FINAL ENVIRONMENTAL IMPACT REPORT

Tierra Luna EIR Appendices

12214 Lakewood Boulevard
Downey, California

Lead Agency:
City of Downey
11111 Brookshire Avenue
Downey, California 90241

Applicant:
Manarino Realty
15615 Alton Parkway, Suite 450
Irvine, California 92618

Prepared By:
CAJA Environmental Services
11990 West San Vicente Blvd, Suite 200
Los Angeles, California 90049

December 2011

Appendix A

Comment Letters

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

ARNOLD SCHWARZENEGGER
GOVERNOR

CYNTHIA BRYANT
DIRECTOR

May 19, 2009

RECEIVED
MAY 26 2009
PLANNING

Mark Sellheim
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

Subject: Tierra Luna Specific Plan EIR
SCH#: 2008051022

Dear Mark Sellheim:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 18, 2009, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2008051022
Project Title Tierra Luna Specific Plan EIR
Lead Agency Downey, City of

Type EIR Draft EIR

Description Development of the proposed Project would involve demolition of on-site structures and the construction of up to 3,950,000 square feet of residential, commercial, and office uses, including up to 675,000 square feet of commercial/office use; 1,200,000 square feet of commercial/retail uses; 375,000 square feet of hotel use; and 1,700,000 square feet (approximately 1,500 units) of residential use, including live-work units, for-sale units, and for-rent units. The proposed Project also includes approximately 125,000 square feet of open space.

Lead Agency Contact

Name Mark Sellheim
Agency City of Downey
Phone 562 904-7158 **Fax**
email
Address 11111 Brookshire Avenue
City Downey **State** CA **Zip** 90241

Project Location

County Los Angeles
City Downey
Region
Lat / Long
Cross Streets Lakewood Boulevard and Imperial Highway and Bellflower Bouelvard
Parcel No. multiple
Township **Range** **Section** **Base**

Proximity to:

Highways 105, 605, 5
Airports
Railways Union Pacific, Metro Green Line
Waterways San Gabriel River
Schools DUSD
Land Use Downey Studios/Downey Landing Specific Plan/Mixed Use

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Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply

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Reviewing Agencies Resources Agency; Department of Fish and Game, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Department of Housing and Community Development; Integrated Waste Management Board; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; Native American Heritage Commission

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Date Received 04/03/2009 **Start of Review** 04/03/2009 **End of Review** 05/18/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

May 8, 2009

RECEIVED
MAY 1 2 2009
PLANNING

Mr. Mark Sellheim, Project Planner
CITY OF DOWNEY COMMUNITY DEVELOPMENT DEPARTMENT
11111 Brookshire Avenue
Downey, CA 90241

Re: SCH#2008051022; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for **The Tierra Luna Specific Plan, 79-acre Mixed-Use Development;** located in the City of Downey; Los Angeles County, California

Dear Mr. Sellheim:

The Native American Heritage Commission (NAHC) is the state 'trustee agency' pursuant to Public Resources Code §21070 designated to protect California's Native American Cultural Resources. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the California Code of Regulations §15064.5(b)(c)(f) CEQA guidelines). Section 15382 of the 2007 CEQA Guidelines defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS) for possible 'recorded sites' in locations where the development will or might occur.. Contact information for the Information Center nearest you is available from the State Office of Historic Preservation (916/653-7278)/ http://www.ohp.parks.ca.gov. The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ The Native American Heritage Commission (NAHC) performed:

* A Sacred Lands File (SLF) search of the project 'area of potential effect (APE)': The results: No known Native American Cultural Resources were identified within one-half mile of the 'area of potential effect' (APE).; However, there are Native American cultural resources in close proximity to the APE. The NAHC urges caution with any ground-breaking activity. Also, the NAHC SLF is not exhaustive and local tribal contacts should be consulted from the attached list and the there are Native American cultural resources in close proximity..

- The NAHC advises the use of Native American Monitors, also, when professional archaeologists or the equivalent are employed by project proponents, in order to ensure proper identification and care given cultural resources that may be discovered. The NAHC, FURTHER, recommends that contact be made with Native American Contacts on the attached list to get their input on potential IMPACT of the project (APE) on cultural resources.. In some cases, the existence of a Native American cultural resources may be known only to a local tribe(s) or Native American individuals or elders.
- √ Lack of surface evidence of archeological resources does not preclude their subsurface existence.
- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

- Again, a culturally-affiliated Native American tribe may be the only source of information about a Sacred Site/Native American cultural resource.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the California Code of Regulations (CEQA Guidelines) mandate procedures to be followed, including that construction or excavation be stopped in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery until the county coroner or medical examiner can determine whether the remains are those of a Native American. . Note that §7052 of the Health & Safety Code states that disturbance of Native American cemeteries is a felony.

√ Lead agencies should consider avoidance, as defined in §15370 of the California Code of Regulations (CEQA Guidelines), when significant cultural resources are discovered during the course of project planning and implementation

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Attachment: List of Native American Contacts

Cc: State Clearinghouse

Native American Contacts
Los Angeles County
May 8, 2009

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th Street, Rm. 403
Los Angeles , CA 90020
(213) 351-5324
(213) 386-3995 FAX

Gabrielino Tongva Nation
Sam Dunlap, Tribal Secretary
P.O. Box 86908
Los Angeles , CA 90086
samdunlap@earthlink.net
(909) 262-9351 - cell
Gabrielino Tongva

Ti'At Society
Cindi Alvitre
6515 E. Seaside Walk, #C
Long Beach , CA 90803
calvitre@yahoo.com
(714) 504-2468 Cell
Gabrielino

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Tribal Chair/Cultural Resources
P.O. Box 490
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-925-7989 - fax
Gabrielino Tongva

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
,
tattnlaw@gmail.com
310-570-6567
Gabrielino Tongva

Gabrielino-Tongva Tribe
Felicia Sheerman, Chairperson
501 Santa Monica Blvd, # 500
Santa Monica , CA 90401
(310) 587-2203
(310) 428-7720 - cell
(310) 587-2281
fsheerman1@GabrielinoTribe.
Gabrielino

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693
San Gabriel , CA 91778
(828) 286-1262 -FAX
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 Fax
Gabrielino Tongva

Gabrielino-Tongva Tribe
Bernie Acuna
501 Santa Monica Blvd, # 500
Santa Monica , CA 90401
(310) 587-2203
(310) 428-7720 - cell
(310) 587-2281
Gabrielino

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2008051022; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the proposed Tierra Luna Specific Plan, a mixed-use development on a 79-acre site; City of Downey; Los Angeles County, California.

STATE OF CALIFORNIA
ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

May 7, 2009

Mark Sellheim, Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

RECEIVED
MAY 1 1 2009
PLANNING

Dear Mr. Sellheim:

Re: SCH# 2008051022; Tierra Luna Specific Plan EIR

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings.

The Commission's Rail Crossings Engineering Section (RCES) is in receipt of the *Notice of Completion & Environmental Document Transmittal-Draft Environmental Impact Report* from the State Clearinghouse for the mixed-use development at Lakewood Boulevard and Imperial Highway and Bellflower Boulevard. Commission staff is concerned that the proposed project may increase traffic over the nearby Union Pacific Railroad Company (UPRR) Lakewood Boulevard (DOT# 748105H), Woodruff Avenue (DOT# 748107W), and Stewart and Grey Road (DOT# 748108D) crossings. This includes considering pedestrian circulation patterns/destinations with respect to the railroad right-of-way.

Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad right-of-way.

Language should be in place so that any traffic impact studies undertaken should also address traffic increase impacts over the affected crossings and associated proposed mitigation measures.

If you have any questions, please contact Sergio Licon, Utilities Engineer at 213-576-7085, sal@cpuc.ca.gov, or me at rxm@cpuc.ca.gov, 213-576-7078.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

C: Dan Miller, UPRR

STATE OF CALIFORNIA
ARNOLD SCHWARZENEGGER, *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013

May 7, 2009

Mark Sellheim, Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

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Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

C: Dan Miller, UPRR

SOUTHERN CALIFORNIA

ASSOCIATION of GOVERNMENTS

Main Office

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Jon Edney, El Centro

Community, Economic and Human Development
Larry McCallon, Highland

Energy & Environment
Keith Hanks, Azusa

Transportation
Mike Ten, South Pasadena

May 15, 2009

Mr. Mark Sellheim
City of Downey
11111 Brookshire Avenue
Downey, CA 90241
msellheim@downeyca.org

RE: SCAG Comments on the Draft Environmental Impact Report for the Tierra Luna Specific Plan [SCAG No. I20090089]

Dear Mr. Sellheim,

Thank you for submitting the **Draft Environmental Impact Report for the Tierra Luna Specific Plan [SCAG No. I20090089]** to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review of Programs proposed for federal financial assistance and direct development activities, pursuant to Presidential Executive Order 12372 (replacing A-95 Review). Additionally, pursuant to Public Resources Code Section 21083(d) SCAG reviews Environmental Impacts Reports of projects of regional significance for consistency with regional plans per the California Environmental Quality Act Guidelines, Sections 15125(d) and 15206(a)(1). SCAG is also the designated Regional Transportation Planning Agency and as such is responsible for both preparation of the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) under California Government Code Section 65080 and 65082. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans. This activity is based on SCAG's responsibilities as a regional planning organization pursuant to state and federal laws and regulations. Guidance provided by these reviews is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

SCAG staff has reviewed this project and determined that the proposed project is regionally significant per California Environmental Quality Act (CEQA) Guidelines, Sections 15125 and/or 15206. The proposed project, located on 79 acres at 12214 Lakewood Boulevard, would consist of up to 3.9 million square feet of commercial/office uses, commercial retail/uses, hotel rooms, and residential uses that will include live/work, for-sale and for-rent units.

We have evaluated this project based on the policies of SCAG's Regional Transportation Plan (RTP) and Compass Growth Vision (CGV) that may be applicable to your project. The RTP and CGV can be found on the SCAG web site at: http://scag.ca.gov/igr. The attached detailed comments are meant to provide guidance for considering the proposed project within the context of our regional goals and policies. We also encourage the use of the SCAG List of Mitigation Measures extracted from the RTP to aid with demonstrating consistency with regional plans and policies. Please provide a copy of the Final Environmental Impact Report (FEIR) for our review. If you have any questions regarding the attached comments, please contact Bernard Lee at (213) 236-1800. Thank you.

Sincerely,

Jacob Lieb, Manager
Assessment, Housing & EIR

DOCS# 151625

SCAG No. I20090089

May 15, 2009
Mr. Sellheim

COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TIERRA LUNA SPECIFIC PLAN [SCAG NO. I20090089]

PROJECT LOCATION

The project is located at 12214 Lakewood Boulevard, which is in the southeastern portion of the City of Downey. It lies about 1.5 miles west of the San Gabriel River freeway (Interstate 605), about 2.5 miles south of the Santa Ana freeway (Interstate 5), approximately 0.5 miles north of the Glenn Anderson freeway (Interstate 105) and transit way, and the Long Beach freeway (Interstate 710) is about 3 miles west of it. The San Gabriel River flows about three-quarters of a mile east. The project site is generally bound by the Downey Landing Retail Center to the north, Bellflower Boulevard to the east, Congressman Steve Horn Way to the south, and Clark Avenue and Lakewood Boulevard to the west.

PROJECT DESCRIPTION

The proposed project would offer up to 3,950,000 square feet of commercial, office, residential and public open space uses, including up to 675,000 square feet of commercial/office uses, up to 1,200,000 square feet of commercial/retail uses, up to 450 hotel rooms, and up to 1,700,000 square feet (up to 1,500 units) of residential uses to include live/work units, for-sales units, and for-rent units. In addition, the proposed project would offer up to 125,000 square feet of public open space and 850,000 square feet of parking facilities dispersed among several multi-level parking structures, on-street parking, and surface parking lots.

Land uses in proximity of the project site include: immediately to the north is the 34-acre Downey Landing retail center with its mix of retail and service commercial uses, along with a variety of restaurant uses. Single-family residences occupy the properties north of the retail center, across Stewart & Gray Road. East of the project site are industrial uses and two Kaiser Permanente administrative office buildings. Southeast of the project site are commercial and industrial uses, as well as the city-owned and operated Independence Skate Park and Tennis Center. South of the project site is the 13-acre city park that features recreational facilities, open space, along with the Columbia Memorial Space Science Learning Center and a 30-acre Kaiser Medical Center; the medical center consists of a 4-story, 97,500 square foot medical office building and a 6-story, 680,000 square foot hospital that is under construction and scheduled to be completed by the end of 2009. West of the project site, across Lakewood Boulevard, are single-family residences, multifamily complexes, commercial uses, three senior healthcare facilities, and a Hindu Temple.

Downey Studios currently occupies the project site, which totals approximately 79 acres, or 3,441,240 square feet. A total of 25 buildings exist onsite along with the current improvements related to Downey Studios. Downey Studios is a 750,000 square foot television and movie studio production facility with parking lots and 20 acres of back lot space, including a 16-house suburban street. Most of the existing on-site structures would be demolished except for the front portion of building One which includes the front section of the original EMSCO building, the Kauffman wing, and another wing attributed to Kauffman would not be demolished.

The following summarizes discretionary actions and permits being sought by the project from the City of Downey:

- Amendment to the existing Downey Landing Specific Plan
- Development Agreement
- Subdivision Map Act Approval
- Standard Urban Stormwater Mitigation Plan as well as Specific Plan Water, Wastewater, and Recycled Water Master Plan Approval
- Conditional Use Permit(s)

May 15, 2009
Mr. Sellheim

SCAG No. I20090089

In addition, other actions, permits, and certifications may be required from federal, state, regional, county and other local agencies.

CONSISTENCY WITH REGIONAL TRANSPORTATION PLAN

Regional Growth Forecasts
The DEIR should reflect the most current SCAG forecasts, which are the 2008 RTP (May 2008) Population, Household and Employment forecasts. The forecasts for your region, subregion, and city are as follows:

Adopted SCAG Regionwide Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	19,418,344	20,465,830	21,468,948	22,395,121	23,255,377	24,057,286
Households	6,086,986	6,474,074	6,840,328	7,156,645	7,449,484	7,710,722
Employment	8,349,453	8,811,406	9,183,029	9,546,773	9,913,376	10,287,125

Adopted GCCOG Subregion Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	2,143,979	2,190,471	2,236,253	2,280,588	2,323,438	2,364,199
Households	591,028	607,440	623,862	636,482	648,759	658,696
Employment	762,987	776,857	785,715	796,129	807,251	817,891

Adopted City of Downey Forecasts[1]

	2010	2015	2020	2025	2030	2035
Population	115,973	118,011	120,207	122,323	124,358	126,301
Households	34,767	35,279	35,818	36,239	36,646	36,981
Employment	40,580	41,544	42,160	42,885	43,658	44,398

1. The 2008 RTP growth forecast at the regional, subregional, and city levels was adopted by the Regional Council in May 2008.

