R = 55.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.0 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1159	0.95	Rolling	8	2	0.877	1.00	1391
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable	Violation?
V_{R12}		Exhibit 25-7	

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1391 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1391	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1345	Exhibit 25-14	4700	No
V_R	46	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1391	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 11.7 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.432 (Exhibit 25-19)

S_R = 55.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.1 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Offramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☐ Yes ☐ On ☑ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1236	0.95	Rolling	8	2	0.877	1.00	1483
Ramp	0	0.95	Rolling	0	0	1.000	1.00	0
UpStream								
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = using Equation (Exhibit 25-5)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}		Exhibit 25-7		

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}		Exhibit 25-7		

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_{12} + 0.0078\, v_R - 0.00627\, L_A$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

M_S = (Exibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = 1.000 using Equation (Exhibit 25-12)

V_{12} = 1483 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F	1483	Exhibit 25-14	4700	No
$V_{FO} = V_F - V_R$	1483	Exhibit 25-14	4700	No
V_R	0	Exhibit 25-3	2000	No

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}	1483	Exhibit 25-14	4400:All	No

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = 12.5 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

D_s = 0.428 (Exhibit 25-19)

S_R = 55.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 55.2 mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/09	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	531	0.95	Rolling	8	2	0.877	1.00	637
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 637 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	671	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	671	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$
D_R = 7.6 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.294 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/09	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	820	0.95	Rolling	8	2	0.877	1.00	984
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 984 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1018	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1018	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$
D_R = 10.3 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/09	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	969	0.95	Rolling	8	2	0.877	1.00	1163
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1163 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1192	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1192	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 11.6 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.299 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1034	0.95	Rolling	8	2	0.877	1.00	1241
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1241 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1247	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1247	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 12.1 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.300 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information		Site Information	
Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/09	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	408	0.95	Rolling	8	2	0.877	1.00	490
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 490 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	536	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	536	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 6.5 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.293 (Exibit 25-19)
S_R = 58.3 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.3 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information		Site Information	
Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/09	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	629	0.95	Rolling	8	2	0.877	1.00	755
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 755 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	801	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	801	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 8.6 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.295 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	744	0.95	Rolling	8	2	0.877	1.00	893
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 893 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	927	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	927	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 9.6 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.296 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2010

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	794	0.95	Rolling	8	2	0.877	1.00	953
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 953 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	959	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	959	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 9.8 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.296 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft V_u = 0 veh/h	S_{FF} = 65.0 mph S_{FR} = 35.0 mph Sketch (show lanes, L_A, L_D, V_R, V_f)	L_{down} = ft V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	571	0.95	Rolling	8	2	0.877	1.00	685
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 685 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	719	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	719	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 7.9 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.294 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft V_u = 0 veh/h	S_{FF} = 65.0 mph S_{FR} = 35.0 mph Sketch (show lanes, L_A, L_D, V_R, V_f)	L_{down} = ft V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	881	0.95	Rolling	8	2	0.877	1.00	1057
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1057 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1091	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1091	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 10.8 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.298 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1041	0.95	Rolling	8	2	0.877	1.00	1249
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1249 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1278	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1278	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.3 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.300 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1111	0.95	Rolling	8	2	0.877	1.00	1333
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1333 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1339	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1339	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.8 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.301 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	438	0.95	Rolling	8	2	0.877	1.00	526
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 526 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	572	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	572	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 6.8 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.293 (Exibit 25-19)

S_R = 58.3 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.3 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	676	0.95	Rolling	8	2	0.877	1.00	811
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	857	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	857	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 9.0 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.295 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft V_u = 0 veh/h	S_{FF} = 65.0 mph S_{FR} = 35.0 mph Sketch (show lanes, L_A, L_D, V_R, V_f)	L_{down} = ft V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	799	0.95	Rolling	8	2	0.877	1.00	959
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 959 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	993	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	993	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 10.1 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2014 without Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft V_u = 0 veh/h	S_{FF} = 65.0 mph S_{FR} = 35.0 mph Sketch (show lanes, L_A, L_D, V_R, V_f)	L_{down} = ft V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	853	0.95	Rolling	8	2	0.877	1.00	1024
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1024 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1030	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1030	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734 v_R + 0.0078 V_{12} - 0.00627 L_A$

D_R = 10.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086 V_{12} - 0.009 L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = 0 veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	571	0.95	Rolling	8	2	0.877	1.00	685
Ramp	48	0.95	Rolling	0	0	1.000	1.00	51
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 685 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	736	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	736	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 8.1 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.294 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = 0 veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	881	0.95	Rolling	8	2	0.877	1.00	1057
Ramp	48	0.95	Rolling	0	0	1.000	1.00	51
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1057 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1108	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1108	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 11.0 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.298 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1041	0.95	Rolling	8	2	0.877	1.00	1249
Ramp	40	0.95	Rolling	0	0	1.000	1.00	42
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1249 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1291	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1291	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 12.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.300 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1111	0.95	Rolling	8	2	0.877	1.00	1333
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1333 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1339	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1339	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 12.8 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.301 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	438	0.95	Rolling	8	2	0.877	1.00	526
Ramp	64	0.95	Rolling	0	0	1.000	1.00	67
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 526 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	593	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	593	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 6.9 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.293 (Exibit 25-19)

