TRAFFIC IMPACT ANALYSIS
AND AIR QUAITY MODELING

FOR THE

HOMEWOOD LUMBER RELOCATION
Loomis, California

Prepared For:

HOMEWOOD LUMBER
3243 Rippey Road
Loomis, CA 95650

Prepared By:

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Job No. 3707-01

Homewood Lumber.rpt

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TRAFFIC IMPACT ANALYSIS AND AIR QUALITY MODELING FOR THE HOMEWOOD LUMBER RELOCATION

Loomis, CA

TABLE OF CONTENTS

INTRODUCTION **1**

EXISTING SETTING **3**
- Study Area Streets 3
- Non-Automotive Facilities 4
- Existing Traffic Volumes 4
- Levels of Service - Methodologies 6
- Existing Levels of Service 7

PROJECT TRAFFIC IMPACTS **8**
- Project Characteristics 8
- Existing Plus Project Conditions 9

CUMULATIVE TRAFFIC IMPACTS **14**
- Background Traffic Conditions 1
- Access Evaluation 14

MITIGATION MEASURES / RECOMMENDATIONS **16**
- Mitigations for Development of Project 16

AIR QUALITY MODELING **16**

APPENDIX **17**

April 17, 2006

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TRAFFIC IMPACT ANALYSIS AND AIR QUALITY MODELING FOR HOMEWOOD LUMBER RELOCATION

Loomis, California

INTRODUCTION

This report summarizes **kdANDERSON Transportation Engineers'** analysis of traffic impacts and air quality emissions associated with relocating the **Homewood Lumber** operation in Loomis. The proposed project will relocate Homewood Lumber's current operations on Rippey Road to a site that lies on the southeast quadrant of the Sierra College Blvd / Taylor Road intersection, as shown in Figure 1. The project involves construction of buildings, parking and materials storage areas on a portion of a 9± site located immediately north of Brace Road and east of Sierra College Blvd. Access to the site is planned via two driveways, one located onto Brace Road and one onto Sierra College Blvd. The Sierra College Blvd access is located midway between the Taylor Road and Brace Road intersections and would be limited to right turns only. The Brace Road access is about 300 feet from Sierra College Blvd, and full access is proposed at the Brace Road access.

The scope of this traffic analysis is intended to conform to Town of Loomis guidelines for projects that are consistent with adopted General Plan land uses. "Existing" traffic conditions have been evaluated through observation of current weekday a.m. and p.m. peak hour traffic volumes at two major intersections in the vicinity of the project. The impacts of the proposed project have been evaluated by estimating probable project trip generation, assigning project trips to the study area street system and superimposing project traffic onto background conditions to determine whether development of this use will result in conditions in excess of the Town of Loomis' minimum Level of Service standards.

Per direction from the Town of Loomis, this study includes analysis of three scenarios: 1) "Existing" Conditions 2) "Existing Plus Project" Conditions and, with regard to site access only 3) "Cumulative Plus Project" Conditions.

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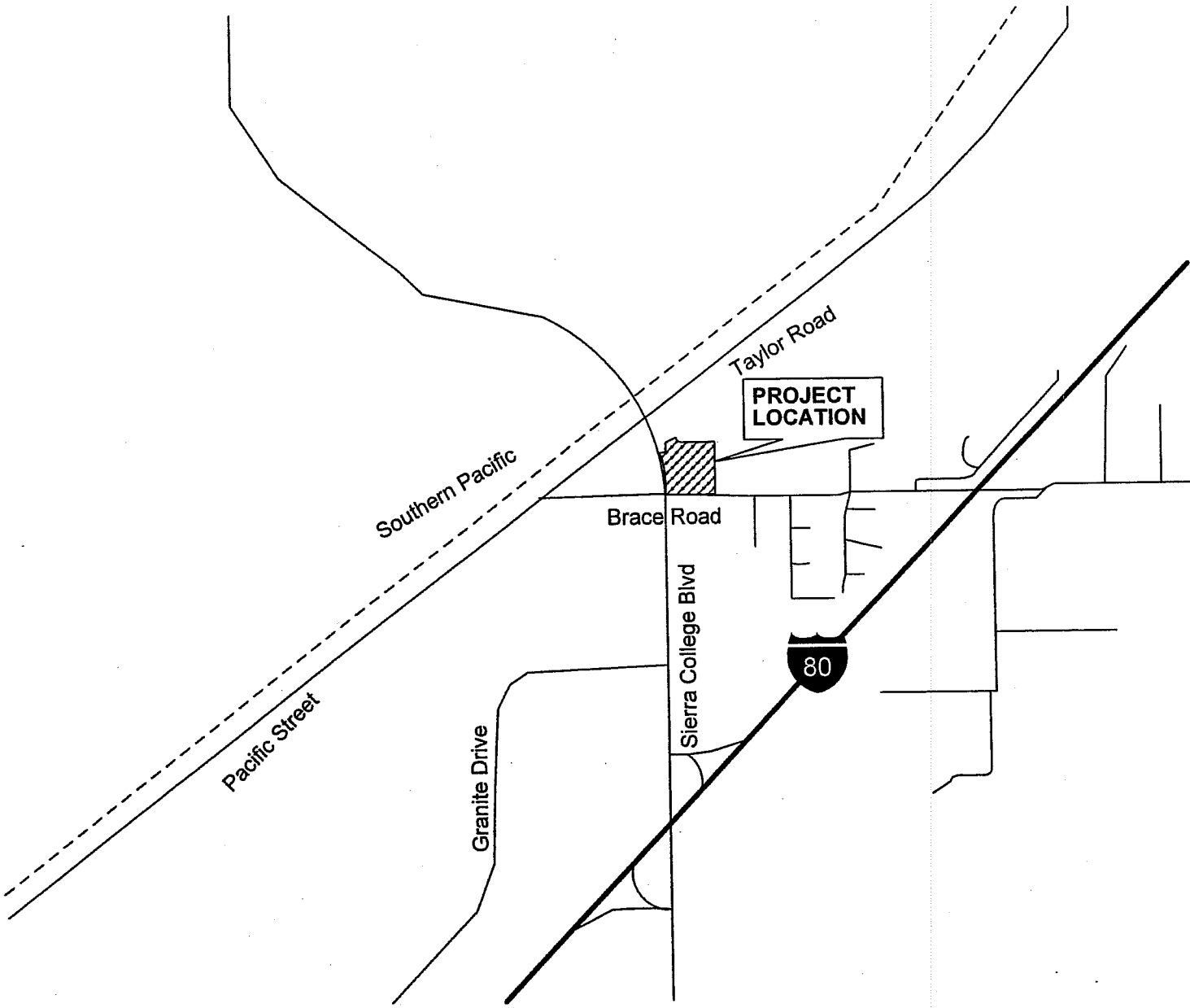

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VICINITY MAP

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figure 1

EXISTING SETTING

Study Area Streets

Through discussions with Town of Loomis staff it was determined that this analysis should focus on project access and on impacts to the following two key intersections during the a.m. and p.m. peak hour.

1. Taylor Road / Sierra College Blvd
2. Sierra College Blvd / Brace Road

The text that follows describes the physical characteristics of the streets that serve the site.

Taylor Road. Taylor Road is a major arterial street that runs parallel to Interstate 80 and links Loomis with the City of Rocklin to the west and with the communities of Penryn and Newcastle to the east. Taylor Road is generally a two-lane road through Loomis, but incremental half section widening has occurred as development has proceeded. Along the exiting project frontage Taylor Road has one travel lane in each direction, but to the east the roadway has been widened to provide a continuous two-way left turn (TWLT) lane and to the west the roadway has been widened to accommodate auxiliary turn lanes at the Sierra College Blvd intersection. Recent traffic counts conducted by the Town of Loomis in December 2004 reveal that Taylor Road carries an *Average Daily Traffic (ADT)* volume of about 10,460 vehicles per day (vpd) in the area from Sierra College Blvd to Shawn Way, 10,030 between Shawn Way and Horseshoe Bar Road, 16,031 ADT between Horseshoe Bar Road and King Road and 6,964 ADT east of King Road.

Sierra College Blvd. Sierra College Blvd is a major arterial street that links Loomis with the City of Lincoln to the north and with Interstate 80 and the City of Rocklin to the South. Today, Sierra College Blvd has one travel lane in each direction from Rocklin Road across Interstate 80 to its northern terminus at SR 193. Incremental widening has occurred to accommodate auxiliary turn lanes at the Taylor Road intersection. Del Oro High School and Loomis Elementary School are located along Taylor Road in the area east of downtown Loomis. Recent traffic counts reveal that Sierra College Blvd carries about, 15,724 ADT between Granite Drive and Brace Road and 10,585 ADT north of the Taylor Road intersection.

The **Taylor Road / Sierra College Blvd intersection** is controlled by an actuated traffic signal. Left turn lanes and right turn lanes exist on each approach. Pedestrian indications and crosswalks exist on each leg of the intersection. Sierra College Blvd crosses the Union Pacific Railroad (UPRR) tracks that run parallel and north of Taylor Road. This crossing is equipped with crossing arms and warning signals and is linked to the operation of the Taylor Road / Sierra College Blvd traffic signal.

Brace Road. Brace Road is an east-west collector that links the Sierra College Blvd corridor with southeaster Loomis. Brace Road begins at an intersection on Taylor Road and continues easterly across Sierra College Blvd and over Interstate 80 to Laird Road. Brace Road has two travel lanes in each direction, and the most recent traffic counts available from the Town of Loomis indicate that Brace Road carries about 2,240 ADT in the area between Sierra College Blvd and Laird Road.

The **Sierra College Blvd / Brace Road intersection** is controlled by an actuated traffic signal. The geometric configuration of the intersection is limited, primarily due to right of way limitations that precluded development of lanes to accommodate all turning movements. The western Brace Road leg is limited to "right turns only", as that portion of the road is too narrow to accommodate the additional turning movement requirements of trucks. The eastern Brace Road leg features separate left turn and right turn lanes. A southbound left turn lane exists on Sierra College Blvd, and a right turn lane exists on the northbound approach to the intersection. Because the volume of traffic on Brace Road is relatively light, the closely spaced Brace Road and Taylor Road signals are not operated in a coordinated manner.