SCAG Staff Comments:

The Draft EIR utilizes the 2008 Regional Transportation Plan growth forecasts, released in May 2008.

The **2008 Regional Transportation Plan (RTP)** also has goals and policies that are pertinent to this proposed project. This RTP links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations. The RTP continues to support all applicable federal and state laws in implementing the proposed project. Among the relevant goals and policies of the RTP are the following:

Regional Transportation Plan Goals:
RTP G1 *Maximize mobility and accessibility for all people and goods in the region.*
RTP G2 *Ensure travel safety and reliability for all people and goods in the region.*

RTP G3	*Preserve and ensure a sustainable regional transportation system.*
RTP G4	*Maximize the productivity of our transportation system.*
RTP G5	*Protect the environment, improve air quality and promote energy efficiency.*
RTP G6	*Encourage land use and growth patterns that complement our transportation investments.*
RTP G7	*Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.*

SCAG Staff Comments:

SCAG staff feels that the proposed project meets consistency with RTP goals G1 and G6, and cannot determine consistency with RTP G4 and G5. RTP goals G2, G3, and G7 are not applicable to this project.

The proposed project meets consistency with goal RTP G1. Mobility pertains to the speed at which one may travel and the delay, or difference between the actual travel time and travel time that would be experienced if a person traveled at the legal speed limit. Accessibility measures how well the transportation system provides people access to opportunities, such as jobs, education, shopping, recreation, and medical care. Table IV.L-14 suggests that if mitigation measures are applied, in 2020, the project would not create a significant impact on local roadways relative to a no project scenario. With regard to accessibility, the proposed project is located near Interstates 105 and 605 and would offer a mix of uses on the project site.

SCAG staff cannot determine consistency with goal RTP G4. Productivity is a system efficiency measure that reflects the degree to which the transportation system performs during peak demand conditions. Given that Table IV.L-14 suggests that in 2020, the proposed project would result in Levels of Service of E or lower at four nearby intersections, even after mitigation measures have been applied.

SCAG staff cannot determine consistency with goal RTP G5. Table 4.3-8 illustrates that after mitigation measures are applied, the operation of the project would have a long-term significant unavoidable adverse impact related to emissions of ROC, NO_X, CO, PM_{10}, and $PM_{2.5}$, largely due to mobile sources.

The proposed project meets consistency with goal RTP G6. The project site is located less than one mile from Interstate 105. Per page IV.L-3, eight bus lines and the Metro Green Line light rail serve the immediate vicinity of the project site.

GROWTH VISIONING

The fundamental goal of the **Compass Growth Visioning** effort is to make the SCAG region a better place to live, work and play for all residents regardless of race, ethnicity or income class. Thus, decisions regarding growth, transportation, land use, and economic development should be made to promote and sustain for future generations the region's mobility, livability and prosperity. The following "Regional Growth Principles" are proposed to provide a framework for local and regional decision making that improves the quality of life for all SCAG residents. Each principle is followed by a specific set of strategies intended to achieve this goal.

Principle 1: Improve mobility for all residents.

GV P1.1	*Encourage transportation investments and land use decisions that are mutually supportive.*
GV P1.2	*Locate new housing near existing jobs and new jobs near existing housing.*
GV P1.3	*Encourage transit-oriented development.*

GV P1.4 *Promote a variety of travel choices*

SCAG Staff Comments:

The proposed project is consistent with Growth Visioning Principle 1.

The proposed project is located near Interstates 105 and 605 for regional auto access. The Metro Green Line light rail and eight different bus lines also serve the project site's immediate vicinity. Therefore the proposed project meets consistency with GV P1.1.

The proposed project is consistent with GV P1.2 as it offers proximity to job centers in Downtown Los Angeles, Downtown Long Beach, and Northern Orange County. Also, the project would create both housing and employment opportunities on-site.

Per page IV.C.1-25, the proposed project is intends to promote alternative modes of travel including transit and is therefore consistent with GV P1.3 and GV P1.4.

Principle 2: Foster livability in all communities.

GV P2.1 *Promote infill development and redevelopment to revitalize existing communities.*
GV P2.2 *Promote developments, which provide a mix of uses.*
GV P2.3 *Promote "people scaled," walkable communities.*
GV P2.4 *Support the preservation of stable, single-family neighborhoods.*

SCAG Staff Comments:

Where applicable, the proposed project is consistent with Growth Visioning Principle 2. GV P2.4 is not applicable since there are no single-family residences on the project site currently.

Page II-3 in the Project Description section discusses the principles embodied within the proposed project. Some of the included principles are Pedestrian Orientation, Mix of Land Uses, and Infill Development. Therefore, the proposed project is consistent with GV P2.1, GV P2.2, and GV P2.3.

Principle 3: Enable prosperity for all people.

GV P3.1 *Provide, in each community, a variety of housing types to meet the housing needs of all income levels.*
GV P3.2 *Support educational opportunities that promote balanced growth.*
GV P3.3 *Ensure environmental justice regardless of race, ethnicity or income class.*
GV P3.4 *Support local and state fiscal policies that encourage balanced growth*
GV P3.5 *Encourage civic engagement.*

SCAG Staff Comments:

Where applicable, SCAG staff generally cannot determine consistency with Growth Visioning Principle 3. GV P3.2 and GV P3.5 are not applicable.

While there will be a variety of housing built as part of the project, it is unclear whether any of this housing will be affordable to lower income households since it is not stated anywhere. Therefore, SCAG staff cannot determine consistency with GV P3.1.

Similarly, it is unclear from the Draft EIR whether any disadvantaged groups will be disproportionately impacted by the proposed project. As a result, SCAG staff cannot determine consistency with GV P3.3.

One of the specific objectives of the proposed project, which is indicated on page II-12, is to positively impact the City of Downey's fiscal base. Given the balance between residential and commercial uses, the proposed project meets consistency with GV P3.4.

In the Final EIR, it would be helpful to state whether there will be any affordable housing provided and also the status of environmental justice efforts.

Principle 4: Promote sustainability for future generations.

GV P4.1 *Preserve rural, agricultural, recreational, and environmentally sensitive areas*

GV P4.2 *Focus development in urban centers and existing cities.*

GV P4.3 *Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.*

GV P4.4 *Utilize "green" development techniques*

SCAG Staff Comments:

Where applicable, the project is partially consistent with Growth Visioning Principle 4. GV P4.1 does not apply.

As mentioned previously, the proposed project may be characterized as an infill development and therefore meets consistency with GV P4.2.

With regard to GV P4.3, page IV.M-43 discusses energy conservation mitigation measures and page IV.C.1-25 mentions that encouraging the use of alternate modes of travel would reduce air pollutant emissions. SCAG staff feels that the project is partially consistent based on contents of the Draft EIR. If there are additional strategies being contemplated that would use resources efficiently, eliminate pollution, or significantly reduce waste, then it would be helpful to state them in the Final EIR.

The Draft EIR does not specifically discuss "green" development techniques and therefore SCAG staff cannot determine consistency with GV P4.4. If "green" development techniques are being proposed, it would be helpful to see them stated in the Final EIR.

CONCLUSION

The proposed project partially meets consistency with SCAG Regional Transportation Plan Goals and Growth Visioning Principles. The Final EIR should mention whether affordable housing is being considered, the status of environmental justice efforts, any additional energy conservation efforts, and whether "green" development techniques are being proposed.

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA. Refer to the SCAG List of Mitigation Measures for additional guidance, which may be found here:
http://www.scag.ca.gov/igr/documents/SCAG_IGRMMRP_2008.pdf

When a project is of statewide, regional, or areawide significance, transportation information generated by a required monitoring or reporting program shall be submitted to SCAG as such information becomes reasonably available, in accordance with CEQA, Public Resource Code Section 21018.7, and CEQA Guidelines Section 15097 (g).

Southern California Gas Company

A Sempra Energy utility

1919 S. State College Blvd.
Anaheim, CA 92806-6114

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APR 10 2009
PLANNING

April 8, 2009

City of Downey
Planning Division
11111 Brookshire Ave
Downey, CA 90241

Attention: Mark Sellheim

Subject: E.I.R for The Proposed Tierra Luna Specific Plan located at 12214 Lakewood Blvd.

Thank you for providing the opportunity to respond to this E.I.R. Document. We are pleased to inform you that Southern California Gas Company has facilities in the area where the aforementioned project is proposed. Gas service to the project can be provided from an existing gas main located in various locations. The service will be in accordance with the Company's policies and extension rules on file with the California Public Utilities Commission when the contractual arrangements are made.

This letter is not a contractual commitment to serve the proposed project but is only provided as an informational service. The availability of natural gas service is based upon conditions of gas supply and regulatory agencies. As a public utility, Southern California Gas Company is under the jurisdiction of the California Public Utilities Commission. Our ability to serve can also be affected by actions of federal regulatory agencies. Should these agencies take any action, which affect gas supply or the conditions under which service is available, gas service will be provided in accordance with the revised conditions.

This letter is also provided without considering any conditions or non-utility laws and regulations (such as environmental regulations), which could affect construction of a main and/or service line extension (i.e., if hazardous wastes were encountered in the process of installing the line). The regulations can only be determined around the time contractual arrangements are made and construction has begun.

Estimates of gas usage for residential and non-residential projects are developed on an individual basis and are obtained from the Commercial-Industrial/Residential Market Services Staff by calling (800) 427-2000 (Commercial/Industrial Customers) (800) 427-2200 (Residential Customers). We have developed several programs, which are available upon request to provide assistance in selecting the most energy efficient appliances or systems for a particular project. If you desire further information on any of our energy conservation programs, please contact this office for assistance.

Sincerely,

Mike Harriel
Technical Services Supervisor
Pacific Coast Region - Anaheim

MHAJ
eir02.doc

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

May 18, 2009 **Via Electronic and Regular Mail**

Mr. Mark Sellheim
Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

Dear Mr. Sellheim:

Notice of Availability of a Draft Environmental Impact
Report for the proposed Tierra Luna Specific Plan Project

Thank you for keeping the Metropolitan Water District of Southern California (Metropolitan) notified of developments in the environmental review process for the Tierra Luna Specific Plan Project (Project). The Project is an amendment to the existing Downey Landing Specific Plan, for which Metropolitan received notice and responded in a letter dated June 2, 2008.

Metropolitan encourages projects within its service area to include water conservation measures. While Metropolitan continues to build new supplies and develop means for more efficient use of current resources, projected population, and economic growth will increase demands on the current system. Water conservation, reclaimed water use, and groundwater recharge programs are integral components to regional water supply planning. Metropolitan supports mitigation measures such as using water efficient fixtures, drought-tolerant landscaping, and reclaimed water to offset any increase in water use associated with the proposed project.

We appreciate the ongoing opportunities to provide input to your planning process and we look forward to continuing discussion on this Project. For further assistance, please contact Miss Connie Yee at (213) 217-5657.

Very truly yours,

Delaine W. Shane
Manager, Environmental Planning Team

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: P.O. Box 54153, Los Angeles, California, 90054-0153 • Telephone: (213) 217-6000

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

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May 28, 2009

IN REPLY PLEASE REFER TO FILE: LD-1

Mr. Mark Sellheim, Principal Planner
Planning Division
11111 Brookshire Avenue
Downey, CA 90241

Dear Mr. Sellheim:

DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
TIERRA LUNA SPECIFIC PLAN
DOWNEY STUDIOS
CITY OF DOWNEY

Thank you for the opportunity to review the DEIR for the subject project. The project will consist of commercial/office, commercial retail, hotel rooms, and residential uses that will include live/work units.

The following comments are for your consideration and relate to the environmental document only:

Environmental

1. **Storage Space for Recyclables**: The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each development project to provide an adequate storage area for collection and removal of recyclable materials. The DEIR should include/discuss standards to provide adequate recyclable storage areas for collection/storage of recyclable and green waste materials for this project.

2. **Underground Storage Tanks**: Should any operation within the subject project include the construction, installation, modification, or removal of underground storage tanks, the County of Los Angeles Department of Public Works' Environmental Programs Division must be contacted for required approvals and operating permits.

3. **Hazardous Waste**: If any excavated soil is contaminated by or classified as hazardous waste by an appropriate agency, the soil must be managed and disposed in accordance with applicable Federal, State, and local laws and regulations.

4. Historically, this site has had many tanks and various leaking underground storage tank cases that were closed by the Los Angeles Regional Water Quality Control Board (LARWQCB). Public Works does have one closed Industrial Waste file and two closed Underground Storage Tank files on record. Currently, there is remediation occurring here that is being overseen by the LARWQCB Site Cleanup Unit. For this location we refer all matters to the LARWQCB since they are the lead and have final determination. The case can be found at this link:

   https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL2045E1618

   For questions regarding the environmental comments above, please contact Mr. Corey Mayne at (626) 458-3524.

Hazard–Flood

1. The last page of the Hydrology Section concluded that no mitigation measures are required. However the document mentioned numerous mitigation measures that will be used to infiltrate, and detain runoff, to keep it out of the deficient storm drain systems in the area. This mitigation section should at least mention that the proposed mitigation measures in the DEIR will reduce any impacts due to storm water runoff.

2. Public Works recently approved a storm drain, Miscellaneous Transfer Drain (MTD) No. 1754, under Congressman Steve Horn Way. This drain was designed with a large detention facility and two large CDS units, which are being maintained by the City of Downey. The DEIR mentioned an on-site drainage plan but it did not provide any insight into how or where it might be connecting into off-site systems. A large portion of the project sight was tabulated to go into MTD No. 1754 and the rest would be flowing to Lakewood Boulevard per the Hydrology Study for MTD No. 1754. The DEIR should address how the proposed drainage will connect to or affect MTD No. 1754 and off-site drainage. The DEIR should reference this hydrology study and discuss how the proposed site should be draining.

   If you have any questions regarding storm drain comments, please contact Mr. Chris Sheppard at (626) 458-4921.

Hazard–Water Quality

1. Detailed hydrologic analyses should be performed for the existing condition and the proposed condition of the project's watershed. The analyses should be used to evaluate future stormwater drainage systems and water quality issues at the

proposed project site. Further, the hydrologic analyses should ascertain that storm water outflow from the proposed project site into existing Public Works' drainage system (Maplewood Channel) is consistent with the design capacity of the existing system.

2. The hydrologic analysis should be based on the standards and procedures described in the 2006 Public Works Hydrology Manual. Public Works' 2006 Hydrology Manual can be viewed at www.dpw.lacounty.gov/wrd/publication/. The hydrologic report for Public Works' review should include a hydrologic map (printed to scale). The report should also contain time of concentration and peak flow rates calculations, flow path lengths, flow path slopes, percent impervious values, soil types, design storm frequency, and rainfall depth.