S_R = 58.3 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.3 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	676	0.95	Rolling	8	2	0.877	1.00	811
Ramp	64	0.95	Rolling	0	0	1.000	1.00	67
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	878	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	878	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 9.2 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.295 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	799	0.95	Rolling	8	2	0.877	1.00	959
Ramp	48	0.95	Rolling	0	0	1.000	1.00	51
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 959 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1010	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1010	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 10.2 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2014 with Willits Bypass

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	853	0.95	Rolling	8	2	0.877	1.00	1024
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1024 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1030	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1030	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 10.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = 0 veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	729	0.95	Rolling	8	2	0.877	1.00	875
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 875 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	909	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	909	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 9.4 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.296 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp	Terrain: Rolling	Downstream Adj Ramp
☑ Yes ☑ On ☐ No ☐ Off		☐ Yes ☐ On ☑ No ☐ Off
L_{up} = 1000 ft	S_{FF} = 65.0 mph S_{FR} = 35.0 mph	L_{down} = ft
V_u = 0 veh/h	Sketch (show lanes, L_A, L_D, V_R, V_f)	V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	$v = V/PHF \times f_{HV} \times f_p$
Freeway	1125	0.95	Rolling	8	2	0.877	1.00	1350
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1350 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1384	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1384	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 13.1 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.302 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1329	0.95	Rolling	8	2	0.877	1.00	1595
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1595 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1624	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1624	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 15.0 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.306 (Exibit 25-19)

S_R = 58.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.0 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1418	0.95	Rolling	8	2	0.877	1.00	1702
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1702 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1708	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1708	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 15.7 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.308 (Exibit 25-19)

S_R = 57.9 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 57.9 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10am	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	559	0.95	Rolling	8	2	0.877	1.00	671
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 671 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	717	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	717	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 7.9 (pc/mi/ln)
LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.294 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	863	0.95	Rolling	8	2	0.877	1.00	1036
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 1036 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1082	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1082	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$
D_R = 10.8 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.298 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1021	0.95	Rolling	8	2	0.877	1.00	1225
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1225 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1259	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1259	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.1 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.300 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2030

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1089	0.95	Rolling	8	2	0.877	1.00	1307
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1307 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1313	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1313	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 12.6 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.300 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 9am-10am	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	828	0.95	Rolling	8	2	0.877	1.00	994
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 994 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1028	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1028	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$
D_R = 10.3 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.297 (Exibit 25-19)
S_R = 58.2 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 11am-12noon	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off
L_{up} = 1000 ft
V_u = 0 veh/h

Terrain: Rolling
S_{FF} = 65.0 mph S_{FR} = 35.0 mph
Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off
L_{down} = ft
V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1277	0.95	Rolling	8	2	0.877	1.00	1532
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)
P_{FM} = 1.000 using Equation (Exhibit 25-5)
V_{12} = 1532 pc/h
V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No
If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1566	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1566	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$
D_R = 14.5 (pc/mi/ln)
LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.305 (Exibit 25-19)
S_R = 58.0 mph (Exhibit 25-19)
S_0 = N/A mph (Exhibit 25-19)
S = 58.0 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)
P_{FD} = using Equation (Exhibit 25-12)
V_{12} = pc/h
V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)
Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No
Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No
If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable		Violation?
V_{12}		Exhibit 25-14		

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$
D_R = (pc/mi/ln)
LOS = (Exhibit 25-4)

Speed Determination

D_S = (Exhibit 25-19)
S_R = mph (Exhibit 25-19)
S_0 = mph (Exhibit 25-19)
S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 1:15pm-2:15pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1509	0.95	Rolling	8	2	0.877	1.00	1811
Ramp	28	0.95	Rolling	0	0	1.000	1.00	29
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1811 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1840	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1840	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 16.7 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.311 (Exibit 25-19)

S_R = 57.9 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 57.9 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	July Peak 4:45pm-5:45pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1610	0.95	Rolling	8	2	0.877	1.00	1932
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1932 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1938	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1938	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\ v_R + 0.0078\ V_{12} - 0.00627\ L_A$

D_R = 17.5 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.313 (Exibit 25-19)

S_R = 57.8 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 57.8 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\ V_{12} - 0.009\ L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 9am-10:am	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	635	0.95	Rolling	8	2	0.877	1.00	762
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 762 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	808	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	808	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 8.6 (pc/mi/ln)