Non-Automotive Facilities.

Bus Service. Public bus service is provided to the Loomis area by Placer County Transit. The *Taylor Road Shuttle* links Loomis, Penryn, Auburn and Sierra College in Rocklin. This route stops within Loomis at the downtown multi-modal center. Service is provided between 6:30 a.m. and 4:15 p.m. Monday –Friday with four stops per day. Loomis is also served by *Placer Commuter Express*, which runs during commute hours and links the community with downtown Sacramento. The area is also served by *Placer County Transit Dial-a-Ride* from 6:00 a.m. to 8:00 p.m.

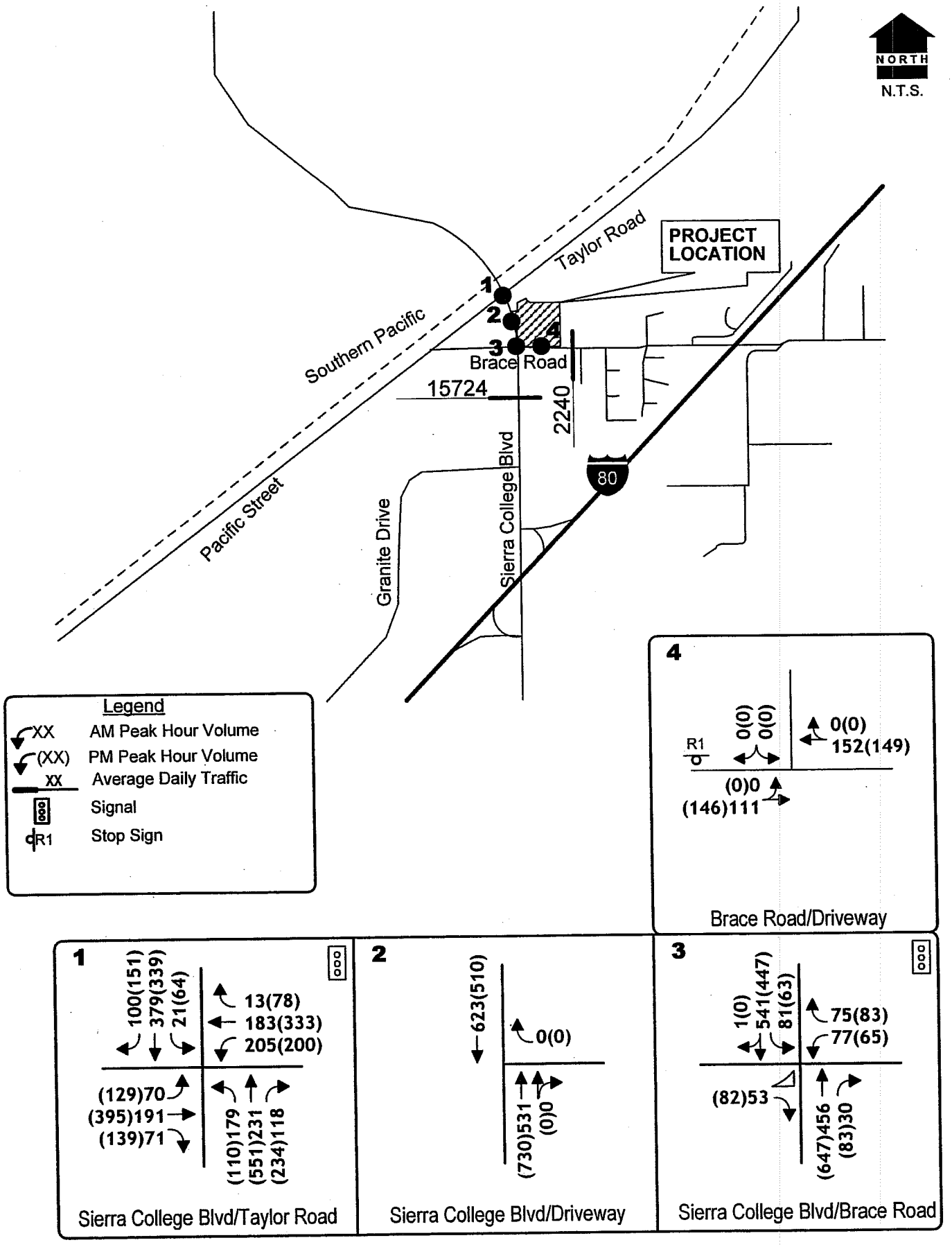
Bicycle Facilities. The existing bicycle system consists of a series of Class I (off-street trails) and Class II (on-street lanes) facilities on major arterials. Class II lanes exist on Taylor Road between Sierra College Blvd and downtown Loomis.

Sidewalks. Sidewalks are provided today on portions of Taylor Road where development has occurred, but sidewalks are infrequent in the area of the proposed project.

Existing Traffic Volumes

A.m. and p.m. peak hour traffic counts at the two study intersections were assembled for this study. Counts were conducted for the Taylor Road/ Sierra College Blvd intersection on December 2, 2004, while new counts were at Sierra College Blvd / Brace Road on March 15, 2006. Figure 2 displays these existing traffic volumes that were used for this analysis.

Conditions on major roads have also been evaluated within the context of current daily traffic volumes, as shown in Table 1.



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EXISTING VOLUMES AND LANE CONFIGURATIONS

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figure 2

TABLE 1
CURRENT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment	# of Lanes	Average Daily Traffic	Daily Volume / Capacity Ratio	LOS
Taylor Road	Sierra College Blvd to Shawn Way	2	10,460	0.70	C
	Shawn Way To Horseshoe Bar Road	2	10,030	0.67	B
	Horseshoe Bar Road to King Road	2	16,030	1.07	F
	East of King Road to Taylor Road	2	6,965	0.46	A
Sierra College Blvd	Granite Drive to Brace Road	2	15,724	0.70	C
	Taylor Road to Bankhead Road	2	10,565	0.47	A
	Bankhead Road to King Road	2	9,645	0.43	A
	North of King Road	2	9,665	0.43	A
Brace Road	Sierra College Blvd to Interstate 80	2	2,240	0.15	A

Level of Service – Methodologies

To assess the quality of existing traffic conditions, operating Levels of Service were calculated at each study intersection. "Level of Service" (or "LOS") is a qualitative measure of traffic operating conditions whereby a letter grade "A" through "F", corresponding to progressively worsening traffic operating conditions, is assigned to an intersection.

Table 2 presents the characteristics associated with each LOS grade. As shown in Table 2, LOS "A", "B" and "C" are considered satisfactory to most motorists, while LOS "D" is marginally acceptable. LOS "E" and "F" are associated with increasingly long delays and congestion and are unacceptable to most motorists. The Town of Loomis has established LOS "C" as an operational threshold beyond which mitigations are required.

The General Plan also contains thresholds based on the volume of traffic on individual roadway segments. Measured in terms of the Volume / Capacity ratio (V/C), unsatisfactory conditions occur when the v/c ratio exceeds 0.80.

Levels of Service were calculated for study intersections using the methodologies contained in the 2000 Highway Capacity Manual. In the case of intersections controlled by side street stop signs, both the overall Level of Service for the intersection and the individual Level of Service for all movements has been identified.

Levels of Service and V/C ratio for roadway segments were calculated using the capacity thresholds identified in the General Plan.

TABLE 2
LEVEL OF SERVICE DEFINITIONS

Level of Service	Signalized Intersection	Unsignalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Overall Level of Service for unsignalized intersections is weighted average of delays experienced by all motorists yielding the right of way, excluding through traffic.			
Sources: 2000 Highway Capacity Manual, Transportation Research Board (TRB) Special Report 209.			

Existing Levels of Service

Current a.m. and p.m. peak hour Levels of Service are summarized in Table 3. As shown, the peak hour Level of Service at the two study intersections meets the Town's LOS C minimum.

TABLE 3
EXISTING INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec)	LOS	Average Delay (sec)	LOS
Taylor Rd / Sierra College Blvd	Signal	29.1 sec	C	34.2 sec	C
Sierra College Blvd / Brace Rd	Signal	13.6 sec	B	15.3 sec	B

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As was shown in Table 1, based on daily traffic volumes the segment of Taylor Road between Horseshoe Bar Road and King Road operates with a v/c ratio of 1.07. This is in excess of the minimum established by the Loomis General Plan. All other roads carry volumes that are indicative of acceptable conditions.

PROJECT TRAFFIC IMPACTS

Traffic conditions resulting from relocating the Homewood Lumber operation to the subject site are described in this report section. Project impacts have been quantified by estimating the number and directional distribution of project trips, and by superimposing those trips onto current traffic volumes at the study intersections. Levels of Service were then recalculated for the "Existing Plus Project" condition.

Project Characteristics

Existing Trip Generation. The proposed project is an existing manufacturing use that generates automobile and truck traffic throughout the day. To quantify the amount of traffic already occurring today at Homewood Lumber's Rippey Road operation, Homewood staff observed entering traffic during the week of March 13, 2006 and noted the time of entry and the type of vehicle. Commercial haulers were also asked for their trip origin and destination.

The data provided by Homewood Lumber indicated that the amount of traffic traveling to and from the site varied over the week. On the two highest volume days an average of 636 daily customer trip ends were observed. Of this traffic about 10% was 18 wheel trucks and 7% was utility trucks (bobtails). Another 192 daily trips are associated with employees, bringing the current daily trip generation to 828 trips.

The available data was also reviewed to identify the volume of traffic occurring during typical a.m. and p.m. commute hours. It was determined that on peak days approximately 140 trips occur during the a.m. peak hour (7:00 to 9:00 a.m.) and 56 trips are generated during the p.m. peak hour (4:00 to 6:00 p.m.).