3. The hydrologic map should include adequate topography to support watershed delineation. The time of concentration path from the top of the lot to the outlet of each subbasin should be clearly shown. Elevations at the top of the lot and at the outlet point of each subbasin should be shown. The paths through which surface flows are conveyed to the existing Public Works drainage system should be shown.

If you have any questions regarding water quality comments, please contact Ms. Belinda Kwan at (626) 458-6135.

If you have any other questions or require additional information, please contact Mr. Toan Duong at (626) 458-4921.

Very truly yours,

GAIL FARBER
Director of Public Works

for DENNIS HUNTER, PLS PE
Assistant Deputy Director
Land Development Division

MA:ca
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COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

STEPHEN R. MAGUIN
Chief Engineer and General Manager

April 9, 2009

File No: 02-00.04-00

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Mr. Mark Sellheim, Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

Dear Mr. Sellheim:

Tierra Luna Specific Plan

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on April 3, 2009. The proposed development is located within the jurisdictional boundaries of District No. 2. We offer the following corrections and comments:

1. *Page IV.M-3, Joint Water Pollution Control Plant:* The JWPCP provides primary and secondary treatment for 400 million gallons per day (mgd) of wastewater and currently receives an average flow of approximately 300 mgd, with a remaining capacity of approximately 100 mgd.

2. *Page IV.M-4, 2nd paragraph:* The Los Coyotes WRP has a design capacity of 37.5 mgd and currently treats an average flow of 27.8 mgd, with a remaining capacity of approximately 10 mgd.

3. *Page IV.M-5, Project Impacts:* Based on the Districts' average wastewater generation factors, the proposed project is anticipated to generate 663,750 gallons per day (gpd) of wastewater, or a net increase of 653,498 gpd.

4. *Table IV.M-2, Proposed Project Wastewater Generation:* The Districts should not be cited as a source in this table unless the following Districts' average wastewater generation factors are used: 200 gpd/1,000 sf for Office; 150 gpd/1,000 sf for Retail; 125 gpd/room for Hotel; and 195 gpd/unit for Residential. No wastewater is anticipated from Open Space and Parking Facilities.

5. *Table IV.M-3, Cumulative Wastewater Generation:* The Districts should not be cited as a source in this table unless the Districts' average wastewater generation factors are used. For a copy of these factors, go to www.lacsd.org, Information Center, Will Serve Program, Obtain Will Serve Letter, and click on the appropriate link on page 2.

Recycled Paper

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Stephen R. Maguin

Ruth I. Frazen

Ruth I. Frazen
Customer Service Specialist
Facilities Planning Department

RIF:rf

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA 90012-2952
213.922.2000 Tel
metro.net

Metro

April 21, 2009

Mark Sellheim
Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA

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Dear Mr. Sellheim:

Los Angeles County Metropolitan Transportation Authority (Metro) is in receipt of the Draft EIR for the Tierra Luna Specific Plan project. This letter conveys recommendations concerning issues that are germane to Metro's statutory responsibilities in relation to the proposed project.

The Traffic Impact Analysis prepared for the Draft EIR satisfies the traffic and transit requirements of the proposed project. However, the following issue should be addressed for the Final EIR:

Several transit corridors with Metro bus service could be impacted by the project. Metro Bus Operations Control Special Events Coordinator should be contacted at 213-922-4632 regarding construction activities that may impact Metro bus lines. Other Municipal Bus Service Operators may also be impacted and therefore should be included in construction outreach efforts.

Metro looks forward to reviewing the Final EIR. If you have any questions regarding this response, please call me at 213-922-6908 or by email at chapmans@metro.net. Please send the Final EIR to the following address:

Metro CEQA Review Coordination
One Gateway Plaza MS 99-23-2
Los Angeles, CA 90012-2952
Attn: Susan Chapman

Sincerely,

Susan F. Chapman
Program Manager, Long Range Planning

-----Original Message-----
From: Weinfurter, Buck [mailto:bweinfurter@dusd.net]
Sent: Saturday, April 25, 2009 2:06 PM
To: Mark Sellheim
Cc: Condon, Kevin
Subject: [Junk released by Allow List] Tierra Luna EIR

The Downey Unified School District takes no exception to the referenced EIR.

Good luck with the project.

Buck Weinfurter
DIR, MOT, DUSD
(562) 469-6701
fax 469-6705

May 18, 2009

Submitted by email
Mark Sellheim, Principal Planner
City of Downey
11111 Brookshire Avenue
Downey, CA 90241
Email: msellheim@downeyca.org

Re: Draft EIR – Tierra Luna (Downey Studios) Specific Plan

Dear Mr. Sellheim:

On behalf of the Los Angeles Conservancy, thank you for the opportunity to provide these preliminary comments on the Draft Environmental Impact Report (DEIR) for the Tierra Luna (Downey Studios) Specific Plan, which proposes to demolish twelve historic buildings on site and substantial demolition of Building 1—all eligible for the National Register of Historic Places. The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with almost 7,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural heritage of Los Angeles. The Conservancy strongly disagrees with the Draft EIR's conclusion that impacts on cultural resources will be less than significant based on implementation of token mitigation measures included in the Memorandum of Agreement between NASA, GSA, SHPO and the City of Downey.

A key policy under the California Environmental Quality Act (CEQA) is the lead agency's duty to "take all action necessary to provide the people of this state with historic environmental qualities and preserve for future generations examples of major periods of California history."[1] CEQA "requires public agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects."[2] Courts often refer to the EIR as "the heart" of CEQA because it provides decision makers with an in-depth review of projects with potentially significant environmental impacts and analyzes a range of alternatives that reduce those impacts.[3] In order to fulfill this informational function, the EIR for the proposed Tierra Luna Specific Plan should be augmented to include at least one bona fide preservation

[1] Public Resource Code, Sec. 21001 (b),(c).
[2] *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41, italics added; also see PRC Secs. 21002, 21002.1.
[3] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795; *Laurel Heights Improvement Association v. Regents of the University of California* (1993) 6 Cal.4th 1112, 1123.

alternative that reduces or avoids significant adverse impacts on cultural resources, while meeting most of the project objectives.

Despite the proposed demolition of over a dozen National Register-eligible historic buildings, the Draft EIR project nonetheless concludes that the project will not result in significant adverse impacts on cultural resources after implementation of mitigation measures in the MOA negotiated during Section 106 review under the federal National Historic Preservation Act. The sum total of this mitigation includes HABS/HAER documentation, establishment of an educational program, and retention and restoration of the façade of Building 1 in accordance with the Secretary of the Interior's Standards.

Although HABS/HAER documentation is a fairly common mitigation measure adopted under Section 106 review, it is well established under CEQA that documentation and selective preservation does not meaningfully reduce the impacts of demolition of historic resources. As recognized by the court in *League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896: "A large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers. Nor, we think, are the effects of the demolition reduced to a level of insignificance by a proposed new building with unspecified design elements which may incorporate features of the original architecture into an entirely different shopping center." It appears that the Draft EIR's conclusion that the project will result in less-than-significant impacts on cultural resources is based on a faulty assumption that Section 106 and CEQA require the same level of mitigation and are essentially interchangeable, when in fact CEQA sets the bar higher by requiring the lead agency to evaluate and adopt all feasible alternatives and mitigation measures that avoid or reduce impacts on historic resources.

As a result of this erroneous assumption, the Draft EIR for the Tierra Luna Specific Plan fails to evaluate any potentially feasible preservation alternatives that avoid or significantly reduce adverse impacts on cultural resources. Accordingly, the Final EIR should evaluate the feasibility of adaptively reusing some, if not all of the historic buildings currently targeted for demolition. In crafting preservation alternative/s and assessing their feasibility, the EIR should take into account economic and code incentives available to encourage rehabilitation of historic properties, including:

- **California State Historical Building Code**: The CHBC gives property owners flexibility to find economical methods to allow for the rehabilitation of historic features while still retaining the structure's historic integrity. Many projects that would otherwise be financially impossible under today's building code are made feasible by the CHBC, whose regulations are performance-oriented rather than

prescriptive. A "qualified historical building" eligible for the CHBC includes any building which is listed by any level of government as having historic importance.

- **Federal Rehabilitation Tax Credit:** Federal law provides a federal income tax credit equal to 20% of the cost of rehabilitating a historic building for commercial use. To qualify for the credit, the property must be a certified historic structure—that is, listed on the National Register of Historic Places or contributing to a registered historic district.

- **New Markets Tax Credit:** The New Markets Tax Credit is a 39 percent credit on an equity investment to a Community Development Entity (CDE) that is claimed over a 7-year compliance period. The CDE must then make an equity investment or loan to a qualified business in a qualified Low-Income Community, defined as U.S. census tracts with a 20 percent poverty rate or household incomes at or below 80 percent of the area or statewide median, whichever is greater. Due to this liberal definition, 40 percent of all U.S. and most central business district census tracts qualify for the New Market Tax Credits. A mixed-use (residential/commercial) property can qualify as long as more than 20 percent of the gross revenue comes from commercial rents. The New Markets Tax Credit can be combined with the Federal Rehabilitation Tax Credit.

- **Mills Act Program:** The Mills Act is an economic incentive program to encourage maintenance and rehabilitation of historic buildings. The state legislation, enacted in 1972, is used by developers of commercial buildings or those who restore historic homes so they can enjoy property tax breaks in exchange for saving old buildings. The Mills Act adjusts the property tax to reflect the actual use of the site, therefore offering significant tax reductions of approximately 50% for newly improved or recently purchased properties. Under the program, the local government and a property owner enter into an agreement and property tax is reduced using a valuation approach that looks at comparable rents for nearby similar properties.

Thank you for the opportunity to comment on the Draft EIR for the proposed Tierra Luna Specific Plan. Please feel free to contact me at (213) 430-4203 or mbuhler@laconservancy.org should you have any questions.

Sincerely,

Mike Buhler, Esq.
Director of Advocacy

-----Original Message-----
From: Vickie Travis [mailto:vickie.travis@gmail.com]
Sent: Monday, May 18, 2009 4:29 PM
To: Mark Sellheim
Subject: Comment for Draft E.I.R. - Downey Tierra Luna Project

Dear Mr. Sellheim:

I am sending my comment regarding the Draft Environmental Impact Report for the Tierra Luna Project.

My questions pertain to:

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. HAZARDS AND HAZARDOUS MATERIALS

1. The City of Downey currently gets it's water from deep wells, 800 feet deep. The hazardous chemical plume is at a shallower depth. What is being done to remove the hazardous material and to prevent it's sinking into the City's water source before it is truly remediated?

2. The majority of the environmental cleanups will not be completed before 2013. Why is there a rush to approve a project that might not be possible to ever build?

3. the Downey property has been documented as the site of a significant amount of atomic power generation and weapons development during the 40's, 50's and 60's. The draft EIR does not mention any clean up of radioactive materials. Are we to believe that there were no accidents, spills or dumping?

4. There are reports of many people that have worked at the studio facility and at the Kaiser hospital who became ill from the soil and air contamination. Why is this not addressed in the report?

Thank you very much for your time in this matter.

Sincerely,

--
Vickie Travis
Former Caregiver, Eldest Child and Daughter of Adam Wesley Arnold
http://www.kaiserpapers.org
http://kaiserpapers.info
President of The Managed Care Reform Council
http://www.themcrc.info/
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"Do good and avoid evil."

G. HAROLD TSEKLENIS

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COMMUNITY DEVELOPMENT

May 11, 2009

Mark Sellheim, Principal Planner

Downey City Hall

11111 Brookshire Ave.

Downey, CA 90241

RE: Tierra Luna draft EIR

The subject draft EIR does not address, or adequately address, a number of issues including:

--The City, with public approval and support, awarded the development of the better part of the Downey Landing site for a filming studio on the premise that the development would attract high value jobs by attracting the preproduction, postproduction and production support operations on the site.

There has not been adequate evidence provided that that the developer has promoted the Downey Studios to the extent necessary to make it successful under the agreement to reach the original proposal and attendant City just expectations.

A full justification for the proposed change to the existing specific plan being sought is warranted.

--If indeed a change in the specific plan is justifiable, an adequate analysis of potential other uses of the subject site has not been presented

--For the benefits to the City of the proposed use of the site to be adequately evaluated, the following need to be more fully addressed:

- the number and value of the jobs to be provided post construction of the development.
- where would the 4,883 residents of the proposed 1,500 residential units be employed.
- the justification for the additional housing units in light of the current surplus of available residential units has not been made.
- what is the projected occupancy and source of guests at the proposed 450 room hotel, and the market studies to support those projections.
- there is not sufficient evidence nor market studies to justify the proposed retail component.
- how have the demographics of the City been considered in the proposed action.

7828 8TH STREET, DOWNEY CA 90241 TEL: 562 928 8967 FAX: 562 928 0727

E-MAIL:HAROLDTSEKLENIS@AOL.COM

G. HAROLD TSEKLENIS

-- Since the proposed site is subject to liquefaction making high rise buildings problematic, what specific foundation/structural design criteria and provisions are proposed for the design of structures on the site.

--Given the reality of the pending implementation AB 32, yet the draft EIR does not address how its provision are accommodated in the proposed development.

--Finally, not scheduling a series of well publicized full public hearings diminishes the importance of the proposed action and it is not acceptable. It raises questions and suspicions of possible improprieties, in addition to denying the opportunity of the voters of Downey to participate in the decision of how City resources are being committed.

Respectfully,

Harold Tseklenis

Harold Tseklenis

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May 18, 2009

VIA E-MAIL, FAX & FED EX

Mr. Mark Sellheim
Principal Planner
Downey Planning Division
11111 Brookshire Avenue
Downey, CA 90241

RE: TIERRA LUNA DRAFT ENVIRONMENTAL IMPACT REPORT AMENDMENT TO THE DOWNEY LANDING SPECIFIC PLAN

Dear Mr. Sellheim:

Our firm represents Kaiser Foundation Hospitals, Inc. ("Kaiser") in connection with the Draft Environmental Impact Report (the "DEIR") for the proposed amendment to the Downey Landing Specific Plan (the "Proposed Project"). I provide Kaiser's comments to the DEIR as follows.

The DEIR describes a 3.9 million square-foot mixed-use development comprised of commercial retail, office, hotel, residential and restaurant uses located on a 79-acre site bounded by the Downey Landing Retail Center on the north, Bellflower Boulevard on the east, Congressman Steve Horn Way to the south, and Clark Avenue and Lakewood Boulevard on the west.

The DEIR does not comply with the California Environmental Quality Act ("CEQA"), for the reasons described below. We propose that representatives of Kaiser and the City of Downey (the "City") meet at the earliest available opportunity to address Kaiser's comments in a constructive, mutually satisfactory manner.