LOS = A (Exhibit 25-4)

Speed Determination

M_S = 0.295 (Exibit 25-19)

S_R = 58.2 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.2 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	11/24/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 11am-12noon	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	980	0.95	Rolling	8	2	0.877	1.00	1176
Ramp	44	0.95	Rolling	0	0	1.000	1.00	46
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1176 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1222	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1222	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 11.9 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.299 (Exibit 25-19)

S_R = 58.1 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.1 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R)P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

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RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 1:15pm-2:15pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1159	0.95	Rolling	8	2	0.877	1.00	1391
Ramp	32	0.95	Rolling	0	0	1.000	1.00	34
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1391 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1425	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1425	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 13.4 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.302 (Exibit 25-19)

S_R = 58.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.0 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)

RAMPS AND RAMP JUNCTIONS WORKSHEET Page 1 of 1

RAMPS AND RAMP JUNCTIONS WORKSHEET

General Information / Site Information

Analyst	TDH	Freeway/Dir of Travel	Northbound US 101
Agency or Company	W-Trans	Junction	Harris Quarry Driveway-Onramp
Date Performed	9/4/2009	Jurisdiction	Mendocino County/Caltrans
Analysis Time Period	October Peak 4:45pm-5:45pm	Analysis Year	2040

Project Description: Harris Quarry - Project Conditions

Inputs

Upstream Adj Ramp: ☑ Yes ☑ On ☐ No ☐ Off

L_{up} = 1000 ft

V_u = 0 veh/h

Terrain: Rolling

S_{FF} = 65.0 mph S_{FR} = 35.0 mph

Sketch (show lanes, L_A, L_D, V_R, V_f)

Downstream Adj Ramp: ☐ Yes ☐ On ☑ No ☐ Off

L_{down} = ft

V_D = veh/h

Conversion to pc/h Under Base Conditions

(pc/h)	V (Veh/hr)	PHF	Terrain	%Truck	%Rv	f_{HV}	f_p	v = V/PHF x f_{HV} x f_p
Freeway	1236	0.95	Rolling	8	2	0.877	1.00	1483
Ramp	6	0.95	Rolling	0	0	1.000	1.00	6
UpStream	0	0.90	Level	0	0	1.000	1.00	0
DownStream								

Merge Areas

Estimation of v_{12}

$V_{12} = V_F (P_{FM})$

L_{EQ} = (Equation 25-2 or 25-3)

P_{FM} = 1.000 using Equation (Exhibit 25-5)

V_{12} = 1483 pc/h

V_3 or V_{av34} = 0 pc/h (Equation 25-4 or 25-5)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☑ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☑ No

If Yes, V_{12a} = pc/h (Equation 25-8)

Capacity Checks

	Actual	Capacity		LOS F?
V_{FO}	1489	Exhibit 25-7		No

Flow Entering Merge Influence Area

	Actual	Max Desirable		Violation?
V_{R12}	1489	Exhibit 25-7	4600:All	No

Level of Service Determination (if not F)

$D_R = 5.475 + 0.00734\, v_R + 0.0078\, V_{12} - 0.00627\, L_A$

D_R = 14.0 (pc/mi/ln)

LOS = B (Exhibit 25-4)

Speed Determination

M_S = 0.303 (Exibit 25-19)

S_R = 58.0 mph (Exhibit 25-19)

S_0 = N/A mph (Exhibit 25-19)

S = 58.0 mph (Exhibit 25-14)

Diverge Areas

Estimation of v_{12}

$V_{12} = V_R + (V_F - V_R) P_{FD}$

L_{EQ} = (Equation 25-8 or 25-9)

P_{FD} = using Equation (Exhibit 25-12)

V_{12} = pc/h

V_3 or V_{av34} = pc/h (Equation 25-15 or 25-16)

Is V_3 or V_{av34} > 2,700 pc/h? ☐ Yes ☐ No

Is V_3 or V_{av34} > 1.5 * V_{12}/2 ☐ Yes ☐ No

If Yes, V_{12a} = pc/h (Equation 25-18)

Capacity Checks

	Actual	Capacity		LOS F?
V_F		Exhibit 25-14		
$V_{FO} = V_F - V_R$		Exhibit 25-14		
V_R		Exhibit 25-3		

Flow Entering Diverge Influence Area

	Actual	Max Desirable	Violation?
V_{12}		Exhibit 25-14	

Level of Service Determination (if not F)

$D_R = 4.252 + 0.0086\, V_{12} - 0.009\, L_D$

D_R = (pc/mi/ln)

LOS = (Exhibit 25-4)

Speed Determination

D_s = (Exhibit 25-19)

S_R = mph (Exhibit 25-19)

S_0 = mph (Exhibit 25-19)

S = mph (Exhibit 25-15)