Project Trip Generation. The relocation of Homewood Lumber will provide the opportunity for increased efficiency in handling materials and improved storage. While the relocation will not directly increase the number of customers served by Homewood Lumber, it is reasonable to expect that some increase in sales activity could accompany the project. For the purpose of this traffic and air quality study, a 25% increase in site trip generation has been assumed.

As shown in Table 4, the proposed project will generate 1,035 daily trips with 175 trips occurring in the a.m. peak hour and 70 occurring in the p.m. peak hour.

TABLE 4
TRIP GENERATION

	Trip Generation						
		A.M. Peak Hour			P.M. Peak Hour		
	Daily	In	Out	Total	In	Out	Total
Existing Rippey Rd Site	828	84	56	140	13	43	56
Proposed Brace Road Site	1,035	105	70	175	16	54	70

Trip Distribution. Having determined the number of trips that may be generated by the proposed project, it is necessary to identify the directional distribution of project traffic in order to assign these trips to the study area street system. Based on information derived from the surveys at the existing Homewood Lumber operation on Rippey Road, customer activity is generally divided between Auburn (east) and Sacramento (west) markets. The greater share of customers is oriented to the west and will use Sierra College Blvd to reach Interstate 80. After accounting for the regional distribution of employee trips, the overall allocation of project trips to the study area circulation system that is identified in Table 5 was developed. The resulting assignment of project trips onto the study are street system is shown in Figure 3.

TABLE 5
DIRECTIONAL TRIP DISTRIBUTION

	Percentage of Total Trips
North on Sierra College Blvd	10%
East on Taylor Road	5%
West on Taylor Road	5%
East on Brace Road	5%
South on Sierra College Blvd	75%
Total	100%

Existing Plus Project Conditions

Daily Traffic Volumes. Table 6 presents the daily traffic volume contribution of this project to study area roads and resulting Levels of Service. As shown, the addition of project traffic will exacerbate conditions that are already in excess of capacity on the segment of Taylor Road between Horseshoe Bar Road and King Road. All other segments will continue to operate within the Town's minimum LOS C standard.

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Intersection Levels of Service. Figure 4 presents "Existing Plus Project" peak hour traffic volumes. Table 7 presents Levels of Service at the project driveways and study intersections with development of the project. As shown, of this project will not result in conditions in excess of Town standards the Level of Service at the two signalized study intersections. No mitigation to address Level of Service is needed at these locations

Under "Existing Plus Project" condition the level of service for motorists accessing the site at the two new driveways will also be within Town standards.

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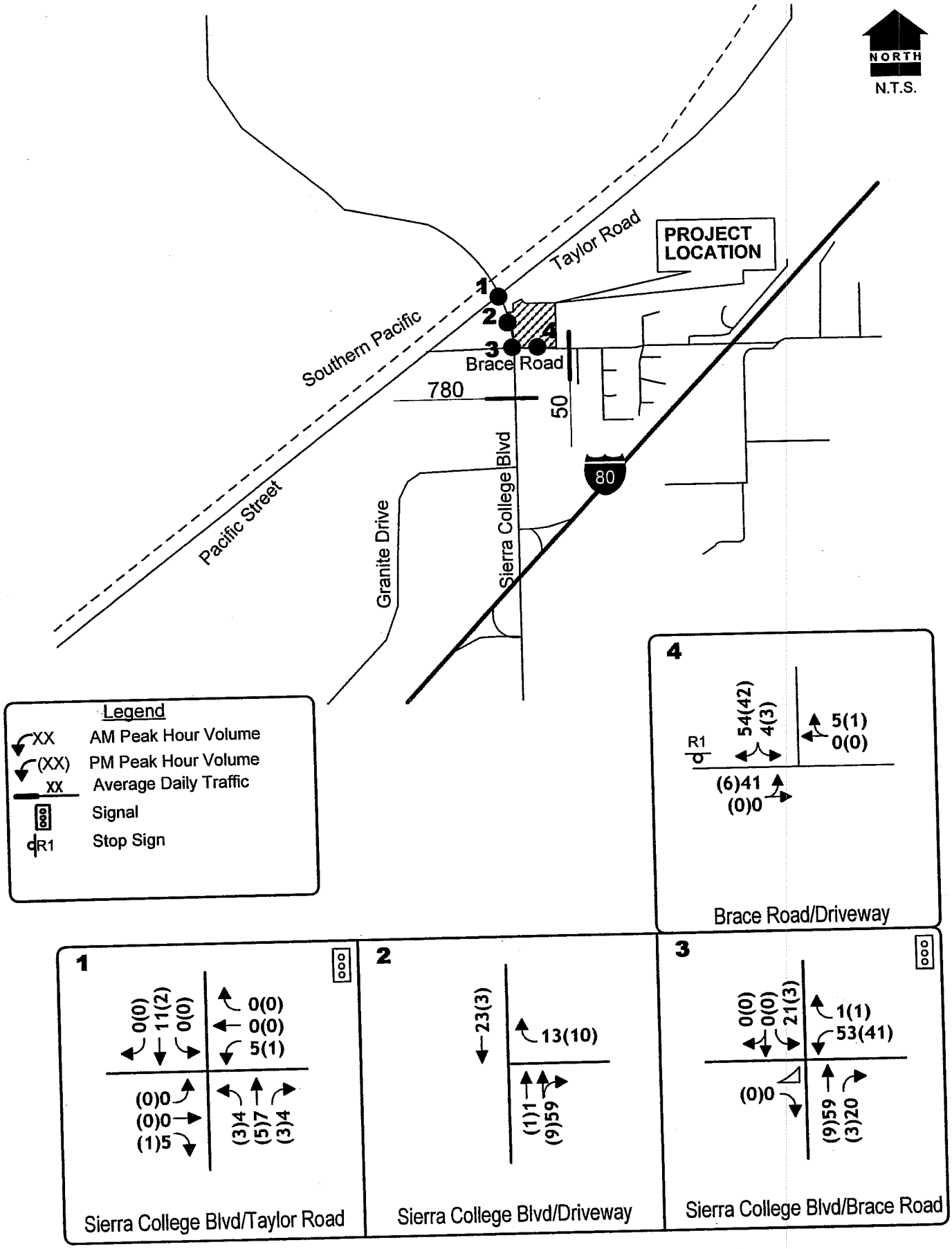

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PROJECT ONLY VOLUMES AND LANE CONFIGURATIONS

figure 3

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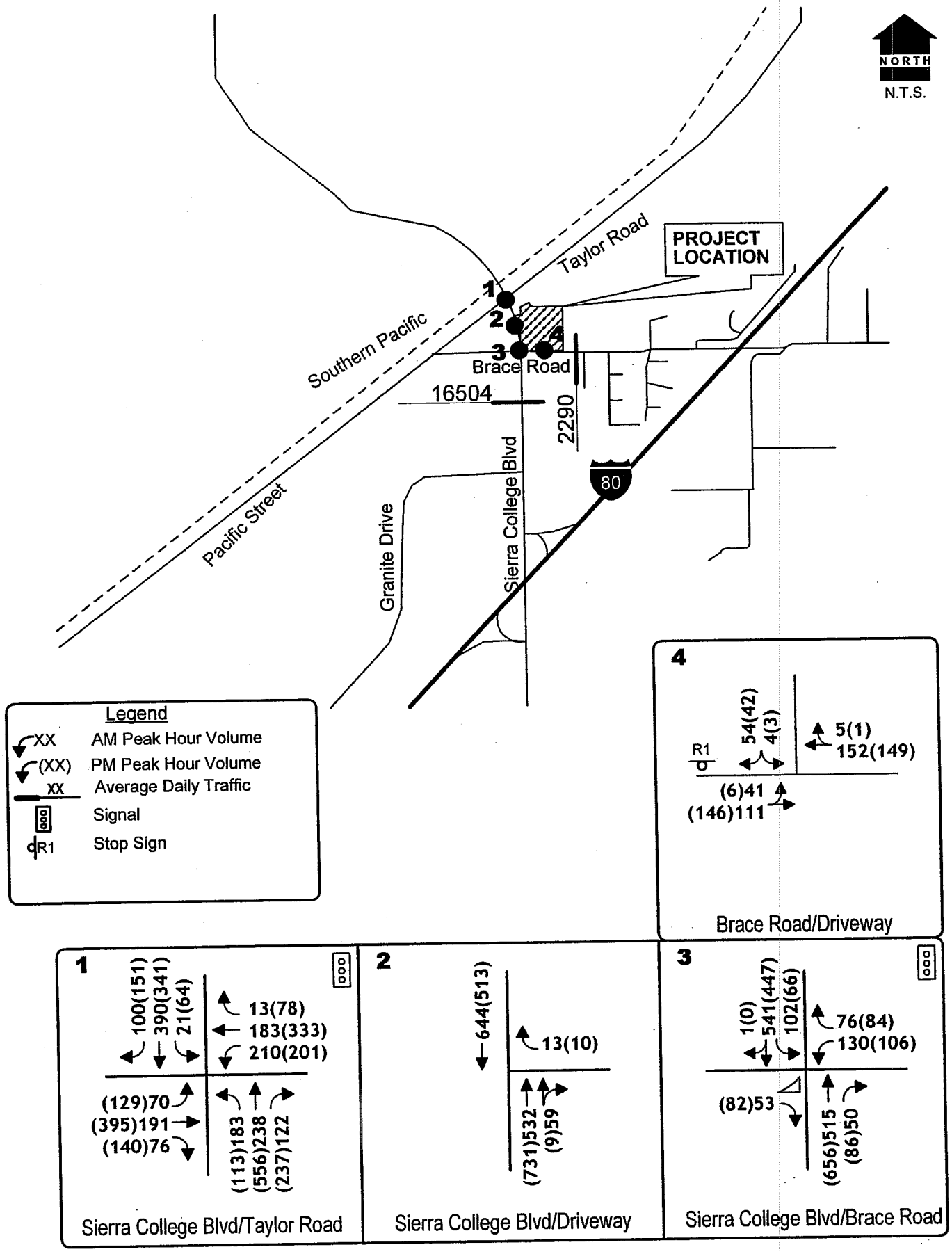