A. Cumulative Impacts

An environmental impact report ("EIR") must include a discussion of cumulative impacts when a project's impact is cumulatively considerable. CEQA Guidelines, § 15065(a)(3). "Cumulatively considerable" means that the incremental effects of an

individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects. CEQA Guidelines, § 15065(a)(3). A draft EIR must identify related projects, must contain a summary of the expected environmental effects to be produced by the related projects, must include a reasonable analysis of the cumulative impacts of the related projects and must provide an examination of reasonable, feasible options of mitigation measures for the project's contribution to significant cumulative effects. CEQA Guidelines, § 15130. Related projects must include existing projects, *projects under construction, projects that are approved but not built,* and projects that are currently undergoing environmental review by the lead agency. *See San Franciscans for Reasonable Growth v. City and County of San Francisco*, 151 Cal. App. 3d 61, 74 (1984).

The DEIR for the Proposed Project does not comply with CEQA because it omits Kaiser's 1,000,000 square foot medical center (the "Kaiser Project") from its evaluation of related projects. In 2002 the City approved the Kaiser Project and certified its Final EIR. Since then, Kaiser has constructed only a small portion of its Project -- a 185,000 square foot medical office building – and has begun constructing its 600,000 square foot hospital. Even after building its hospital, Kaiser will have 215,000 square feet of hospital and medical office space remaining under its entitlements. As a consequence, the Kaiser Project has a total of 815,000 square feet of approved development either under construction or unbuilt which the DEIR for the Proposed Project excludes from its evaluation of impacts. The Kaiser Project is a related project in that it has many of the same impacts as the Proposed Project, including traffic, parking, air quality, noise and circulation, and it lies *directly adjacent* to the Proposed Project. The Kaiser Project, at 1,000,000 square feet, is far more development-intensive than any of the related projects the DEIR evaluates, and both projects comprise a portion of the Downey Landing Specific Plan area. Thus, the Proposed Project's DEIR must include the Kaiser Project in its evaluation of cumulative impacts, including, but not limited to the following impacts:

1. **Traffic.** The baseline Traffic Study in the DEIR was conducted while only a fraction of the Kaiser Project was operational (185,000 of 1,000,000 approved square feet). The DEIR and the Traffic Study for the Proposed Project failed to include the Kaiser Project in the list of related projects, and thus did not analyze the cumulative traffic impacts of the 815,000 square feet of traffic-intense medical and hospital uses. Many more intersections and roadways will likely experience significant cumulative effects when the cumulative traffic impacts of the large-scale Kaiser Project and Proposed Project, along with the other related projects, are properly considered. The accuracy of the Traffic Study and the measures needed to mitigate all significant traffic impacts are of particular importance to Kaiser, as ambulances and patients need efficient and immediate access to the Kaiser Project during emergency situations.

2. **Parking.** The parking element of the Traffic Study in the DEIR fails to analyze cumulative parking impacts. A portion of the parking required for the Proposed Project includes street parking along Congressman Steve Horn Way, which serves as the boundary between the Kaiser Project and the Proposed Project. Although the Kaiser Project provides its own parking, users of both the Kaiser Project and Proposed Project, which together will result in nearly 5,000,000 square feet of development, will undoubtedly park along Congressman Steve Horn Way. The DEIR does not address this obvious cumulative impact. Also, as addressed below, the DEIR lacks any evaluation of parking impacts from the Proposed Project's 1,700,000 square feet of residential uses, and discloses that the Proposed Project provides *no onsite parking* for these uses. The only onsite parking the Proposed Project includes is devoted exclusively to non-residential uses. Consequently, since the Proposed Project does not plan for any onsite residential parking, many residential users will park within the adjacent Kaiser Project site. The DEIR likewise omits any analysis of this cumulative impact. The DEIR thus fails to analyze the cumulative parking impacts on Congressman Steve Horn Way which both projects will generate, and on the Kaiser Project which the Proposed Project will cause.

3. **Air Quality.** The cumulative localized carbon monoxide (CO) impacts are analyzed in the DEIR by taking related projects into account, and this analysis relies on the related projects identified in the DEIR Traffic Study. Since the DEIR and the Traffic Study exclude the Kaiser Project from their cumulative impacts analysis, however, the DEIR Traffic Study does not evaluate the Kaiser Project's cumulative CO impacts. In view of the considerable CO emissions attributable to the Kaiser Project's intensive traffic generation, and since that project is a "related project", the DEIR must include an analysis of the cumulative localized CO impacts.

4. **Noise.** The DEIR notes that future construction associated with related projects could result in a cumulatively significant impact from temporary or periodic increases in ambient noise levels. While the DEIR describes the Desert Reign Church and Davita Dialysis Clinic, located nearly one-half mile from the Proposed Project and having only 36,528 square feet of development, as the "nearest related project", it ignores the 1,000,000 square foot Kaiser Project lying next door to the Proposed Project. This exclusion violates CEQA because, as outlined above, the Kaiser Project also is a related project, and the DEIR must include the cumulative impacts associated with the construction of these adjacent large-scale projects. The cumulative temporary or periodic increases in ambient noise levels from these two projects would likely be potentially significant, in view of the large size of each project, the sensitive uses associated with Kaiser's hospital, and the likelihood that construction of both projects could occur simultaneously. Similarly, the DEIR does not address the cumulative noise impacts the Kaiser Project's operations will cause the Proposed Project's residential uses, which are sensitive noise receptors. Finally, the DEIR does not account for the

Kaiser Project when assessing cumulative ground borne vibration and traffic-generated noise impacts, and needs to include this assessment as well.

B. **Parking.**

1. **Residential Use Parking.** The DEIR provides that "the residential component [of the Proposed Project] would provide parking for its own use", but makes no attempt to estimate or evaluate the parking demand which would result from the 1,700,000 square feet of residential uses. Indeed, the DEIR has no discussion of the parking demand that will be created by the occupants and guests of the proposed 1,500 residential units, and proposes no parking for these units to mitigate the enormous need for parking that this scale of development will require. The demand for parking which this element of the Proposed Project will create will result in a significant environmental impact by any reasonable measure. By not identifying, evaluating or proposing to mitigate this significant environmental effect, the DEIR violates CEQA. The DEIR needs to include this information. The residential parking requirements should also be included in the analysis of cumulative parking impacts, as described above.

2. **Hotel, Office and Commercial Use Parking.** As discussed above, the DEIR fails to analyze the cumulative impacts of the 1,000,000 square foot Kaiser Project on the required parking for the Proposed Project.

C. **Project Description/Availability of the Specific Plan Amendment.**

The DEIR describes the Proposed Project in very general terms, and provides two alternative conceptual plans for development. The Proposed Project is, at this stage, the Specific Plan Amendment, but the City has confirmed that it has not completed a draft of it, and will not have it available for review during the DEIR's public review period. It thus appears that the City has not yet determined what project it will consider for approval and evaluation under CEQA since the Specific Plan Amendment remains subject to material change. The public cannot be reasonably informed about the Proposed Project and its various elements based on the uncertainty created by the DEIR's vague project description, the unavailability of the Specific Plan Amendment, and its incomplete stage. Kaiser requests that the City completes and makes available the Specific Plan Amendment before it approves the Proposed Project or certifies the EIR.

D. **Other Suggestions.**

1. **Residential Component.** Since Bellflower Boulevard is comprised mostly of industrial and commercial office uses, the proposed residential uses should be located along Lakewood Boulevard, adjacent to the park and learning center. Alternatively,

these uses should lie to the north and center of the site of the Proposed Project, away from these highly trafficked arterials.

E. **Information Requests.**

In addition to the preceding comments, Kaiser requests additional information and/or elaboration in the DEIR with respect to the following topics:

1. **Electricity.** An Edison substation is located southeast of the subject site constructed as part of the hospital approval, paid for by Kaiser, with the understanding that it would be exclusive to Kaiser. The DEIR does not state where the power source will come from "on-site." Please verify the proposed location of the power source, or that the existing Edison sub-station dedicated to Kaiser will not be used in conjunction with the Proposed Project.

2. **Water.** According to the Utilities Section, the current potable water demand is 13,123 gallons/day. The proposed demand will increase to 617,837 gallons/day. Considering the exponential increase in potable water demand and the drought conditions currently affecting the State of California, the DEIR should include a discussion and mitigations to address probable more restrictive water regulations sure to be implemented in the future.

G. **Textual Changes.**

Kaiser provides specific textual comments on the DEIR, attached hereto as Exhibit A.

Kaiser appreciates the opportunity to comment on the DEIR. Our client looks forward to a Proposed Project that addresses the foregoing concerns and that will mutually benefit the City, its citizens, Kaiser, and Kaiser's members. We look forward to the City's reply to our request for a meeting to address these concerns.

Sincerely,

Fernando Villa

Cc: Mr. Richard Buckrop
Ms. Elizabeth Trombley
Ms. Jo-Dee Becker
Indrajit Obeysekere, Esq.

Each via e-mail only

7164918.1

EXHIBIT A – TEXTUAL CHANGES

Page	Comment
I-5, Paragraph 1	Should state, "...Kaiser Hospital (currently under construction) and a new 185,000 square-foot medical office building and an existing 290,000 square-foot medical center located on the northwest corner of Imperial Highway and Bellflower Boulevard".
I-5, Paragraph 4	DEIR states, "...proposed project would involve the construction up to 4,075,000 square feet..." However, the remainder of the document states a maximum of 3,950,000 square feet.
II-8, Figure II-5	Considering that Congressman Steve Horn Way will serve as a primary access point into the proposed development, the document should identify the four (4) access points into the proposed development from this street.
III-2, Paragraph 3	Should state, "...Kaiser Hospital (currently under construction) and a new 185,000 square-foot medical office building and an existing 290,000 square-foot medical center located on the northwest corner of Imperial Highway and Bellflower Boulevard".
III-3, Paragraph 6	Should state, "....Kaiser Downey Medical Center which includes 1,000,000 square feet of entitled hospital and medical office uses".
Table III-1	Table excludes the Kaiser Hospital under construction and remaining 215,000 square feet of entitled to Kaiser (80,000 square feet hospital, 135,000 square feet medical office) per the Downey Land Specific Plan and the certified 2002 Final Environmental Impact Report.
IV.B-5, Paragraph 2	Should state, "...Kaiser Hospital (currently under construction) and a new 185,000 square foot medical office building and an existing 290,000 square-foot medical center located on the northwest corner of Imperial Highway and Bellflower Boulevard".
IV.F-2, Paragraph 1	Should state, "...Kaiser Hospital (currently under construction) and a new 185,000 square foot medical office building and an existing 290,000 square-foot medical center located on the northwest corner of Imperial Highway and Bellflower Boulevard".
IV.F-13, Paragraph 1	Should state, "...approximately 600,000 square-foot medical center and 185,000 square-foot medical office

	building with an additional 215,000 square feet entitled for hospital and medical office uses per the Downey Land Specific Plan and the certified 2002 Final Environmental Impact Report".
IV.H-1, Paragraph 7	Should state, "...approximately 600,000 square-foot hospital and 185,000 square-foot medical office building with an additional 215,000 square feet entitled for hospital and medical office uses per the Downey Land Specific Plan and the certified 2002 Final Environmental Impact Report. Directly west of the new medical center is an existing 290,000 square-foot Kaiser medical center located on the northwest corner of Imperial Highway and Bellflower Boulevard."
Table IV.L-8	Table excludes the Kaiser Hospital under construction and remaining 215,000 square feet of entitled to Kaiser (80,000 square feet hospital, 135,000 square feet medical office) per the Downey Land Specific Plan and the certified 2002 Final Environmental Impact Report.
IV.L-32, Paragraph 5	Have the traffic mitigations referenced in this section been verified as built or under construction? If under construction, when is the anticipated date of completion?

Appendix B

Air Quality Data

Model Inputs

Hours	Factor
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	1
9	1
10	1
11	1
12	0
13	1
14	1
15	1
16	1
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0

Deposition Values

	Fugitive			Combustion
PM10				
	1	0.0787	2.3	1
	2.5	0.1292	2.3	2.5
	10	0.7922	2.3	10
PM2.5				
	1	0.3785	2.3	1
	2.5	0.6215	2.3	2.5

Ascii file Format
for dry deposition
(4I2,2F9.4,F6.1,I2,2F7.1,F9.4,F10.1,F8.4)

n

0.9158	2.3
0.0042	2.3
0.08	2.3
0.9954	2.3
0.0046	2.3

Per Area

	Nox	CO	PM10	PM2.5
Area	**lbs/day**	**lbs/day**	**lbs/day**	**lbs/day**
Demo	0	0	0	0
Site Prep	54.15	23.19	6.21	3.56
Build	30.3	14.4	1.8	1.6
Asphalt	28	14.8	2	1.8

Whole Site

Demo	162.5	78.9	13.55	9.65

Construction Hours
8

2007 Air Quality SCAQMD

SRA	Nox 1 Hr	CO 1 HR	CO 8 Hr	PM10	PM2.5
12	0.1	8	5.1		
Threshold	0.18	20	9		
				10.4	10.4

1

Hours of Operation 8

Demo Avg Time	x/Q ug/m3/(g/s)
Receptor 1	
1-HR	237.17
8-HR	69.43
PM 10 24-HR	22.44
PM 2.5 24-HR	20.54
Receptor 2	
1-HR	332.82
8-HR	44.33
PM 10 24-HR	28.1
PM 2.5 24-HR	23.26
Receptor 3	
1-HR	242.3
8-HR	30.29
PM 10 24-HR	12.83
PM 2.5 24-HR	12.04
Receptor 4	
1-HR	317.26
8-HR	53.73
PM 10 24-HR	26.41
PM 2.5 24-HR	16.32
Receptor 5	
1-HR	194.62
8-HR	44.7
PM 10 24-HR	21.41
PM 2.5 24-HR	17
Receptor 6	
1-HR	367.3
8-HR	77.76
PM 10 24-HR	35.52
PM 2.5 24-HR	26.53

Site Prep, Build, & Asphalting Peak Avg Time	x/Q ug/m3/(g/s)
Receptor 1	
1-HR	1393.58
8-HR	455.94
PM 10 24-HR	169.46
PM 2.5 24-HR	55.55
Receptor 2	
1-HR	901.74
8-HR	318.26
PM 10 24-HR	145.05
PM 2.5 24-HR	109.53
Receptor 3	
1-HR	657.94
8-HR	129.8
PM 10 24-HR	54.73
PM 2.5 24-HR	51.88
Receptor 4	
1-HR	676.16
8-HR	281.07
PM 10 24-HR	130.19
PM 2.5 24-HR	108.55
Receptor 5	
1-HR	768
8-HR	225.59
PM 10 24-HR	93.29
PM 2.5 24-HR	84.56
Receptor 6	
1-HR	1173.72
8-HR	674.45
PM 10 24-HR	275.11
PM 2.5 24-HR	246.48