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EXISTING PLUS PROJECT
VOLUMES AND LANE CONFIGURATIONS

3770-01 sg 4/17/2006

figure 4

TABLE 7
EXISTING PLUS PROJECT DAILY TRAFFIC VOLUMES AND LEVELS OF SERVICE

Roadway	Segment	# of Lanes	Existing			Existing Plus Project			
						Average Daily Traffic			
			Average Daily Traffic	Volume / Capacity Ratio	LOS	Project Only	Existing Plus Project	Volume / Capacity Ratio	LOS
Taylor Road	Sierra College Blvd to Shawn Way	2	10,460	0.70	C	50	10,510	0.70	C
	Shawn Way To Horseshoe Bar Rd	2	10,030	0.67	B	50	10,080	0.67	C
	Horseshoe Bar Road to King Rd	2	**16,030**	**1.07**	**F**	**50**	**16,080**	**1.07**	**F**
	East of King Road	2	6,965	0.46	A	0	6,965	0.46	A
Sierra College Blvd	Granite Drive to Brace Rd	2	15,724	0.70	C	780	16,504	0.73	C
	Granite Drive to Access	2	15,724	0.70	C	405	16,129	0.72	C
	Access to Taylor Road	2	15,724	0.70	C	205	15,929	0.71	C
	Taylor Road to Bankhead Road	2	10,565	0.47	A	105	10,670	0.47	A
	Bankhead Road to King Road	2	9,645	0.43	A	105	9,750	0.44	A
	North of King Road	2	9,665	0.43	A	105	9,770	0.44	A
Brace Road	Sierra College Blvd to I-80	2	2,240	0.15	A	50	2,290	0.15	A

TABLE 8
EXISTING PLUS PROJECT
INTERSECTION LEVEL OF SERVICE

Intersection	Control	AM Peak Hour				PM Peak Hour			
		Existing		Existing Plus Project		Existing		Existing Plus Project	
		Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS	Average Delay (sec)	LOS
Taylor Rd / Sierra College Blvd	Signal	29.1 sec	C	30.0 sec	C	33.8 sec	C	34.1 sec	C
Sierra College Blvd / Access WB right turn	WB Stop			10.2 sec	B			10.8 sec	B
Sierra College Blvd / Brace Road	Signal	13.6 sec	B	15.9 sec	C	15.3 sec	B	16.8 sec	B
Brace Road / Access SB left+right turn	SB Stop			9.7 sec	A			9.5 sec	B

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CUMULATIVE TRAFFIC CONDITIONS / ACCESS FEASIBILITY

The relative impacts of the proposed project have also been evaluated within the context of long term traffic conditions anticipated under the Town of Loomis General Plan. Under Town of Loomis traffic study guidelines, a cumulative analysis is not required if the proposed project is consistent with the General Plan and the project's long term traffic impact is already accounted for via the Town's Capital Improvement Program (CIP). As the project is consistent with the General Plan, its cumulative impact is addressed by existing Town of Loomis mitigation fees in those locations where improvements are planned.

The adequacy of project access is also considered under cumulative conditions. As part of this analysis the length of "throats" between Taylor Road and parking aisles has been reviewed. The intersection between site access and through traffic on Sierra College Blvd and Brace Road has also been evaluated.

Background Traffic Conditions

Year 2020 Traffic Volumes. The Town of Loomis General Plan is the basis for future traffic volume forecasts in the Loomis area. The projections included in this document were made using a version of the City of Rocklin's regional travel demand forecasting model with adjustments made to reflect the Town of Loomis 2000 General Plan Update. Table 9 presents long term traffic volumes on study area streets as suggested by the Loomis General Plan Update EIR.

The GPU notes the range of improvements needed to deliver acceptable conditions, including major widening of Sierra College Blvd to 4-6 lanes. However, the GPU acknowledges that significant and unavoidable cumulative impacts will remain after all identified GPU improvements are constructed.

TABLE 9
FUTURE TRAFFIC VOLUMES AND GROWTH RATES

Road	Location	Daily Traffic Volume		Growth Rate
		2004	2020	
Sierra College Blvd	South of Taylor Road	15,724	49,600	3.15
	North of Taylor Road	10,565	36,000	3.41
Taylor Road	East of Sierra College Blvd	10,460	18,400	1.76

Access Evaluation

The adequacy of project access has been evaluated within the context of anticipated future traffic conditions adjacent to the site. As noted earlier, the project site will take access to Sierra College Blvd (right turn only) and via Brace Road.

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The volume of background traffic occurring at the two project access points was determined by multiplying the current observed volume by the growth rate implied from GPU data. For Brace Road the factor projected for Taylor Road was employed.

Queue Length. The length of driveway throat needed to store waiting vehicles is considered. Per Town guidelines, a 95% confidence level has been assumed, meaning that the forecast queue length should only be exceeded 5% of the time during the peak hour. In this case, because the volume of traffic turning right onto Sierra College Blvd is relatively low and the background volume on Brace Road is limited, the peak hour queue in each driveway is one (1) vehicle or less. Thus, the limited throat provided in each access should be adequate.

Interaction with Sierra College Blvd traffic. A more important consideration with regard to the feasibility of site access it the long term interaction between through traffic on Sierra College Blvd and vehicles using the proposed access. As noted above, large traffic volumes are forecast for the future and poor traffic conditions are likely in the area of the Taylor Road / Sierra College Blvd intersection.

While it may be possible for Homewood Lumber to make use of the Sierra College Blvd access in the short term because background volumes are low, without improvements the delays to through traffic caused in the future by decelerating trucks would have an impact on the overall flow of traffic on Sierra College Blvd. Ideally, project access should be eliminated in the future when Sierra College Blvd is widened to 4-6 lanes. If the Town determines that this access can remain, then an auxiliary lane should be provided on northbound Sierra College Blvd to provide space for deceleration prior to the driveway. This lane would be in addition to the 4-6 lane improvements.

Brace Road Access. Access to Brace Road is less of an issue because background traffic volumes are low. The issue in this location is the extent to which traffic turning left into the site blocks through traffic. In the short term this issue is unlikely to be a problem, as delays for inbound traffic are slight. However, in the long term traffic waiting to turn into the site could be an issue, especially if site access to Sierra College Blvd is lost. Development of a left turn lane opportunity at the project access is recommended. Ideally, the westbound left turn lane at Sierra College Blvd should be extended easterly to the site access as a two-way left turn lane.

MITIGATION MEASURES / RECOMMENDATIONS

The purpose of this section is to describe measures that will alleviate unacceptable traffic conditions. For the Town of Loomis, "unacceptable" conditions are identified as those under which weekday Level of Service (LOS) "D", "E", or "F" is experienced.

Mitigations for Development of Project

Frontage Improvements. The project should construct standard frontage improvements along Brace Road and Taylor Road ads required by the Town. As a part of this work a continuous TWLT lane should be developed along Brace Road between the project access and Sierra College Blvd.

Sierra College Blvd Access. A physical barrier should be installed in Sierra College to limit this access to right turns only.

Cumulative Mitigations. The project will need to contribute its fair share to the cost of long term local and regional improvements. Within the Town of Loomis, payment of adopted mitigation fees will suffice to address planned improvements to the Town's roads, Sierra College Blvd and the Interstate 80 / Horseshoe Bar Road interchange.

To accommodate the proposed access onto Sierra College Blvd it would be necessary to increase the scope of future improvements to Sierra College Blvd to include a northbound deceleration lane into the site. Because it may not possible to install this lane today, the Town and developer should work to identify an applicable contribution to the cost of this part of future work.

AIR QUALITY MODELING

URBEMIS emissions modeling has been conducted for the project. Forecasts have been made for "existing' operations at the Rippey Road site and for the 25% higher level of activity assumed for the Brace Road site. Forecasts have also been made for on site construction. These model runs are included in the appendix.

APPENDIX

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URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\All Users\Desktop_Projects_URBEMIS8_7 Projects\Homewood Lumber - Loomis Site\Homewood Existing.urb
Project Name: Homewood Lumber Existing Site
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.41	0.19	0.94	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	5.86	13.58	72.96	0.05	6.76

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	6.27	13.77	73.89	0.05	6.76

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\All Users\Desktop_Projects_URBEMIS8_7 Projects\Homewood Lumber - Loomis Site\Homewood Existing.urb
Project Name: Homewood Lumber Existing Site
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.01	0.19	0.16	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.27	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.41	0.19	0.94	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hardware/paint store	5.86	13.58	72.96	0.05	6.76
TOTAL EMISSIONS (lbs/day)	5.86	13.58	72.96	0.05	6.76

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Hardware/paint store		42.68 trips/1000 sq. ft.	19.40	827.99
		Sum of Total Trips		827.99
		Total Vehicle Miles Traveled		4,354.41

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.60	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	7.50	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Hardware/paint store				23.0	11.5	65.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The hearth option switch changed from on to off.
The consumer products option switch changed from on to off.