Receptor 7	
1-HR	294.86
8-HR	46.17
PM 10 24-HR	21.77
PM 2.5 24-HR	17.67
Receptor 8	
1-HR	443.95
8-HR	68.65
PM 10 24-HR	34.45
PM 2.5 24-HR	23.09
Receptor 9	
1-HR	353.57
8-HR	99.67
PM 10 24-HR	35.84
PM 2.5 24-HR	29.25
Receptor 10	
1-HR	293.98
8-HR	86.77
PM 10 24-HR	34.6
PM 2.5 24-HR	29.01
Receptor 11	
1-HR	220.97
8-HR	52.01
PM 10 24-HR	20.43
PM 2.5 24-HR	19.92
Receptor 12	
1-HR	277.37
8-HR	100.17
PM 10 24-HR	38.8
PM 2.5 24-HR	31.74

Receptor 7	
1-HR	1271.81
8-HR	265.87
PM 10 24-HR	106.52
PM 2.5 24-HR	104.16
Receptor 8	
1-HR	1025.18
8-HR	287.12
PM 10 24-HR	114.02
PM 2.5 24-HR	109.32
Receptor 9	
1-HR	1029.94
8-HR	363.22
PM 10 24-HR	138.49
PM 2.5 24-HR	150.34
Receptor 10	
1-HR	846.06
8-HR	363.36
PM 10 24-HR	154.9
PM 2.5 24-HR	133.8
Receptor 11	
1-HR	889.25
8-HR	244.8
PM 10 24-HR	106.01
PM 2.5 24-HR	105.78
Receptor 12	
1-HR	1173.3
8-HR	474.49
PM 10 24-HR	228.64
PM 2.5 24-HR	194.31

Construction Area / Phase	Nitrogen Dioxide ER g/s	1-Hr Site ug/m3	1-Hr Total ppm	Exceed Threshold 0.18	ER g/s	1-Hr Site ug/m3
Receptor 1						
Demo	2.556	606	**0.42**	YES	1.241	294
Site Prep	0.852	1187	**0.73**	YES	0.365	508
Build	0.477	664	**0.45**	YES	0.227	316
Asphalt	0.440	614	**0.43**	YES	0.233	324
Receptor 2						
Demo	2.556	851	**0.55**	YES	1.241	413
Site Prep	0.852	768	**0.51**	YES	0.365	329
Build	0.477	430	**0.33**	YES	0.227	204
Asphalt	0.440	397	**0.31**	YES	0.233	210
Receptor 3						
Demo	2.556	619	**0.43**	YES	1.241	301
Site Prep	0.852	560	**0.40**	YES	0.365	240
Build	0.477	314	**0.27**	YES	0.227	149
Asphalt	0.440	290	**0.25**	YES	0.233	153
Receptor 4						
Demo	2.556	811	**0.53**	YES	1.241	394
Site Prep	0.852	576	**0.41**	YES	0.365	247
Build	0.477	322	**0.27**	YES	0.227	153
Asphalt	0.440	298	**0.26**	YES	0.233	157
Receptor 5						
Demo	2.556	497	**0.36**	YES	1.241	242
Site Prep	0.852	654	**0.45**	YES	0.365	280
Build	0.477	366	**0.29**	YES	0.227	174
Asphalt	0.440	338	**0.28**	YES	0.233	179
Receptor 6						
Demo	2.556	939	**0.60**	YES	1.241	456
Site Prep	0.852	1000	**0.63**	YES	0.365	428
Build	0.477	559	**0.40**	YES	0.227	266
Asphalt	0.440	517	**0.37**	YES	0.233	273
Receptor 7						
Demo	2.556	754	**0.50**	YES	1.241	366
Site Prep	0.852	1083	**0.68**	YES	0.365	464
Build	0.477	606	**0.42**	YES	0.227	288
Asphalt	0.440	560	**0.40**	YES	0.233	296
Receptor 8						

Demo	2.556	1135	**0.70**	YES	1.241	551
Site Prep	0.852	873	**0.56**	YES	0.365	374
Build	0.477	489	**0.36**	YES	0.227	232
Asphalt	0.440	452	**0.34**	YES	0.233	239
Receptor 9						
Demo	2.556	904	**0.58**	YES	1.241	439
Site Prep	0.852	877	**0.57**	YES	0.365	376
Build	0.477	491	**0.36**	YES	0.227	233
Asphalt	0.440	454	**0.34**	YES	0.233	240
Receptor 10						
Demo	2.556	751	**0.50**	YES	1.241	365
Site Prep	0.852	721	**0.48**	YES	0.365	309
Build	0.477	403	**0.31**	YES	0.227	192
Asphalt	0.440	373	**0.30**	YES	0.233	197
Receptor 11						
Demo	2.556	565	**0.40**	YES	1.241	274
Site Prep	0.852	757	**0.50**	YES	0.365	324
Build	0.477	424	**0.33**	YES	0.227	201
Asphalt	0.440	392	**0.31**	YES	0.233	207
Receptor 12						
Demo	2.556	709	**0.48**	YES	1.241	344
Site Prep	0.852	999	**0.63**	YES	0.365	428
Build	0.477	559	**0.40**	YES	0.227	266
Asphalt	0.440	517	**0.37**	YES	0.233	273

Carbon Monoxide					Particulate Matte	
1-Hr Total ppm	Exceed Threshold 20	8-Hr Site ug/m3	8-Hr Total ppm	Exceed Threshold 9	ER g/s	24-hr ug/m3
8.26	NO	86	**5.18**	NO	0.21	**4.78**
8.44	NO	166	**5.25**	NO	0.10	**16.55**
8.28	NO	103	**5.19**	NO	0.03	**4.80**
8.28	NO	106	**5.19**	NO	0.03	**5.33**
8.36	NO	55	**5.15**	NO	0.21	**5.99**
8.29	NO	116	**5.20**	NO	0.10	**14.17**
8.18	NO	72	**5.16**	NO	0.03	**4.11**
8.18	NO	74	**5.16**	NO	0.03	**4.56**
8.26	NO	38	**5.13**	NO	0.21	**2.73**
8.21	NO	47	**5.14**	NO	0.10	**5.35**
8.13	NO	29	**5.13**	NO	0.03	**1.55**
8.13	NO	30	**5.13**	NO	0.03	**1.72**
8.34	NO	67	**5.16**	NO	0.21	**5.63**
8.22	NO	103	**5.19**	NO	0.10	**12.72**
8.13	NO	64	**5.16**	NO	0.03	**3.69**
8.14	NO	65	**5.16**	NO	0.03	**4.10**
8.21	NO	55	**5.15**	NO	0.21	**4.56**
8.24	NO	82	**5.17**	NO	0.10	**9.11**
8.15	NO	51	**5.14**	NO	0.03	**2.64**
8.16	NO	53	**5.15**	NO	0.03	**2.93**
8.40	NO	97	**5.18**	NO	0.21	**7.57**
8.37	NO	246	**5.31**	NO	0.10	**26.87**
8.23	NO	153	**5.23**	NO	0.03	**7.79**
8.24	NO	157	**5.24**	NO	0.03	**8.65**
8.32	NO	57	**5.15**	NO	0.21	**4.64**
8.41	NO	97	**5.18**	NO	0.10	**10.40**
8.25	NO	60	**5.15**	NO	0.03	**3.02**
8.26	NO	62	**5.15**	NO	0.03	**3.35**

8.48	NO	85	**5.17**	NO	0.21	**7.34**
8.33	NO	105	**5.19**	NO	0.10	**11.14**
8.20	NO	65	**5.16**	NO	0.03	**3.23**
8.21	NO	67	**5.16**	NO	0.03	**3.59**
8.38	NO	124	**5.21**	NO	0.21	**7.64**
8.33	NO	132	**5.22**	NO	0.10	**13.53**
8.20	NO	82	**5.17**	NO	0.03	**3.92**
8.21	NO	85	**5.17**	NO	0.03	**4.36**
8.32	NO	108	**5.19**	NO	0.21	**7.37**
8.27	NO	133	**5.22**	NO	0.10	**15.13**
8.17	NO	82	**5.17**	NO	0.03	**4.39**
8.17	NO	85	**5.17**	NO	0.03	**4.87**
8.24	NO	65	**5.16**	NO	0.21	**4.35**
8.28	NO	89	**5.18**	NO	0.10	**10.35**
8.18	NO	55	**5.15**	NO	0.03	**3.00**
8.18	NO	57	**5.15**	NO	0.03	**3.33**
8.30	NO	124	**5.21**	NO	0.21	**8.27**
8.37	NO	173	**5.25**	NO	0.10	**22.33**
8.23	NO	107	**5.19**	NO	0.03	**6.47**
8.24	NO	110	**5.20**	NO	0.03	**7.19**

r 10 Exceed Threshold 10.4	Particulate Matter 2.5 ER g/s	24-HR ug/m3	Exceed Threshold 10.4
NO	0.15	**3.12**	NO
YES	0.06	**3.11**	NO
NO	0.03	**1.40**	NO
NO	0.03	**1.57**	NO
NO	0.15	**3.53**	NO
YES	0.06	**6.13**	NO
NO	0.03	**2.76**	NO
NO	0.03	**3.10**	NO
NO	0.15	**1.83**	NO
NO	0.06	**2.91**	NO
NO	0.03	**1.31**	NO
NO	0.03	**1.47**	NO
NO	0.15	**2.48**	NO
YES	0.06	**6.08**	NO
NO	0.03	**2.73**	NO
NO	0.03	**3.07**	NO
NO	0.15	**2.58**	NO
NO	0.06	**4.74**	NO
NO	0.03	**2.13**	NO
NO	0.03	**2.39**	NO
NO	0.15	**4.03**	NO
YES	0.06	**13.80**	YES
NO	0.03	**6.20**	NO
NO	0.03	**6.98**	NO
NO	0.15	**2.68**	NO
YES	0.06	**5.83**	NO
NO	0.03	**2.62**	NO
NO	0.03	**2.95**	NO

NO	0.15	**3.50**	NO
YES	0.06	**6.12**	NO
NO	0.03	**2.75**	NO
NO	0.03	**3.10**	NO
NO	0.15	**4.44**	NO
YES	0.06	**8.42**	NO
NO	0.03	**3.78**	NO
NO	0.03	**4.26**	NO
NO	0.15	**4.40**	NO
YES	0.06	**7.49**	NO
NO	0.03	**3.37**	NO
NO	0.03	**3.79**	NO
NO	0.15	**3.02**	NO
NO	0.06	**5.92**	NO
NO	0.03	**2.66**	NO
NO	0.03	**2.99**	NO
NO	0.15	**4.82**	NO
YES	0.06	**10.88**	YES
NO	0.03	**4.89**	NO
NO	0.03	**5.50**	NO

Appendix C

Traffic and Parking Study and Appendices
April 27, 2011

MEMORANDUM

To:	Mr. John Perfitt City of Downey	Date:	April 27, 2011
From:	David S. Shender, P.E. Chin S. Taing Linscott, Law & Greenspan, Engineers	LLG Ref:	1-10-3866-1
Subject:	**Tierra Luna Specific Plan – Manarino Alternative Project** **City of Downey**		

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This memorandum has been prepared by Linscott, Law & Greenspan, Engineers (LLG) to summarize our traffic and shared parking analysis for an alternative to be included in the Tierra Luna Specific Plan Final EIR. Project Alternative F, referred to as the "Manarino Alternative" is a mixed-use development consisting of retail, restaurants, hotel, movie theater, and office uses. Parameters and assumptions utilized in the formulation of the project alternative trip generation, distribution, traffic assignment for the traffic impact analysis and shared parking analysis are consistent with those used in the Raju Traffic Study[1] for the proposed Project (the "Raju Study"), which is included in the Draft EIR prepared for the Tierra Luna Specific Plan.

Project Description

Project Alternative F, referred to as the "Manarino Alternative", is a phased, mixed-use development intended for a 77-acre site. Components of the Manarino Alternative include:

- 1,100,000 square feet of commercial/retail floor area, including a movie theater which would comprise approximately 65,000 square feet of the allocated floor area;
- 300,000 square feet of office floor area; and
- 116,000 square feet of hotel floor area (comprising 150 hotel rooms).

It is noted that the total project would not exceed 1,516,000 square feet of building floor area. Also, in conjunction with this Alternative, we understand the Applicant proposes that up to 200,000 square feet of retail space may be developed as office space instead, depending on market conditions.

[1] Traffic Study for the Tierra Luna Specific Plan Project, prepared by Raju Associates, Inc., January 2009.

For this traffic analysis, of the 1,100,000 square feet allocated for commercial retail space, 1,035,000 square feet is assumed to be developed as retail and restaurant space (divided among large format retailers, junior anchor retailers, other small retail shops, restaurant pads and a food court). The remaining 65,000 square feet of the commercial retail space would be a 16-screen multiplex theater. Also, as noted above, a 150-room boutique hotel and 300,000 square feet of office space is proposed as part of the project.

Parking for this project alternative will be provided through structured surface spaces. The supply of parking would be provided based upon the demand analysis provided herein. Vehicular access for Project Alternative F would be provided via driveways on Lakewood Boulevard, Congressman Steven Horn Way, and Bellflower Boulevard. The Project Alternative F site plan is shown in ***Figure 1***.

Trip Generation

Trip generation for the mixed-use development proposed for Project Alternative F was estimated based on trip rates provided in the ITE *Trip Generation* manual, 7th Edition, consistent with the Raju Study. A summary of the trip generation forecast for Project Alternative F is presented in ***Table 1***. The daily and PM peak hour internal capture rates are calculated based on the worksheet included in the ITE Trip Generation Handbook, June 2004, as contained in ***Appendix A***.

As shown in *Table 1*, Project Alternative F is expected to generate 829 net new vehicle trips (594 inbound trips and 235 outbound trips) during the AM peak hour. During the PM peak hour, Project Alternative F is expected to generate 2,477 net new vehicle trips (1,086 inbound trips and 1,391 outbound trips). Over a 24-hour period, Project Alternative F is forecast to generate 26,391 net new daily trip ends during a typical weekday (13,195 inbound trips and 13,196 outbound trips).

The Project Alternative F trip generation forecasts were compared to that of the proposed Project, as shown in ***Table 2***. As indicated in *Table 2*, this alternative generates a net total of 26,391 daily trips, representing 18 percent (18%) fewer daily trips than the proposed Project. Comparable reductions are also forecasted for the peak hours, whereby this alternative generates 52 percent (52%) fewer AM peak hour trips and 20 percent (20%) fewer PM peak hour trips than the proposed Project.