Changes made to the default values for Operations

The light auto percentage changed from 55.2 to 48.6.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 7.5.
The operational emission year changed from 2005 to 2007.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\All Users\Desktop_Projects_URBEMIS8_7 Projects\Homewood Lumber - Loomis Site\Homewood Lumber Proposed.urb
Project Name: Homewood Lumber Proposed Site
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	4.34	34.49	31.39	0.00	4.59	1.59	3.00

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	41.20	28.99	31.08	0.00	1.24	1.22	0.02

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	0.48	0.24	0.98	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	7.33	16.98	91.23	0.06	8.45

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	7.81	17.22	92.21	0.06	8.45

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Documents and Settings\All Users\Desktop_Projects_URBEMIS8_7 Projects\Homewood Lumber - Loomis Site\Homewood Lumber Proposed.urb
Project Name: Homewood Lumber Proposed Site
Project Location: Lower Sacramento Valley Air Basin
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 12
Total Land Use Area to be Developed: 1.1 acres
Maximum Acreage Disturbed Per Day: 0.3 acres
Single Family Units: 0 Multi-Family Units: 0
Retail/Office/Institutional/Industrial Square Footage: 24260

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	3.00	-	3.00
Off-Road Diesel	4.31	34.45	30.66	-	1.59	1.59	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.03	0.04	0.73	0.00	0.00	0.00	0.00
Maximum lbs/day	4.34	34.49	31.39	0.00	4.59	1.59	3.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	3.94	30.03	29.16	-	1.34	1.34	0.00
Bldg Const Worker Trips	0.05	0.03	0.65	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.99	30.06	29.81	0.00	1.35	1.34	0.01
Max lbs/day all phases	4.34	34.49	31.39	0.00	4.59	1.59	3.00
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							

Bldg Const Off-Road Diesel	3.94	28.76	30.04	-	1.22	1.22	0.00
Bldg Const Worker Trips	0.05	0.03	0.61	0.00	0.01	0.00	0.01
Arch Coatings Off-Gas	37.09	-	-	-	-	-	-
Arch Coatings Worker Trips	0.04	0.02	0.50	0.00	0.01	0.00	0.01
Asphalt Off-Gas	0.07	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.01	0.19	0.04	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	41.20	28.99	31.08	0.00	1.24	1.22	0.02
Max lbs/day all phases	41.20	28.99	31.08	0.00	1.24	1.22	0.02

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 1.3 months
On-Road Truck Travel (VMT): 0
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Rubber Tired Dozers	352	0.590	8.0
1	Tractor/Loaders/Backhoes	79	0.465	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Jul '06
Phase 3 Duration: 10.7 months
Start Month/Year for SubPhase Building: Jul '06
SubPhase Building Duration: 10.7 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Concrete/Industrial saws	84	0.730	8.0
1	Other Equipment	190	0.620	8.0
1	Rough Terrain Forklifts	94	0.475	8.0

Start Month/Year for SubPhase Architectural Coatings: Apr '07
SubPhase Architectural Coatings Duration: 1.1 months
Start Month/Year for SubPhase Asphalt: May '07
SubPhase Asphalt Duration: 0.5 months
Acres to be Paved: 0.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.02	0.23	0.20	0	0.00
Hearth - No summer emissions					
Landscaping	0.12	0.00	0.78	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.34	-	-	-	-
TOTALS(lbs/day,unmitigated)	0.48	0.24	0.98	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hardware/paint store	7.33	16.98	91.23	0.06	8.45
TOTAL EMISSIONS (lbs/day)	7.33	16.98	91.23	0.06	8.45

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Hardware/paint store		42.68 trips/1000 sq. ft.	24.26	1,035.42
		Sum of Total Trips		1,035.42
		Total Vehicle Miles Traveled		5,445.26

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	48.60	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	7.50	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.7	3.8	4.6	7.8	4.5	4.5
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Hardware/paint store				23.0	11.5	65.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Construction

Changes made to the default values for Area

The hearth option switch changed from on to off.
The consumer products option switch changed from on to off.

Changes made to the default values for Operations

The light auto percentage changed from 55.2 to 48.6.
The heavy-heavy truck 33001-60000 percentage changed from 0.9 to 7.5.
The operational emission year changed from 2005 to 2007.

Table 8-8
Placer County APCD Wood Stove Rebate Program 1999-2004

Year	Number of Non EPA-Certified Wood Stoves Replaced	$ Amount	PM Reduction (tons/year)	Avg. Cost Effective ($/ton)
1999~2004	138	$48,000	7.07	$6,789.25

Several County plans and documents contain goals and policies related to air quality that are applicable to the proposed Home Depot project. The applicable plans and their goals and policies for air quality are identified in Appendix C.

8.3 IMPACTS

This section identifies and discusses the environmental impacts resulting from the proposed project, and suggests mitigation measures to reduce the levels of impact. A detailed discussion of mitigation measures is included in Section 8.4.

Significance Criteria

The air quality impacts of a project are considered significant if any of the following are true:

- Construction or operation of the project would result in emissions that exceed 82 lb/day for either ozone precursors (NO_X or ROG) or PM_{10} (which includes $PM_{2.5}$) or 550 lb/day for CO. These emission thresholds have been developed by PCAPCD.
- Project emissions would lead to new exceedances of the federal or state ambient air quality standards.
- The proposed project would conflict with the goals and policies in the State Implementation Plan, local air quality attainment plan, or the County General Plan.
- The proposed project would have the potential to frequently expose members of the public to objectionable odors.

8.3.1 Construction Impacts

IMPACT NO. A-1: Construction activities would increase short-term criteria air pollutant emissions.

SIGNIFICANCE: Short-term: Significant for PM_{10} and NO_X
Long-term: Less Than Significant

MITIGATION: Mitigation Measures A-A (Implement additional Construction Emission/Dust Control measures beyond those identified in Environmental Protection Measures); and A-B (Reduce daily area of disturbance during grading)

SIGNIFICANCE AFTER MITIGATION: Short-term: Significant for NO_X,
Less than Significant for PM_{10}
Long-term: Less Than Significant

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Scenario Report

Scenario:	ex am plus project
Command:	Default Command
Volume:	ex am
Geometry:	existing
Impact Fee:	Default Impact Fee
Trip Generation:	am peak
Trip Distribution:	current
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Generation Report

Forecast for am peak

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1		1.25	industrial	84.00	56.00	105	70	175	100.0
	Zone 1 Subtotal					105	70	175	100.0
TOTAL						105	70	175	100.0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Distribution Report

Percent Of Trips current

Zone	To Gates 1	2	3	4	5
1	75.0	5.0	5.0	10.0	5.0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Turning Movement Report
am peak

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Taylor Rd / Sierra College													
Base	179	231	118	21	379	100	70	191	71	205	183	13	1761
Added	4	7	4	0	11	0	0	0	5	5	0	0	36
Total	183	238	122	21	390	100	70	191	76	210	183	13	1797
#2 Sierra College / Brace Rd													
Base	0	456	30	81	541	1	0	0	53	77	0	75	1314
Added	0	59	20	21	0	0	0	0	0	53	0	1	154
Total	0	515	50	102	541	1	0	0	53	130	0	76	1468
#3 Sierra College / Access													
Base	0	531	0	0	623	0	0	0	0	0	0	0	1154
Added	0	1	59	0	21	0	0	0	0	0	0	13	94
Total	0	532	59	0	644	0	0	0	0	0	0	13	1248
#4 Brace Rd / Access													
Base	0	0	0	0	0	0	0	111	0	0	152	0	263
Added	0	0	0	4	0	54	41	0	0	0	0	5	104
Total	0	0	0	4	0	54	41	111	0	0	152	5	367

Traffix 7.7.0715 (c) 2004 Dowling Assoc. Licensed to kdANDERSON TRANSP.

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Taylor Rd / Sierra College	C	29.1	0.803	C	30.0	0.820	+ 0.869 D/V
# 2 Sierra College / Brace Rd	B	13.6	0.509	B	15.9	0.604	+ 2.338 D/V
# 3 Sierra College / Access	A	0.0	0.000	B	10.2	0.000	+10.204 D/V
# 4 Brace Rd / Access	A	0.0	0.000	A	9.7	0.000	+ 9.652 D/V

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****

Intersection #1 Taylor Rd / Sierra College

****

Cycle (sec): 70 Critical Vol./Cap. (X): 0.803
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.1
Optimal Cycle: 68 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 1 0 1			1 0 1 0 1			1 0 1 0 1		
Volume Module: >> Count Date: 2 Dec 2004 <<												
Base Vol:	179	231	118	21	379	100	70	191	71	205	183	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	179	231	118	21	379	100	70	191	71	205	183	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	224	289	148	26	474	125	88	239	89	256	229	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	224	289	148	26	474	125	88	239	89	256	229	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	224	289	148	26	474	125	88	239	89	256	229	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.95	0.81	0.90	0.95	0.81	0.93	0.98	0.83	0.93	0.98	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1718	1809	1537	1718	1809	1537	1769	1862	1583	1769	1862	1583
Capacity Analysis Module:												
Vol/Sat:	0.13	0.16	0.10	0.02	0.26	0.08	0.05	0.13	0.06	0.14	0.12	0.01
Crit Moves:	****				****			****		****		
Green/Cycle:	0.16	0.45	0.45	0.04	0.33	0.33	0.10	0.16	0.16	0.18	0.24	0.24
Volume/Cap:	0.80	0.36	0.22	0.36	0.80	0.25	0.51	0.80	0.35	0.80	0.51	0.04
Delay/Veh:	43.6	13.1	12.1	35.6	29.3	17.6	32.4	42.8	27.0	41.1	23.8	20.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.6	13.1	12.1	35.6	29.3	17.6	32.4	42.8	27.0	41.1	23.8	20.3
HCM2kAvg:	7	4	2	1	12	2	3	7	2	8	5	0

****

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 Taylor Rd / Sierra College

Cycle (sec): 70 Critical Vol./Cap. (X): 0.820
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.0
Optimal Cycle: 71 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	0 1		1 0 1	0 1		1 0 1	0 1	
Volume Module: >> Count Date: 2 Dec 2004 <<												
Base Vol:	179	231	118	21	379	100	70	191	71	205	183	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	179	231	118	21	379	100	70	191	71	205	183	13
Added Vol:	4	7	4	0	11	0	0	0	5	5	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	183	238	122	21	390	100	70	191	76	210	183	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	229	298	153	26	488	125	88	239	95	263	229	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	229	298	153	26	488	125	88	239	95	263	229	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	229	298	153	26	488	125	88	239	95	263	229	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.95	0.81	0.90	0.95	0.81	0.93	0.98	0.83	0.93	0.98	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1718	1809	1537	1718	1809	1537	1769	1862	1583	1769	1862	1583
Capacity Analysis Module:												
Vol/Sat:	0.13	0.16	0.10	0.02	0.27	0.08	0.05	0.13	0.06	0.15	0.12	0.01
Crit Moves:	****				****			****		****		
Green/Cycle:	0.16	0.45	0.45	0.04	0.33	0.33	0.10	0.16	0.16	0.18	0.24	0.24
Volume/Cap:	0.82	0.37	0.22	0.37	0.82	0.25	0.51	0.82	0.38	0.82	0.51	0.04
Delay/Veh:	45.6	13.0	11.9	35.8	30.4	17.4	32.6	45.2	27.5	42.9	24.0	20.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	13.0	11.9	35.8	30.4	17.4	32.6	45.2	27.5	42.9	24.0	20.4
HCM2kAvg:	8	4	2	1	12	2	3	8	2	8	5	0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