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Traffic Analysis

Summaries of the volume-to-capacity (*v/c*) ratios and Levels of Service (LOS) values during the AM and PM peak hours are provided in ***Table 3***. The Intersection Capacity Utilization (ICU) data calculation worksheets are included in ***Appendix B***. The traffic analysis methodology and significance impact criteria (i.e., LOS F at 0.02) contained herein are consistent with those utilized in the Raju Study. As presented in *Table 3*, Project Alternative F is forecasted to result in significant traffic impacts at three intersections (one intersection during the both AM and PM peak hours and two intersections during the PM peak hour). Project Alternative F is expected to create significant impacts at the following three locations according to the County of Los Angeles' Congestion Management Program impact criteria during the peak hour with the addition of ambient growth, related projects traffic, and Project Alternative F-related traffic:

- Int. No. 24: Bellflower Boulevard/Imperial Highway
  AM peak hour *v/c* ratio increase of 0.043 [to 1.216 (LOS F) from 1.173 (LOS F)]
  PM peak hour *v/c* ratio increase of 0.099 [to 1.323 (LOS F) from 1.224 (LOS F)]
- Int. No. 38: Lakewood Boulevard/Gallatin Road
  PM peak hour *v/c* ratio increase of 0.036 [to 1.113 (LOS F) from 1.077 (LOS F)]
- Int. No. 77: I-605 Freeway Southbound Ramps/Firestone Boulevard
  PM peak hour *v/c* ratio increase of 0.049 [to 1.019 (LOS F) from 0.970 (LOS E)]

The proposed Project was calculated in the Raju Study to cause significant traffic impacts at four (4) intersections, including the three intersections listed above plus a fourth intersection (Int. No 17: Lakewood Boulevard/Stewart and Gray). Thus, on an overall basis, Project Alternative F, with three intersections identified for potential traffic impacts prior to consideration of mitigation measures, would adversely impact traffic to a lesser degree than the proposed Project.

Trip Generation Equivalency

As previously noted, the project applicant is requesting flexibility to develop up to 200,000 square feet of retail space as office space if market conditions warrant. Thus, for example, instead of 1,100,000 square feet of commercial/retail floor area and 300,000 square feet of office floor area, the applicant may propose to build 900,000 square feet of commercial/retail floor area and 500,000 square feet of office floor area. In combination with the 116,000 square feet proposed for the hotel, total development on the site would not exceed 1,516,000 square feet of building area.

The conversion of retail floor area to office floor area would not alter the findings and conclusions related to this traffic analysis of the Manarino Alternative. That is due to the fact that retail floor area has a higher trip rate as compared to an equivalent amount of office floor area. For example, in reviewing the trip generation potential for the PM peak hour (which is considered the "critical" peak hour since all of the potentially significant traffic impacts due to the Manarino Alternative are determined to occur in the PM peak hour, with only one significant impact identified during the AM peak hour), the relationship between retail floor area and office floor area is as follows:

- Retail floor area * 1.811 = Equivalent Office floor area

Thus, for example, 100,000 square feet of retail floor area would have the equivalent traffic impacts as 181,100 square feet of office floor area (100,000 s.f. * 1.811 = 181,100 s.f.). However, as there is an overall "cap" on the amount of new development on the site, the retail floor area would be exchanged for office floor area on a 1:1 basis, and thus, any exchange would result in potential traffic impacts that would be slightly less than what is analyzed herein.

Mitigation Measures

The mitigation measures for these intersections, as recommended in the Raju Study for the proposed Project, are expected to reduce the Project Alternative F impacts to less than significant levels. The following mitigation measures, as well as the effectiveness of these measures, are described below:

- Int. No. 24: Bellflower Boulevard/Imperial Highway – The improvement at this intersection includes dual left-turn lanes on the northbound and southbound approaches. This improvement can be achieved by widening on the west side of Bellflower Boulevard (north of Imperial Highway) and on the east side of Bellflower Boulevard (south of Imperial Highway) by approximately two to twelve feet for approximately 250 feet. The northbound and southbound approaches would provide dual left-turn lanes, two through lanes and a separate right-turn lane.

- Int. No. 38: Lakewood Boulevard/Gallatin Road – This improvement includes a second eastbound left-turn lane. This improvement can be achieved by restriping the existing eastbound through lane to a shared left-through lane. The eastbound approach would provide one left-turn lane, one shared left-through lane, and a separate right-turn lane. The traffic signal would be modified to include split phasing operations for the eastbound and westbound Gallatin Road approaches.

- Int. No. 77: I-605 Freeway Southbound Ramps/Firestone Boulevard – The improvement at this intersection includes a second westbound left-turn lane. This improvement can be achieved by restriping the existing painted chevron on the westbound approach. The westbound approach would provide dual left-turn lanes and two through lanes.

As shown in column [3] of ***Table 4***, the recommended mitigation measures are anticipated to reduce the forecast Project Alternative F related traffic impact at the subject study intersections during the AM and/or PM peak hours to less than significant levels.

Shared Parking Demand Analysis

A shared parking analysis was conducted in order to determine peak parking demand for Project Alternative F and to determine the adequacy of the proposed parking supply. The assumptions and methodology used in the shared parking analysis for this alternative is consistent with the procedures used in the Raju Study for the proposed Project. ***Tables 5***, ***6***, and ***7*** provide a summary of the peak parking demand at the site for Project Alternative F during weekdays and weekend days of various seasonal conditions. The weekdays and weekend days were evaluated for a typical month (April), a peak summer month (July), and a peak holiday shopping month (December). ***Appendix C*** contains the weekday and weekend day shared parking demand analysis calculation worksheets for the individual land use components for the project alternative for each seasonal condition (refer to *Appendix Table C-1* for April conditions, *Appendix Table C-2* for July conditions and *Appendix Table C-3* for December conditions).

The concept of shared parking is widely recognized within the transportation planning industry and accounts for the changes in parking demand over time for different types of land uses within a project. This shared parking analysis incorporates the analysis procedures recommended in the *Shared Parking* manual published by the ULI, and is consistent with methodology used by for the Project. The *Shared Parking* manual provides recommendations with respect to the following characteristics of parking demand at multi-use centers:

- Hourly Parking Indices. The *Shared Parking* manual provides hourly parking indices for various land uses. For the project alternative, the hourly parking indices for retail, theater, hotel and office were utilized. The indices show, for example, that the hourly parking demand for retail (which generates its peak parking demand during the early afternoon period) is different than the parking demand associated with a theater (which generates its peak parking demand concentrated around the late evening periods).

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- Day of Week Parking Variations. The *Shared Parking* manual provides recommendations for day of week parking factors. For example, office uses experience their peak parking demands during weekdays but experience minimal demand during weekends. Retail uses generally have a higher demand for parking during weekends as compared to weekdays.

Below is a summary of the estimated peak parking demand for Project Alternative F during weekdays and weekend days for the various seasonal conditions. It is noted that the highest seasonal parking demand would occur in December during the holiday shopping period. As shown below, a peak parking demand of 4,105spaces is forecast to occur at 2:00 PM during the weekday for the peak shopping/holiday month (December). As a result, the overall peak shared parking demand for the Manarino Project Alternative would range from 4,105 spaces at 2:00 PM on a weekday to 3,911 spaces also at 2:00 PM on a weekend day during the peak shopping/holiday season in December.

Estimated Peak Project Parking Demand by Season

Proposed Manarino Alternative	Typical Month (April) Peak Parking Demand	Peak Summer Month (July) Peak Parking Demand	Shopping/Holiday Month (December) Peak Parking Demand	Overall Peak Parking Demand
Weekday	3,057	3,205	4,105	4,105
Weekend	2,771	3,014	3,911	3,911

Based on the finding of the holiday shopping period having the highest parking demand, it is recommended that parking for the project components be provided at the effective rates during the peak hour of demand (highest for weekday and weekend) as provided in *Table 7*. Accordingly, the following recommended parking rates are recommended for the project components:

- Retail/Restaurant: 3.24 spaces/1,000 s.f.
- Movie Theater: 0.09 spaces/seat
- Hotel: 0.44 spaces/room
- Office: 3.09 spaces/1,000 s.f.

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Thus, for the Manarino Alternative as proposed, the recommended parking rates would yield the following calculation of the required supply of parking:

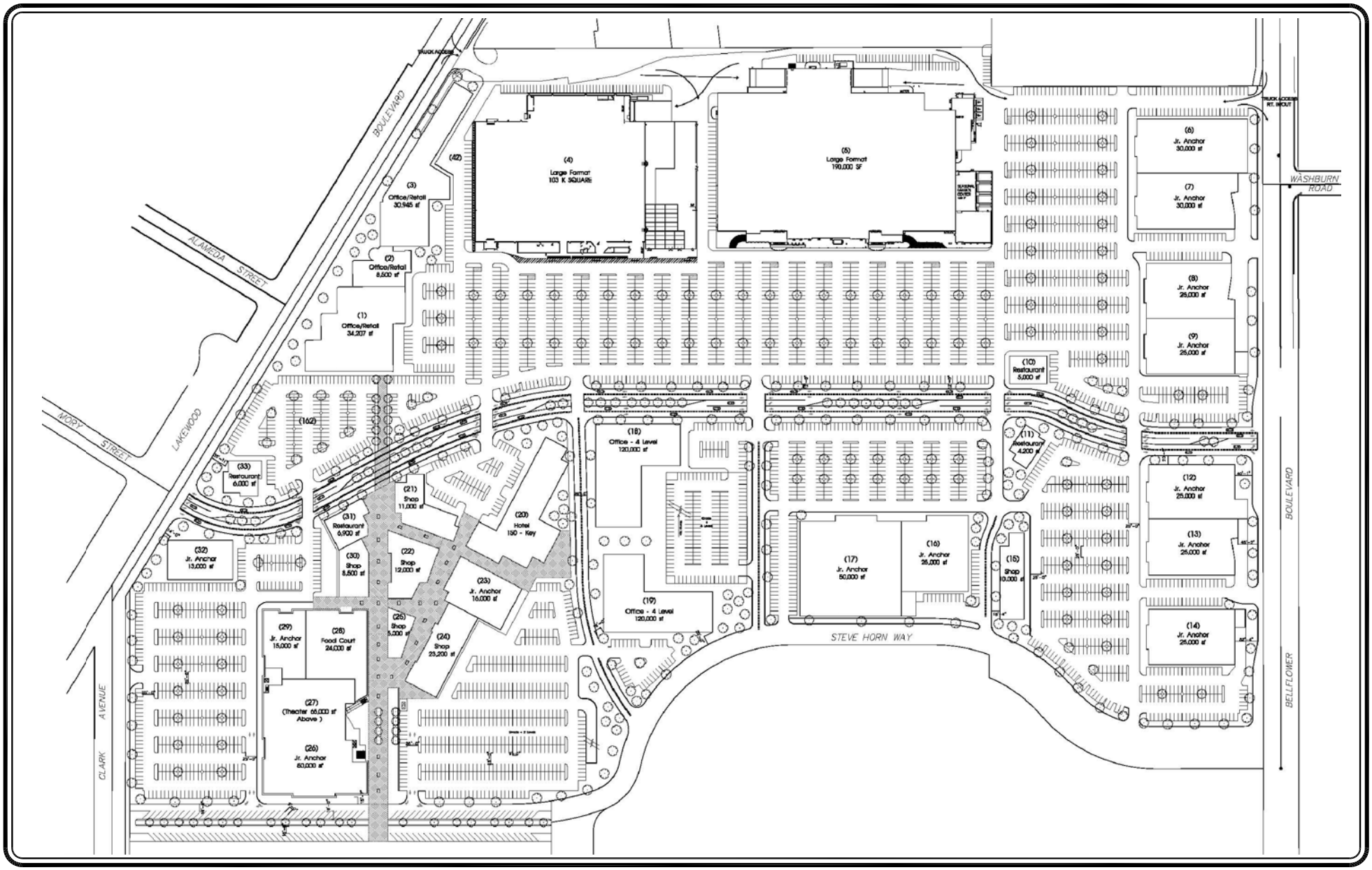
- Retail/Restaurant: 3.24 spaces/1,000 s.f. x 1,035 ksf = 3,353 spaces
- Movie Theater: 0.09 spaces/seat x 4,800 seats = 432 spaces
- Hotel: 0.44 spaces/room x 150 rooms = 66 spaces
- Office: 3.09 spaces/1,000 s.f. x 300 ksf = 927 spaces

- Total Supply: 3,353 + 432 + 66 + 927 = 4,778 spaces

The recommended supply of 4,778 parking spaces would exceed the forecast peak hour demand for parking for both weekday (4,105 spaces) and weekend (3,911 spaces) conditions during the highest seasonal parking demand period of the year (December holiday).

Please feel free to contact us should you have any questions regarding this traffic impact and shared parking analysis conducted for the Manarino Project Alternative for the Tierra Luna Specific Plan.

cc: File



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MAP SOURCE: MANARINO REALTY

FIGURE 1
SITE PLAN

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TIERRA LUNA SPECIFIC PLAN - MANARINO ALTERNATIVE PROJECT

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Table 1
MANARINO ALTERNATIVE PROJECT TRIP GENERATION [1]

25-Apr-11

LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2] IN	AM PEAK HOUR VOLUMES [2] OUT	AM PEAK HOUR VOLUMES [2] TOTAL	PM PEAK HOUR VOLUMES [2] IN	PM PEAK HOUR VOLUMES [2] OUT	PM PEAK HOUR VOLUMES [2] TOTAL
Proposed Uses:								
LU 310 Hotel [3]	150 Rooms	969	41	27	68	39	35	74
Transit Reduction (10%)		(97)	(4)	(3)	(7)	(4)	(4)	(8)
Internal Capture Trip Credit [4]		(323)	n/a	n/a	n/a	(12)	(16)	(28)
Subtotal		549	37	24	61	23	15	38
LU 710 General Office [5]	300,000 GSF	3,109	398	54	452	71	344	415
Transit Reduction (10%)		(311)	(40)	(5)	(45)	(7)	(34)	(41)
Internal Capture Trip Credit [4]		(531)	n/a	n/a	n/a	(20)	(26)	(46)
Subtotal		2,267	358	49	407	44	284	328
LU 820 Shopping Center [6]	1,035,000 GLSF	31,020	388	248	636	1,405	1,522	2,927
Transit Reduction (10%)		(3,102)	(39)	(25)	(64)	(141)	(152)	(293)
Internal Capture Trip Credit [4]		(828)	n/a	n/a	n/a	(41)	(31)	(72)
Pass-by Trip Reduction [7]		(5,418)	(70)	(45)	(115)	(245)	(268)	(513)
Subtotal		21,672	279	178	457	978	1,071	2,049
LU 445 Multiplex Movie Theater [8]	16 Screens	2,180	n/a	n/a	n/a	98	120	218
Transit Reduction (10%)		(218)	n/a	n/a	n/a	(10)	(12)	(22)
Internal Capture Trip Credit [9]		(59)	n/a	n/a	n/a	(3)	(3)	(6)
Subtotal		1,903	n/a	n/a	n/a	85	105	190
Project Trip Generation Total		26,391	674	251	925	1,130	1,475	2,605
Existing Uses (to be removed)								
Downey Studios [10]		n/a	(80)	(16)	(96)	(44)	(84)	(128)
Net Project Trip Generation Total		**26,391**	**594**	**235**	**829**	**1,086**	**1,391**	**2,477**