Intersection #2 Sierra College / Brace Rd

Cycle (sec):	70	Critical Vol./Cap. (X):	0.509
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	13.6
Optimal Cycle:	39	Level Of Service:	B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Split Phase				Split Phase			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	0 0	1 0	1		1 0	0 1	0		0 0	0 0	1		1 0	0 0	1	
Volume Module: >> Count Date: 15 Mar 2006 <<																
Base Vol:	0	456	30		81	541	1		0	0	53		77	0	75	
Growth Adj:	1.00	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	456	30		81	541	1		0	0	53		77	0	75	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90		0.90	0.90	0.90	
PHF Volume:	0	507	33		90	601	1		0	0	59		86	0	83	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	0	507	33		90	601	1		0	0	59		86	0	83	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Final Vol.:	0	507	33		90	601	1		0	0	59		86	0	83	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	1.00	0.95	0.81		0.90	0.95	0.95		1.00	1.00	0.85		0.93	1.00	0.83	
Lanes:	0.00	1.00	1.00		1.00	0.99	0.01		0.00	0.00	1.00		1.00	0.00	1.00	
Final Sat.:	0	1809	1537		1718	1805	3		0	0	1611		1769	0	1583	
Capacity Analysis Module:																
Vol/Sat:	0.00	0.28	0.02		0.05	0.33	0.33		0.00	0.00	0.04		0.05	0.00	0.05	
Crit Moves:		****			****						****				****	
Green/Cycle:	0.00	0.55	0.55		0.10	0.65	0.65		0.00	0.00	0.07		0.10	0.00	0.10	
Volume/Cap:	0.00	0.51	0.04		0.51	0.51	0.51		0.00	0.00	0.51		0.47	0.00	0.51	
Delay/Veh:	0.0	10.3	7.3		32.2	6.7	6.7		0.0	0.0	35.0		31.4	0.0	32.3	
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
AdjDel/Veh:	0.0	10.3	7.3		32.2	6.7	6.7		0.0	0.0	35.0		31.4	0.0	32.3	
HCM2kAvg:	0	7	0		3	7	7		0	0	2		2	0	2	

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Sierra College / Brace Rd

Cycle (sec): 70 Critical Vol./Cap. (X): 0.604
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 46 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	0 1	0	0 0	0 0	1	1 0	0 0	1
Volume Module: >> Count Date: 15 Mar 2006 <<												
Base Vol:	0	456	30	81	541	1	0	0	53	77	0	75
Growth Adj:	1.00	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	456	30	81	541	1	0	0	53	77	0	75
Added Vol:	0	59	20	21	0	0	0	0	0	53	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	515	50	102	541	1	0	0	53	130	0	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	572	56	113	601	1	0	0	59	144	0	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	572	56	113	601	1	0	0	59	144	0	84
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	572	56	113	601	1	0	0	59	144	0	84
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.81	0.90	0.95	0.95	1.00	1.00	0.85	0.93	1.00	0.83
Lanes:	0.00	1.00	1.00	1.00	0.99	0.01	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	1809	1537	1718	1805	3	0	0	1611	1769	0	1583
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.04	0.07	0.33	0.33	0.00	0.00	0.04	0.08	0.00	0.05
Crit Moves:		****		****					****	****		
Green/Cycle:	0.00	0.52	0.52	0.11	0.63	0.63	0.00	0.00	0.06	0.14	0.00	0.14
Volume/Cap:	0.00	0.60	0.07	0.60	0.53	0.53	0.00	0.00	0.60	0.60	0.00	0.39
Delay/Veh:	0.0	12.7	8.3	35.2	7.5	7.5	0.0	0.0	42.4	32.8	0.0	28.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.7	8.3	35.2	7.5	7.5	0.0	0.0	42.4	32.8	0.0	28.9
HCM2kAvg:	0	9	1	4	8	8	0	0	2	4	0	2

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #3 Sierra College / Access
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1 1 0			0 0 1 0 0			0 0 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	531	0	0	623	0	0	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
Initial Bse:	0	531	0	0	623	0	0	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
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	590	0	0	692	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	590	0	0	692	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped 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	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****

Intersection #3 Sierra College / Access

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.2]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	531		0		0	623		0		0		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	
Initial Bse:	0	531		0		0	623		0		0		0		0	0		0		0
Added Vol:	0	1		59		0	21		0		0		0		0	0		0		13
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	532		59		0	644		0		0		0		0	0		0		13
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	591		66		0	716		0		0		0		0	0		0		14
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	591		66		0	716		0		0		0		0	0		0		14
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.3
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			328
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			706
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			706
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.02
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			0.1
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			10.2
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	xxxx		xxxxx		xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx						10.2			
ApproachLOS:	*					*					*						B			

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #4 Brace Rd / Access
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	111	0	0	152	0
Growth Adj:	1.00	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	0	0	0	0	0	0	111	0	0	152	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	123	0	0	169	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	123	0	0	169	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped 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	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****

Intersection #4 Brace Rd / Access

****

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: A[9.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	111	0	0	152	0
Growth Adj:	1.00	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	0	0	0	0	0	0	111	0	0	152	0
Added Vol:	0	0	0	4	0	54	41	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	4	0	54	41	111	0	0	152	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	4	0	60	46	123	0	0	169	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	4	0	60	46	123	0	0	169	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.3	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	386	xxxx	172	174	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	611	xxxx	864	1402	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	596	xxxx	864	1402	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	0.07	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	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	838	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				9.7		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Turning Movement By Zone Report
am peak

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Taylor Rd / Sierra College													
[Base(LOS=C,Del=29.1,V/C=0.803)][Future(LOS=C,Del=30.0,V/C=0.820)][+0.869 D/V]													
Base	179	231	118	21	379	100	70	191	71	205	183	13	1761
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	179	231	118	21	379	100	70	191	71	205	183	13	1761
Zn 1	4	7	4	0	11	0	0	0	5	5	0	0	36
Added	4	7	4	0	11	0	0	0	5	5	0	0	36
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	183	238	122	21	390	100	70	191	76	210	183	13	1797
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	183	238	122	21	390	100	70	191	76	210	183	13	1797
#2 Sierra College / Brace Rd													
[Base(LOS=B,Del=13.6,V/C=0.509)][Future(LOS=B,Del=15.9,V/C=0.604)][+2.338 D/V]													
Base	0	456	30	81	541	1	0	0	53	77	0	75	1314
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	456	30	81	541	1	0	0	53	77	0	75	1314
Zn 1	0	59	20	21	0	0	0	0	0	53	0	1	154
Added	0	59	20	21	0	0	0	0	0	53	0	1	154
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	515	50	102	541	1	0	0	53	130	0	76	1468
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	515	50	102	541	1	0	0	53	130	0	76	1468
#3 Sierra College / Access													
[Base(LOS=A,Del=0.0,V/C=0.000)][Future(LOS=B,Del=0.1,V/C=0.000)][+0.000 V/C]													
Base	0	531	0	0	623	0	0	0	0	0	0	0	1154
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	531	0	0	623	0	0	0	0	0	0	0	1154
Zn 1	0	1	59	0	21	0	0	0	0	0	0	13	94
Added	0	1	59	0	21	0	0	0	0	0	0	13	94
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	532	59	0	644	0	0	0	0	0	0	13	1248
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	532	59	0	644	0	0	0	0	0	0	13	1248
#4 Brace Rd / Access													
[Base(LOS=A,Del=0.0,V/C=0.000)][Future(LOS=A,Del=2.4,V/C=0.000)][+0.000 V/C]													
Base	0	0	0	0	0	0	0	111	0	0	152	0	263
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	0	0	0	0	0	0	111	0	0	152	0	263
Zn 1	0	0	0	4	0	54	41	0	0	0	0	5	104
Added	0	0	0	4	0	54	41	0	0	0	0	5	104
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	0	0	4	0	54	41	111	0	0	152	5	367
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	0	0	4	0	54	41	111	0	0	152	5	367

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Scenario Report

Scenario:	ex pm plus project
Command:	Default Command
Volume:	ex pm
Geometry:	existing
Impact Fee:	Default Impact Fee
Trip Generation:	pm peak
Trip Distribution:	current
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Generation Report

Forecast for pm peak

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1		1.25	industrial	13.00	43.00	16	54	70	100.0
	Zone 1 Subtotal					16	54	70	100.0
TOTAL						16	54	70	100.0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Distribution Report

Percent Of Trips current

Zone	To Gates 1	2	3	4	5
1	75.0	5.0	5.0	10.0	5.0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Turning Movement Report
pm peak

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Taylor Rd / Sierra College													
Base	110	551	234	64	339	151	129	395	139	200	333	78	2723
Added	3	5	3	0	2	0	0	0	1	1	0	0	15
Total	113	556	237	64	341	151	129	395	140	201	333	78	2738
#2 Sierra College / Brace Rd													
Base	0	647	83	63	447	0	0	0	82	65	0	83	1470
Added	0	9	3	3	0	0	0	0	0	41	0	1	57
Total	0	656	86	66	447	0	0	0	82	106	0	84	1527
#3 Sierra College / Access													
Base	0	730	0	0	510	0	0	0	0	0	0	0	1240
Added	0	1	9	0	3	0	0	0	0	0	0	10	23
Total	0	731	9	0	513	0	0	0	0	0	0	10	1263
#4 Brace Rd / Access													
Base	0	0	0	0	0	0	0	146	0	0	149	0	295
Added	0	0	0	3	0	42	6	0	0	0	0	1	52
Total	0	0	0	3	0	42	6	146	0	0	149	1	347

Traffix 7.7.0715 (c) 2004 Dowling Assoc. Licensed to kdANDERSON TRANSP.

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Taylor Rd / Sierra College	C	33.8	0.895	C	34.1	0.899	+ 0.367 D/V
# 2 Sierra College / Brace Rd	B	15.3	0.667	B	16.8	0.686	+ 1.438 D/V
# 3 Sierra College / Access	A	0.0	0.000	B	10.8	0.000	+10.777 D/V
# 4 Brace Rd / Access	A	0.0	0.000	A	9.5	0.000	+ 9.496 D/V

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

Intersection #1 Taylor Rd / Sierra College

Cycle (sec):	70	Critical Vol./Cap. (X):	0.895
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	33.8
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	0 1		1 0 1	0 1		1 0 1	0 1		1 0 1	0 1	
Volume Module: >> Count Date: 2 Dec 2004 <<												
Base Vol:	110	551	234	64	339	151	129	395	139	200	333	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	551	234	64	339	151	129	395	139	200	333	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	122	612	260	71	377	168	143	439	154	222	370	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	612	260	71	377	168	143	439	154	222	370	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	612	260	71	377	168	143	439	154	222	370	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.95	0.81	0.90	0.95	0.81	0.93	0.98	0.83	0.93	0.98	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1718	1809	1537	1718	1809	1537	1769	1862	1583	1769	1862	1583
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.17	0.04	0.21	0.11	0.08	0.24	0.10	0.13	0.20	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.38	0.38	0.05	0.32	0.32	0.12	0.26	0.26	0.14	0.29	0.29
Volume/Cap:	0.66	0.89	0.45	0.89	0.66	0.34	0.69	0.89	0.37	0.89	0.69	0.19
Delay/Veh:	38.3	34.7	16.8	99.7	23.5	18.8	39.4	43.4	21.6	60.5	26.1	19.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.3	34.7	16.8	99.7	23.5	18.8	39.4	43.4	21.6	60.5	26.1	19.0
HCM2kAvg:	4	17	5	4	8	3	5	13	3	8	8	2

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

****

Intersection #1 Taylor Rd / Sierra College

****

Cycle (sec): 70 Critical Vol./Cap. (X): 0.899
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.1
Optimal Cycle: 89 Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1	1 0	1 0	1
Volume Module: >> Count Date: 2 Dec 2004 <<												
Base Vol:	110	551	234	64	339	151	129	395	139	200	333	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	551	234	64	339	151	129	395	139	200	333	78
Added Vol:	3	5	3	0	2	0	0	0	1	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	556	237	64	341	151	129	395	140	201	333	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	618	263	71	379	168	143	439	156	223	370	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	618	263	71	379	168	143	439	156	223	370	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	126	618	263	71	379	168	143	439	156	223	370	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.95	0.81	0.90	0.95	0.81	0.93	0.98	0.83	0.93	0.98	0.83
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1718	1809	1537	1718	1809	1537	1769	1862	1583	1769	1862	1583
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.17	0.04	0.21	0.11	0.08	0.24	0.10	0.13	0.20	0.05
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.38	0.38	0.05	0.32	0.32	0.12	0.26	0.26	0.14	0.29	0.29
Volume/Cap:	0.66	0.90	0.45	0.90	0.66	0.35	0.69	0.90	0.37	0.90	0.69	0.19
Delay/Veh:	38.4	35.2	16.8	101.2	23.7	18.8	39.6	44.2	21.7	61.4	26.2	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	38.4	35.2	16.8	101.2	23.7	18.8	39.6	44.2	21.7	61.4	26.2	19.1
HCM2kAvg:	4	17	5	4	8	3	5	13	3	9	8	2

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EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****

Intersection #2 Sierra College / Brace Rd

****

Cycle (sec): 70 Critical Vol./Cap. (X): 0.667
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 51 Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	0 1	0	0 0	0 0	1	1 0	0 0	1
Volume Module: >> Count Date: 15 Mar 2006 <<												
Base Vol:	0	647	83	63	447	0	0	0	82	65	0	83
Growth Adj:	1.00	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	647	83	63	447	0	0	0	82	65	0	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	719	92	70	497	0	0	0	91	72	0	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	719	92	70	497	0	0	0	91	72	0	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	719	92	70	497	0	0	0	91	72	0	92
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.81	0.90	0.95	1.00	1.00	1.00	0.85	0.93	1.00	0.83
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	1809	1537	1718	1809	0	0	0	1611	1769	0	1583
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.06	0.04	0.27	0.00	0.00	0.00	0.06	0.04	0.00	0.06
Crit Moves:		****		****					****			****
Green/Cycle:	0.00	0.60	0.60	0.06	0.66	0.00	0.00	0.00	0.08	0.09	0.00	0.09
Volume/Cap:	0.00	0.67	0.10	0.67	0.42	0.00	0.00	0.00	0.67	0.47	0.00	0.67
Delay/Veh:	0.0	11.1	6.1	47.4	5.9	0.0	0.0	0.0	43.0	32.6	0.0	42.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.1	6.1	47.4	5.9	0.0	0.0	0.0	43.0	32.6	0.0	42.8
HCM2kAvg:	0	11	1	3	5	0	0	0	3	2	0	3

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EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Sierra College / Brace Rd

Cycle (sec):	70	Critical Vol./Cap. (X):	0.686
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.8
Optimal Cycle:	53	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1 0	1	1 0	0 1	0	0 0	0 0	1	1 0	0 0	1
Volume Module: >> Count Date: 15 Mar 2006 <<												
Base Vol:	0	647	83	63	447	0	0	0	82	65	0	83
Growth Adj:	1.00	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	647	83	63	447	0	0	0	82	65	0	83
Added Vol:	0	9	3	3	0	0	0	0	0	41	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	656	86	66	447	0	0	0	82	106	0	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	729	96	73	497	0	0	0	91	118	0	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	729	96	73	497	0	0	0	91	118	0	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	729	96	73	497	0	0	0	91	118	0	93
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.81	0.90	0.95	1.00	1.00	1.00	0.85	0.93	1.00	0.83
Lanes:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00
Final Sat.:	0	1809	1537	1718	1809	0	0	0	1611	1769	0	1583
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.06	0.04	0.27	0.00	0.00	0.00	0.06	0.07	0.00	0.06
Crit Moves:		****		****					****	****		
Green/Cycle:	0.00	0.59	0.59	0.06	0.65	0.00	0.00	0.00	0.08	0.10	0.00	0.10
Volume/Cap:	0.00	0.69	0.11	0.69	0.42	0.00	0.00	0.00	0.69	0.69	0.00	0.61
Delay/Veh:	0.0	11.9	6.4	49.2	6.2	0.0	0.0	0.0	45.2	41.6	0.0	37.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	11.9	6.4	49.2	6.2	0.0	0.0	0.0	45.2	41.6	0.0	37.2
HCM2kAvg:	0	12	1	3	5	0	0	0	3	4	0	3

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #3 Sierra College / Access
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1 1 0			0 0 1 0 0			0 0 0 0 0			0 0 0 0 1		
Volume Module:												
Base Vol:	0	730	0	0	510	0	0	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
Initial Bse:	0	730	0	0	510	0	0	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
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	811	0	0	567	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	811	0	0	567	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped 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	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****

Intersection #3 Sierra College / Access

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: B[10.8]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	1 0		0 0 1	0 0		0 0 0	0 0		0 0 0	0 1	
Volume Module:												
Base Vol:	0	730	0	0	510	0	0	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
Initial Bse:	0	730	0	0	510	0	0	0	0	0	0	0
Added Vol:	0	1	9	0	3	0	0	0	0	0	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	731	9	0	513	0	0	0	0	0	0	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	812	10	0	570	0	0	0	0	0	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	812	10	0	570	0	0	0	0	0	0	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.3
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	411
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	634
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	634
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.8
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	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.8		
ApproachLOS:	*			*			*			B		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #4 Brace Rd / Access
****
Average Delay (sec/veh): 0.0 Worst Case Level Of Service: A[0.0]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	146	0	0	149	0
Growth Adj:	1.00	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	0	0	0	0	0	0	146	0	0	149	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	0	0	0	0	162	0	0	166	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	0	0	0	0	162	0	0	166	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped 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	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

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

Intersection #4 Brace Rd / Access

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	146	0	0	149	0
Growth Adj:	1.00	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	0	0	0	0	0	0	146	0	0	149	0
Added Vol:	0	0	0	3	0	42	6	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	42	6	146	0	0	149	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	3	0	47	7	162	0	0	166	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	3	0	47	7	162	0	0	166	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.3	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	342	xxxx	166	167	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	648	xxxx	870	1411	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	646	xxxx	870	1411	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	0.05	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	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	851	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.5	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				9.5		xxxxxx			xxxxxx		
ApproachLOS:	*				A		*			*		

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Turning Movement By Zone Report
pm peak