[1] Source: ITE "Trip Generation", 7th Edition, 2003, unless otherwise noted.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 310 (Hotel) trip generation equation rates.
- Daily Trip Equation: Trips = 8.95 (room) - 373.16; 50% inbound/50% outbound
- AM Peak Hour Trip Equation: Ln (trips) = 1.24 Ln (room) - 2.00; 61% inbound/39% outbound
- PM Peak Hour Trip Equation (ITE Trip Generation Manual 6th Edition): Ln (trips) = 1.212 Ln (room) - 1.763; 53% inbound/47% outbound

[4] Daily and PM peak hour internal capture based on ITE Trip Generation Handbook, June 2004.
Refer to Internal Capture worksheets in Appendix A. Internal capture credit taken after reduction of transit trips.
[5] ITE Land Use Code 710 (General Office) trip generation equation rates.
- Daily Trip Equation: Ln (trips) = 0.77 Ln (1,000 SF of floor area) + 3.65; 50% inbound/50% outbound
- AM Peak Hour Trip Equation: Ln (trips) = 0.80 Ln (1,000 SF of floor area) + 1.55; 88% inbound/12% outbound
- PM Peak Hour Trip Equation: Trips = 1.12 (1,000 SF of floor area) + 78.81; 17% inbound/83% outbound

[6] ITE Land Use Code 820 (Shopping Center) trip generation equation rates.
- Daily Trip Equation: Ln (trips) = 0.65 Ln (1,000 SF of gross leasable floor area) + 5.83; 50% inbound/50% outbound
- AM Peak Hour Trip Equation: Ln (trips) = 0.60 Ln (1,000 SF of gross leasable floor area) + 2.29; 61% inbound/39% outbound
- PM Peak Hour Trip Equation: Ln (trips) = 0.66 Ln (1,000 SF of gross leasable floor area) + 3.40; 48% inbound/52% outbound

[7] Shopping Center pass-by trip percentage based on ITE Trip Generation Handbook, June 2004 using the following formula (applied only to net external shopping center trips):
Pass-by Trip Reduction of 20% calculated based on the following: Ln (trips) = -0.29 Ln (1,000 SF of gross leasable floor area) + 5.0
Shopping center pass-by trip reduction of 20% taken after transit trip and internal capture credits.
[8] ITE Land Use Code 445 (Multiplex Movie Theater) trip generation rates.
- Daily Trip Rate: assumed to be ten times PM peak hour trips
- AM Peak Hour Rate: not available
- PM Peak Hour Trip Rate: 13.64 trips/Screen; 45% inbound/55% outbound

[9] Daily and PM peak hour internal capture rates based on similar daily and PM peak hour internal capture rates for the shopping center land use component.
[10] Based on the Traffic Study for the Tierra Luna Specific Plan Project, Table 6, prepared by Raju Associates, January 2009.

Table 2

ALTERNATIVE ANALYSIS - SUMMARY AND COMPARISON OF TRIP GENERATION ESTIMATES

25-Apr-11

SCENARIOS	DAILY TRIP ENDS VOLUMES	AM PEAK HOUR VOLUMES			PM PEAK HOUR VOLUMES		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project [1]	32,118	1,052	662	1,714	1,363	1,735	3,098
Alternative A - No Project [1]	0	0	0	0	0	0	0
Difference from Proposed Project	(32,118)	(1,052)	(662)	(1,714)	(1,363)	(1,735)	(3,098)
% Difference	-100%	-100%	-100%	-100%	-100%	-100%	-100%
Alternative B - Existing Specific Plan Build-Out [1]	12,096	1,492	284	1,776	275	1,303	1,578
Difference from Proposed Project	(20,022)	440	(378)	62	(1,088)	(432)	(1,520)
% Difference	-62%	42%	-57%	4%	-80%	-25%	-49%
Alternative C - Reduced Density Alternative [1]	25,836	859	546	1,405	1,107	1,385	2,492
Difference from Proposed Project	(6,282)	(193)	(116)	(309)	(256)	(350)	(606)
% Difference	-20%	-18%	-18%	-18%	-19%	-20%	-20%
Alternative D - Reduced Site Alternative [1]	32,118	1,052	662	1,714	1,363	1,735	3,098
Difference from Proposed Project	0	0	0	0	0	0	0
% Difference	0%	0%	0%	0%	0%	0%	0%
Alternative E - All Commerical Alternative [1]	29,771	1,058	368	1,426	1,199	1,741	2,940
Difference from Proposed Project	(2,347)	6	(294)	(288)	(164)	6	(158)
% Difference	-7%	1%	-44%	-17%	-12%	0%	-5%
Alternative F - Manarino Alternative [2]	26,391	594	235	829	1,086	1,391	2,477
Difference from Proposed Project	(5,727)	(458)	(427)	(885)	(277)	(344)	(621)
% Difference	-18%	-44%	-65%	-52%	-20%	-20%	-20%

Sources:

[1] Trip generation estimates obtained from the Draft Traffic Study for the Tierra Luna Specific Plan Project, prepared by Raju Associates, Inc., January 2009, Table 20.

[2] Refer to Table 1 for the Manarino Alternative project trip generation

Table 3
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
	City of Downey							
23	Ardis Avenue/ Imperial Highway	AM	0.528	A	0.531	A	0.003	NO
		PM	0.534	A	0.599	A	0.065	NO
33	Bellflower Boulevard/ I-105 Eastbound Ramps	AM	0.657	B	0.673	B	0.016	NO
		PM	0.711	C	0.785	C	0.074	NO
32	Bellflower Boulevard/ I-105 Westbound Ramps	AM	0.699	B	0.726	C	0.027	NO
		PM	0.675	B	0.743	C	0.068	NO
34	Bellflower Boulevard/ Foster Road	AM	0.755	C	0.760	C	0.005	NO
		PM	0.659	B	0.683	B	0.024	NO
24	Bellflower Boulevard/ Imperial Highway	AM	1.173	F	1.216	F	0.043	YES
		PM	1.224	F	1.323	F	0.099	YES
25	Bellflower Boulevard/ Congressman Steve Horn Way	AM	0.447	A	0.476	A	0.029	NO
		PM	0.440	A	0.543	A	0.103	NO
27	Bellflower Boulevard/ Stewart and Gray Road	AM	0.724	C	0.793	C	0.069	NO
		PM	0.717	C	0.826	D	0.109	NO
26	Bellflower Boulevard/ Washburn Road	AM	0.527	A	0.603	B	0.076	NO
		PM	0.455	A	0.593	A	0.138	NO
73	Brookshire Avenue/ Firestone Boulevard	AM	0.616	B	0.620	B	0.004	NO
		PM	0.802	D	0.821	D	0.019	NO
72	Brookshire Avenue/ Florence Avenue	AM	0.655	B	0.658	B	0.003	NO
		PM	0.778	C	0.782	C	0.004	NO
74	Brookshire Avenue/ Imperial Highway	AM	0.761	C	0.764	C	0.003	NO
		PM	0.750	C	0.763	C	0.013	NO
31	Clark Avenue/ Foster Road	AM	0.689	B	0.696	B	0.007	NO
		PM	0.534	A	0.549	A	0.015	NO
22	Clark Avenue/ Imperial Highway	AM	0.671	B	0.679	B	0.008	NO
		PM	0.584	A	0.622	B	0.038	NO
53	Downey Avenue/ Alameda Street	AM	0.417	A	0.419	A	0.002	NO
		PM	0.454	A	0.462	A	0.008	NO
51	Downey Avenue/ Firestone Boulevard	AM	0.584	A	0.593	A	0.009	NO
		PM	0.798	C	0.816	D	0.018	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
50	Downey Avenue/	AM	0.674	B	0.674	B	0.000	NO
	Florence Avenue	PM	0.682	B	0.684	B	0.002	NO
55	Downey Avenue/	AM	0.515	A	0.515	A	0.000	NO
	Gardendale Street	PM	0.555	A	0.555	A	0.000	NO
54	Downey Avenue/	AM	0.721	C	0.725	C	0.004	NO
	Imperial Highway	PM	0.607	B	0.621	B	0.014	NO
52	Downey Avenue/	AM	0.584	A	0.591	A	0.007	NO
	Stewart and Gray Road	PM	0.736	C	0.767	C	0.031	NO
103	Erickson Avenue/	AM	0.285	A	0.285	A	0.000	NO
	Imperial Highway Eastbound Ramps [c]	PM	0.255	A	0.255	A	0.000	NO
102	Erickson Avenue/	AM	0.307	A	0.307	A	0.000	NO
	Imperial Highway Westbound Ramps [c]	PM	0.241	A	0.241	A	0.000	NO
105	Lakewood Boulevard/	AM	0.390	A	0.400	A	0.010	NO
	3rd Street-Stonewood Street	PM	0.545	A	0.591	A	0.046	NO
40	Lakewood Boulevard/	AM	0.839	D	0.850	D	0.011	NO
	5th Street	PM	0.918	E	0.975	E	0.057	NO
19	Lakewood Boulevard/	AM	0.381	A	0.405	A	0.024	NO
	Alameda Street	PM	0.547	A	0.615	B	0.068	NO
16	Lakewood Boulevard/	AM	0.553	A	0.567	A	0.014	NO
	Bellflower Boulevard	PM	0.557	A	0.620	B	0.063	NO
104	Lakewood Boulevard/	AM	0.519	A	0.528	A	0.009	NO
	Cherokee Drive	PM	0.641	B	0.673	B	0.032	NO
20	Lakewood Boulevard/	AM	0.421	A	0.323	A	-0.098	NO
	Clark Avenue	PM	0.480	A	0.415	A	-0.065	NO
75	Lakewood Boulevard/	AM	0.469	A	0.490	A	0.021	NO
	Cleta Street	PM	0.432	A	0.473	A	0.041	NO
76	Lakewood Boulevard/	AM	0.602	B	0.626	B	0.024	NO
	Donovan Street	PM	0.476	A	0.531	A	0.055	NO
41	Lakewood Boulevard/	AM	0.813	D	0.835	D	0.022	NO
	Firestone Boulevard [a]	PM	0.837	D	0.926	E	0.089	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
39	Lakewood Boulevard/	AM	0.872	D	0.884	D	0.012	NO
	Florence Avenue	PM	0.935	E	0.973	E	0.038	NO
38	Lakewood Boulevard/	AM	1.088	F	1.095	F	0.007	NO
	Gallatin Road	PM	1.077	F	1.113	F	0.036	YES
29	Lakewood Boulevard/	AM	0.906	E	0.912	E	0.006	NO
	Gardendale Street	PM	0.925	E	0.951	E	0.026	NO
28	Lakewood Boulevard/	AM	0.686	B	0.716	C	0.030	NO
	I-105 Westbound Ramps-Eastbound Off-Ramp	PM	0.831	D	0.887	D	0.056	NO
37	Lakewood Boulevard/	AM	0.689	B	0.717	C	0.028	NO
	I-5 Southbound Ramps	PM	0.716	C	0.782	C	0.066	NO
21	Lakewood Boulevard/	AM	0.664	B	0.700	B	0.036	NO
	Imperial Highway	PM	0.792	C	0.833	D	0.041	NO
18	Lakewood Boulevard/	AM	0.414	A	0.424	A	0.010	NO
	Landing Center Driveway	PM	0.611	B	0.678	B	0.067	NO
30	Lakewood Boulevard/	AM	0.798	C	0.810	D	0.012	NO
	Rosecrans Avenue [a]	PM	0.879	D	0.903	E	0.024	NO
17	Lakewood Boulevard/	AM	0.778	C	0.813	D	0.035	NO
	Stewart and Gray Road	PM	0.885	D	0.979	E	0.094	NO
36	Lakewood Boulevard/	AM	0.725	C	0.732	C	0.007	NO
	Vista Del Rosa Street-I-5 Northbound Off-Ramp	PM	0.916	E	0.952	E	0.036	NO
48	Little Lake Road-I-605 Southbound Ramps/	AM	0.796	C	0.799	C	0.003	NO
	Florence Avenue	PM	0.951	E	0.957	E	0.006	NO
69	Old River Road/	AM	0.713	C	0.715	C	0.002	NO
	Firestone Boulevard-Burns Avenue	PM	0.955	E	0.964	E	0.009	NO
71	Old River Road/	AM	0.772	C	0.773	C	0.001	NO
	Imperial Highway	PM	0.766	C	0.773	C	0.007	NO
70	Old River Road/	AM	0.739	C	0.742	C	0.003	NO
	Stewart and Gray Road	PM	0.739	C	0.743	C	0.004	NO
68	Old River Road-Tecum Road/	AM	0.856	D	0.857	D	0.001	NO
	Florence Avenue	PM	0.982	E	0.984	E	0.002	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
62	Paramount Boulevard/	AM	0.649	B	0.654	B	0.005	NO
	Alameda Street	PM	0.691	B	0.707	C	0.016	NO
60	Paramount Boulevard/	AM	0.874	D	0.878	D	0.004	NO
	Firestone Boulevard	PM	0.996	E	1.008	F	0.012	NO
59	Paramount Boulevard/	AM	0.931	E	0.934	E	0.003	NO
	Florence Avenue	PM	1.068	F	1.074	F	0.006	NO
64	Paramount Boulevard/	AM	0.664	B	0.665	B	0.001	NO
	Gardendale Street	PM	0.761	C	0.764	C	0.003	NO
57	Paramount Boulevard/	AM	0.758	C	0.758	C	0.000	NO
	I-5 Northbound Ramps	PM	1.036	F	1.044	F	0.008	NO
58	Paramount Boulevard/	AM	0.890	D	0.891	D	0.001	NO
	I-5 Southbound Ramps [b]	PM	1.093	F	1.101	F	0.008	NO
63	Paramount Boulevard/	AM	0.812	D	0.814	D	0.002	NO
	Imperial Highway	PM	0.953	E	0.965	E	0.012	NO
61	Paramount Boulevard/	AM	0.840	D	0.845	D	0.005	NO
	Stewart and Gray Road	PM	0.928	E	0.935	E	0.007	NO
56	Paramount Boulevard/	AM	0.835	D	0.838	D	0.003	NO
	Telegraph Road	PM	0.852	D	0.863	D	0.011	NO
65	Rives Avenue/	AM	0.678	B	0.682	B	0.004	NO
	Firestone Boulevard	PM	0.738	C	0.745	C	0.007	NO
67	Rives Avenue/	AM	0.490	A	0.491	A	0.001	NO
	Imperial Highway [b]	PM	0.507	A	0.523	A	0.016	NO
66	Rives Avenue/	AM	0.572	A	0.573	A	0.001	NO
	Stewart and Gray Road	PM	0.682	B	0.691	B	0.009	NO
35	Rosemead Boulevard-Lakewood Boulevard/	AM	1.039	F	1.044	F	0.005	NO
	Telegraph Road [a]	PM	1.215	F	1.223	F	0.008	NO
47	Stewart and Gray Road/	AM	0.609	B	0.622	B	0.013	NO
	Firestone Boulevard	PM	0.847	D	0.901	E	0.054	NO
49	Studebaker Road/	AM	0.850	D	0.852	D	0.002	NO
	Florence Avenue	PM	0.839	D	0.843	D	0.004	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
42	Woodruff Avenue/	AM	0.618	B	0.618	B	0.000	NO
	Firestone Boulevard (East)	PM	0.671	B	0.671	B	0.000	NO
46	Woodruff Avenue/	AM	0.500	A	0.502	A	0.002	NO
	Foster Road	PM	0.551	A	0.560	A	0.009	NO
45	Woodruff Avenue/	AM	0.721	C	0.730	C	0.009	NO
	Imperial Highway	PM	0.796	C	0.814	D	0.018	NO
43	Woodruff Avenue/	AM	0.526	A	0.535	A	0.009	NO
	Stewart and Gray Road	PM	0.655	B	0.703	C	0.048	NO
44	Woodruff Avenue/	AM	0.457	A	0.457	A	0.000	NO
	Washburn Road	PM	0.496	A	0.496	A	0.000	NO
	City of Bellflower							
10	Bellflower Boulevard/	AM	0.633	B	0.633	B	0.000	NO
	Alondra Boulevard	PM	0.800	C	0.800	C	0.000	NO
12	Bellflower Boulevard/	AM	0.880	D	0.881	D	0.001	NO
	Beverly Street-SR-91 Eastbound Ramps	PM	0.862	D	0.862	D	0.000	NO
9	Bellflower Boulevard/	AM	0.755	C	0.756	C	0.001	NO
	Compton Boulevard	PM	0.823	D	0.827	D	0.004	NO
8	Bellflower Boulevard/	AM	0.765	C	0.768	C	0.003	NO
	Rosecrans Avenue	PM	0.816	D	0.820	D	0.004	NO
11	Bellflower Boulevard/	AM	0.791	C	0.792	C	0.001	NO
	SR-91 Eastbound On-Ramp	PM	1.003	F	1.003	F	0.000	NO
5	Clark Avenue/	AM	0.647	B	0.649	B	0.002	NO
	Alondra Boulevard	PM	0.812	D	0.820	D	0.008	NO
4	Clark Avenue/	AM	0.653	B	0.658	B	0.005	NO
	Compton Boulevard	PM	0.707	C	0.717	C	0.010	NO
7	Clark Avenue-Palm Street/	AM	0.590	A	0.591	A	0.001	NO
	SR-91 Eastbound On-Ramp	PM	0.646	B	0.649	B	0.003	NO
3	Clark Avenue/	AM	0.570	A	0.575	A	0.005	NO
	Rosecrans Avenue	PM	0.643	B	0.656	B	0.013	NO
6	Clark Avenue/	AM	0.487	A	0.487	A	0.000	NO
	SR-91 Westbound Off-Ramp	PM	0.627	B	0.631	B	0.004	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
90	Lakewood Boulevard/	AM	0.729	C	0.729	C	0.000	NO
	Alondra Boulevard	PM	1.031	F	1.039	F	0.008	NO
89	Lakewood Boulevard/	AM	0.903	E	0.911	E	0.008	NO
	Compton Boulevard-Somerset Boulevard	PM	0.940	E	0.950	E	0.010	NO
1	Lakewood Boulevard-Park Street/	AM	0.641	B	0.642	B	0.001	NO
	SR-91 Westbound Ramps	PM	0.820	D	0.824	D	0.004	NO
2	Lakewood Boulevard/	AM	0.640	B	0.641	B	0.001	NO
	SR-91 Eastbound Ramps	PM	0.727	C	0.729	C	0.002	NO
15	Woodruff Avenue/	AM	0.760	C	0.762	C	0.002	NO
	Alondra Boulevard	PM	0.970	E	0.973	E	0.003	NO
14	Woodruff Avenue/	AM	0.592	A	0.593	A	0.001	NO
	Compton Boulevard	PM	0.626	B	0.632	B	0.006	NO
13	Woodruff Avenue/	AM	0.835	D	0.839	D	0.004	NO
	Rosecrans Avenue	PM	0.856	D	0.870	D	0.014	NO
	City of Norwalk							
87	Firestone Boulevard/	AM	0.756	C	0.757	C	0.001	NO
	Imperial Highway-Orr and Day Road [a]	PM	0.798	C	0.818	D	0.020	NO
79	Flatbush Avenue-I-605 Southbound Ramps/	AM	0.753	C	0.760	C	0.007	NO
	Imperial Highway	PM	0.820	D	0.827	D	0.007	NO
81	Flatbush Avenue-I-605 Southbound Off-Ramp/	AM	0.756	C	0.756	C	0.000	NO
	Rosecrans Avenue	PM	0.881	D	0.885	D	0.004	NO
78	Hoxie Avenue-I-605 Northbound Ramps/	AM	0.910	E	0.924	E	0.014	NO
	Firestone Boulevard	PM	0.907	E	0.930	E	0.023	NO
80	Hoxie Avenue/	AM	0.771	C	0.772	C	0.001	NO
	Imperial Highway	PM	0.969	E	0.981	E	0.012	NO
82	I-605 Northbound Off-Ramp-I-105 Westbound On-Ramp/	AM	0.712	C	0.714	C	0.002	NO
	Rosecrans Avenue	PM	0.892	D	0.897	D	0.005	NO
77	I-605 Southbound Ramps/	AM	0.838	D	0.856	D	0.018	NO
	Firestone Boulevard	PM	0.970	E	1.019	F	0.049	YES
88	Pioneer Boulevard/	AM	1.025	F	1.034	F	0.009	NO
	Imperial Highway	PM	0.925	E	0.936	E	0.011	NO