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 Taylor Rd / Sierra College													
[Base(LOS=C,Del=33.8,V/C=0.895)][Future(LOS=C,Del=34.1,V/C=0.899)][+0.367 D/V]													
Base	110	551	234	64	339	151	129	395	139	200	333	78	2723
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	110	551	234	64	339	151	129	395	139	200	333	78	2723
Zn 1	3	5	3	0	2	0	0	0	1	1	0	0	15
Added	3	5	3	0	2	0	0	0	1	1	0	0	15
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	113	556	237	64	341	151	129	395	140	201	333	78	2738
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	113	556	237	64	341	151	129	395	140	201	333	78	2738
#2 Sierra College / Brace Rd													
[Base(LOS=B,Del=15.3,V/C=0.667)][Future(LOS=B,Del=16.8,V/C=0.686)][+1.438 D/V]													
Base	0	647	83	63	447	0	0	0	82	65	0	83	1470
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	647	83	63	447	0	0	0	82	65	0	83	1470
Zn 1	0	9	3	3	0	0	0	0	0	41	0	1	57
Added	0	9	3	3	0	0	0	0	0	41	0	1	57
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	656	86	66	447	0	0	0	82	106	0	84	1527
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	656	86	66	447	0	0	0	82	106	0	84	1527
#3 Sierra College / Access													
[Base(LOS=A,Del=0.0,V/C=0.000)][Future(LOS=B,Del=0.1,V/C=0.000)][+0.000 V/C]													
Base	0	730	0	0	510	0	0	0	0	0	0	0	1240
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	730	0	0	510	0	0	0	0	0	0	0	1240
Zn 1	0	1	9	0	3	0	0	0	0	0	0	10	23
Added	0	1	9	0	3	0	0	0	0	0	0	10	23
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	731	9	0	513	0	0	0	0	0	0	10	1263
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	731	9	0	513	0	0	0	0	0	0	10	1263
#4 Brace Rd / Access													
[Base(LOS=A,Del=0.0,V/C=0.000)][Future(LOS=A,Del=1.4,V/C=0.000)][+0.000 V/C]													
Base	0	0	0	0	0	0	0	146	0	0	149	0	295
Growth	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
InitBs	0	0	0	0	0	0	0	146	0	0	149	0	295
Zn 1	0	0	0	3	0	42	6	0	0	0	0	1	52
Added	0	0	0	3	0	42	6	0	0	0	0	1	52
PassBy	0	0	0	0	0	0	0	0	0	0	0	0	0
Future	0	0	0	3	0	42	6	146	0	0	149	1	347
UseAdj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total	0	0	0	3	0	42	6	146	0	0	149	1	347

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Scenario Report

Scenario:	daily
Command:	Default Command
Volume:	none
Geometry:	existing
Impact Fee:	Default Impact Fee
Trip Generation:	daily
Trip Distribution:	current
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Generation Report

Forecast for daily

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1		1.25	industrial	414.00	414.00	518	518	1036	100.0
	Zone 1 Subtotal					518	518	1036	100.0
TOTAL						518	518	1036	100.0

EXISTING PLUS PROJECT
3707 -01 HOMEWOOD LUMBER RELOCATION

Link Volume Report
daily

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#1 Taylor Rd / Sierra College													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	104	104	208	52	52	104	26	26	52	26	26	52	416
Total	104	104	208	52	52	104	26	26	52	26	26	52	416
#2 Sierra College / Brace Rd													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	388	389	777	104	301	405	0	0	0	399	201	600	1782
Total	388	389	777	104	301	405	0	0	0	399	201	600	1782
#3 Sierra College / Access													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	301	104	405	104	103	207	0	0	0	93	291	384	996
Total	301	104	405	104	103	207	0	0	0	93	291	384	996
#4 Brace Rd / Access													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	0	0	0	425	227	652	201	399	600	26	26	52	1304
Total	0	0	0	425	227	652	201	399	600	26	26	52	1304

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2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

Scenario Report

Scenario:	2020 am
Command:	Default Command
Volume:	2020 am
Geometry:	existing
Impact Fee:	Default Impact Fee
Trip Generation:	am peak
Trip Distribution:	current
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Generation Report

Forecast for am peak

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1		1.25	industrial	84.00	56.00	105	70	175	100.0
	Zone 1 Subtotal					105	70	175	100.0
TOTAL						105	70	175	100.0

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2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

Trip Distribution Report

Percent Of Trips current

Zone	To Gates 1	2	3	4	5
1	75.0	5.0	5.0	10.0	5.0

2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

Turning Movement Report
am peak

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Taylor Rd / Sierra College													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	4	7	4	0	11	0	0	0	5	5	0	0	36
Total	4	7	4	0	11	0	0	0	5	5	0	0	36
#2 Sierra College / Brace Rd													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	0	59	20	21	0	0	0	0	0	53	0	1	154
Total	0	59	20	21	0	0	0	0	0	53	0	1	154
#3 Sierra College / Access													
Base	0	1673	0	0	1962	0	0	0	0	0	0	0	3635
Added	0	1	59	0	21	0	0	0	0	0	0	13	94
Total	0	1674	59	0	1983	0	0	0	0	0	0	13	3729
#4 Brace Rd / Access													
Base	0	0	0	0	0	0	0	195	0	0	268	0	463
Added	0	0	0	4	0	54	41	0	0	0	0	5	104
Total	0	0	0	4	0	54	41	195	0	0	268	5	567

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2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 3 Sierra College / Access	A	0.0	0.000	C	17.3	0.000	+17.343 D/V
# 4 Brace Rd / Access	A	0.0	0.000	B	10.7	0.000	+10.662 D/V

2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #3 Sierra College / Access
****
Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[17.3]
****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	1673		0		0	1962		0		0		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	
Initial Bse:	0	1673		0		0	1962		0		0		0		0	0		0		0
Added Vol:	0	1		59		0	21		0		0		0		0	0		0		13
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	1674		59		0	1983		0		0		0		0	0		0		13
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	0	1860		66		0	2203		0		0		0		0	0		0		14
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	1860		66		0	2203		0		0		0		0	0		0		14
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.3
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			963
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			306
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			306
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.05
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			0.1
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			17.3
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*			C
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx						17.3			
ApproachLOS:	*					*					*						C			

$\mu = \frac{14}{306}$

2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

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

Intersection #4 Brace Rd / Access

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[10.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	0	0	0	1!	0	0	0	1	0	0	0	0	0	0	1	0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	0	195	0	0	268	0								
Growth Adj:	1.00	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	0	0	0	0	0	0	195	0	0	268	0								
Added Vol:	0	0	0	4	0	54	41	0	0	0	0	5								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	0	4	0	54	41	195	0	0	268	5								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90								
PHF Volume:	0	0	0	4	0	60	46	217	0	0	298	6								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	0	0	0	4	0	60	46	217	0	0	298	6								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.3	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	608	xxxx	301	303	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	454	xxxx	732	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	441	xxxx	732	1258	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	0.08	0.04	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	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	700	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*								
ApproachDel:	xxxxxx				10.7		xxxxxx			xxxxxx										
ApproachLOS:	*				B		*			*										

$\mu = \frac{64}{700}$

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3707 -01 HOMEWOOD LUMBER RELOCATION

Scenario Report

Scenario:	2020 pm
Command:	Default Command
Volume:	2020 pm
Geometry:	2020
Impact Fee:	Default Impact Fee
Trip Generation:	pm peak
Trip Distribution:	current
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

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Trip Generation Report

Forecast for pm peak

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1		1.25	industrial	13.00	43.00	16	54	70	100.0
	Zone 1 Subtotal					16	54	70	100.0
TOTAL						16	54	70	100.0

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Trip Distribution Report

Percent Of Trips current

Zone	To Gates 1	2	3	4	5
1	75.0	5.0	5.0	10.0	5.0

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Turning Movement Report
pm peak

Volume Type	Northbound Left	Thru	Right	Southbound Left	Thru	Right	Eastbound Left	Thru	Right	Westbound Left	Thru	Right	Total Volume
#1 Taylor Rd / Sierra College													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	3	5	3	0	2	0	0	0	1	1	0	0	15
Total	3	5	3	0	2	0	0	0	1	1	0	0	15
#2 Sierra College / Brace Rd													
Base	0	0	0	0	0	0	0	0	0	0	0	0	0
Added	0	9	3	3	0	0	0	0	0	41	0	1	57
Total	0	9	3	3	0	0	0	0	0	41	0	1	57
#3 Sierra College / Access													
Base	0	2300	0	0	1607	0	0	0	0	0	0	0	3907
Added	0	1	9	0	3	0	0	0	0	0	0	10	23
Total	0	2301	9	0	1610	0	0	0	0	0	0	10	3930
#4 Brace Rd / Access													
Base	0	0	0	0	0	0	0	257	0	0	262	0	519
Added	0	0	0	3	0	42	6	0	0	0	0	1	52
Total	0	0	0	3	0	42	6	257	0	0	262	1	571

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3707 -01 HOMEWOOD LUMBER RELOCATION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 3 Sierra College / Access	A	0.0	0.000	C	17.7	0.000	+17.702 D/V
# 4 Brace Rd / Access	A	0.0	0.000	B	10.4	0.000	+10.437 D/V

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3707 -01 HOMEWOOD LUMBER RELOCATION

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

Intersection #3 Sierra College / Access

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[17.7]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Volume Module:																				
Base Vol:	0	2300		0		0	1607		0		0		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
Initial Bse:	0	2300		0		0	1607		0		0		0		0	0		0		0
Added Vol:	0	1		9		0	3		0		0		0		0	0		0		10
PasserByVol:	0	0		0		0	0		0		0		0		0	0		0		0
Initial Fut:	0	2301		9		0	1610		0		0		0		0	0		0		10
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90		0.90		0.90	0.90		0.90		0.90
PHF Volume:	0	2557		10		0	1789		0		0		0		0	0		0		11
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Final Vol.:	0	2557		10		0	1789		0		0		0		0	0		0		11
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			7.0
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			3.3
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			857
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			295
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			295
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.04
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			0.1
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			17.7
LOS by Move:	*	*		*		*	*		*		*	*		*		*	*			C
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			xxxxx
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			xxxxx
Shared LOS:	*	*		*		*	*		*		*	*		*		*	*			*
ApproachDel:	xxxxxx					xxxxxx					xxxxxx						17.7			
ApproachLOS:	*					*					*						C			

$\mu = \frac{11}{295}$

2020 access
3707 -01 HOMEWOOD LUMBER RELOCATION

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

****
Intersection #4 Brace Rd / Access
****
Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.4]
****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	257	0	0	262	0
Growth Adj:	1.00	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	0	0	0	0	0	0	257	0	0	262	0
Added Vol:	0	0	0	3	0	42	6	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	3	0	42	6	257	0	0	262	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	0	3	0	47	7	286	0	0	291	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	3	0	47	7	286	0	0	291	1
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.3	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	591	xxxx	292	292	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	465	xxxx	740	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	463	xxxx	740	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	0.06	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	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	0	xxxxx	xxxx	712	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.4	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx				10.4		xxxxxx			xxxxxx		
ApproachLOS:	*				B		*			*		

$\mu = \frac{50}{740}$