Table 3 (Continued)
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE

NO.	INTERSECTION	PEAK HOUR	[1] PRE-PROJECT CONDITIONS V/C	LOS	[2] WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT
83	Studebaker Road/	AM	0.809	D	0.821	D	0.012	NO
	Firestone Boulevard	PM	0.875	D	0.892	D	0.017	NO
84	Studebaker Road/	AM	0.861	D	0.865	D	0.004	NO
	Imperial Highway	PM	0.818	D	0.827	D	0.009	NO
86	Studebaker Road/	AM	0.836	D	0.837	D	0.001	NO
	Rosecrans Avenue	PM	0.967	E	0.971	E	0.004	NO
85	Studebaker Road/	AM	0.875	D	0.875	D	0.000	NO
	I-105 Westbound On-Ramp-Eastbound Off-Ramp	PM	0.834	D	0.838	D	0.004	NO
	City of Paramount							
93	Downey Avenue/	AM	0.912	E	0.913	E	0.001	NO
	Alondra Boulevard	PM	0.814	D	0.818	D	0.004	NO
91	Downey Avenue/	AM	0.996	E	0.998	E	0.002	NO
	Rosecrans Avenue	PM	1.070	F	1.075	F	0.005	NO
92	Downey Avenue/	AM	0.783	C	0.784	C	0.001	NO
	Somerset Boulevard	PM	0.785	C	0.788	C	0.003	NO
94	Paramount Boulevard/	AM	0.777	C	0.777	C	0.000	NO
	Rosecrans Avenue	PM	0.860	D	0.861	D	0.001	NO
95	Paramount Boulevard/	AM	0.888	D	0.888	D	0.000	NO
	Somerset Boulevard	PM	0.911	E	0.911	E	0.000	NO
	City of South Gate							
98	Garfield Avenue/	AM	0.941	E	0.944	E	0.003	NO
	Firestone Boulevard	PM	1.243	F	1.253	F	0.010	NO
99	Garfield Avenue/	AM	0.688	B	0.689	B	0.001	NO
	Imperial Highway	PM	0.719	C	0.725	C	0.006	NO
100	I-710 Northbound Off-Ramp/	AM	0.818	D	0.820	D	0.002	NO
	Firestone Boulevard	PM	0.999	E	1.008	F	0.009	NO
101	I-710 Southbound Off-Ramp/	AM	0.850	D	0.854	D	0.004	NO
	Firestone Boulevard	PM	1.086	F	1.095	F	0.009	NO
96	Paramount Boulevard/	AM	0.875	D	0.875	D	0.000	NO
	Somerset Ranch Road North	PM	0.890	D	0.890	D	0.000	NO
97	Paramount Boulevard/	AM	0.736	C	0.736	C	0.000	NO
	Somerset Ranch Road South	PM	0.827	D	0.829	D	0.002	NO

[a] Los Angeles County Congestion Management Program (CMP) monitoring location.
[b] Unsignalized intersections - stop-controlled on all approaches.
[c] Unsignalized intersections - stop-controlled on minor approach(es).

Table 4
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS
PROJECT ALTERNATIVE F: MANARINO ALTERNATIVE (WITH PROJECT PLUS MITIGATION)

			[1]		[2]				[3]			
NO.	INTERSECTION	PEAK HOUR	PRE-PROJECT CONDITIONS V/C	LOS	WITH PROJECT ALT. F CONDITIONS V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT	WITH PROJECT ALT. F MITIGATION V/C	LOS	CHANGE V/C [(3)-(1)]	MITIGATED
City of Downey												
24	Bellflower Boulevard/	AM	1.173	F	1.216	F	0.043	YES	1.091	F	-0.082	YES
	Imperial Highway	PM	1.224	F	1.323	F	0.099	YES	1.212	F	-0.012	YES
38	Lakewood Boulevard/	AM	1.088	F	1.095	F	0.007	NO	1.048	F	-0.040	---
	Gallatin Road	PM	1.077	F	1.113	F	0.036	YES	1.074	F	-0.003	YES
City of Norwalk												
77	I-605 Southbound Ramps/	AM	0.838	D	0.856	D	0.018	NO	0.796	C	-0.042	---
	Firestone Boulevard	PM	0.970	E	1.019	F	0.049	YES	0.970	E	0.000	YES

Table 5

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Typical Month (April) Conditions

Month: Apr

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekday Pkg Rate[3]	4.0 /KSF	0.20 /Seat	1.25 /Rm	3.1 /KSF	
Gross Spaces	4,140 Spc.	960 Spc.	188 Spc.	927 Spc.	
Adjusted Gross Spaces[4]	2,981 Spc.	864 Spc.	152 Spc.	927 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	74	0	106	26	206
7:00 AM	159	0	107	259	525
8:00 AM	449	0	115	659	1,223
9:00 AM	940	0	105	858	1,903
10:00 AM	1,422	0	97	927	2,446
11:00 AM	1,763	0	97	891	2,751
12:00 PM	1,934	42	91	785	2,852
1:00 PM	2,004	83	91	805	2,983
2:00 PM	**1,934**	**99**	**97**	**927**	**3,057**
3:00 PM	1,864	102	97	891	2,954
4:00 PM	1,864	102	99	785	2,850
5:00 PM	1,904	116	99	438	2,557
6:00 PM	1,904	116	94	218	2,332
7:00 PM	1,904	147	88	87	2,226
8:00 PM	1,664	178	93	61	1,996
9:00 PM	1,151	178	99	26	1,454
10:00 PM	661	147	110	9	927
11:00 PM	230	116	112	0	458
12:00 AM	0	73	111	0	184
Effective Pkg Rate at Peak Hour	**1.87 /KSF**	**0.02 /Seat**	**0.65 /Rm**	**3.09 /KSF**	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

Table 5 (Continued)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Typical Month (April) Conditions

Month: Apr

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekend Pkg Rate[3]	4.5 /KSF	0.27 /Seat	1.08 /Rm	0.31 /KSF	
Gross Spaces	4,658 Spc.	1,296 Spc.	162 Spc.	93 Spc.	
Adjusted Gross Spaces[4]	3,354 Spc.	1,166 Spc.	131 Spc.	93 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	83	0	94	0	177
7:00 AM	180	0	96	18	294
8:00 AM	426	0	99	56	581
9:00 AM	978	0	89	75	1,142
10:00 AM	1,362	0	81	83	1,526
11:00 AM	1,667	0	81	93	1,841
12:00 PM	1,939	147	76	83	2,245
1:00 PM	2,097	314	76	75	2,562
2:00 PM	**2,255**	**379**	**81**	**56**	**2,771**
3:00 PM	2,255	384	81	37	2,757
4:00 PM	2,176	384	84	18	2,662
5:00 PM	2,063	425	85	10	2,583
6:00 PM	1,838	425	87	4	2,354
7:00 PM	1,725	555	86	0	2,366
8:00 PM	1,533	685	91	0	2,309
9:00 PM	1,228	685	96	0	2,009
10:00 PM	857	685	103	0	1,645
11:00 PM	339	545	108	0	992
12:00 AM	0	343	105	0	448
Effective Pkg Rate at Peak Hour	**2.18 /KSF**	**0.08 /Seat**	**0.54 /Rm**	**0.19 /KSF**	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates reflect relationships between the weekend parking demand ratios and the peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

Table 6

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Peak Summer Month (July) Conditions

Month: Jul

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekday Pkg Rate[3]	4.0 /KSF	0.20 /Seat	1.25 /Rm	3.1 /KSF	
Gross Spaces	4,140 Spc.	960 Spc.	188 Spc.	927 Spc.	
Adjusted Gross Spaces[4]	2,981 Spc.	864 Spc.	152 Spc.	927 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	74	0	115	25	214
7:00 AM	161	0	116	246	523
8:00 AM	453	0	123	626	1,202
9:00 AM	948	0	111	815	1,874
10:00 AM	1,437	0	102	881	2,420
11:00 AM	1,782	0	102	846	2,730
12:00 PM	1,955	106	96	745	2,902
1:00 PM	2,027	222	96	764	3,109
2:00 PM	**1,955**	**267**	**102**	**881**	**3,205**
3:00 PM	1,884	272	102	846	3,104
4:00 PM	1,884	272	105	745	3,006
5:00 PM	1,925	303	105	415	2,748
6:00 PM	1,925	303	101	207	2,536
7:00 PM	1,925	393	95	83	2,496
8:00 PM	1,682	484	101	58	2,325
9:00 PM	1,162	484	107	25	1,778
10:00 PM	667	393	119	8	1,187
11:00 PM	232	317	122	0	671
12:00 AM	0	197	121	0	318
Effective Pkg Rate at Peak Hour	1.89 /KSF	0.06 /Seat	0.68 /Rm	2.94 /KSF	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

Table 6 (Continued)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Peak Summer Month (July) Conditions

Month: Jul

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekend Pkg Rate[3]	4.5 /KSF	0.27 /Seat	1.08 /Rm	0.31 /KSF	
Gross Spaces	4,658 Spc.	1,296 Spc.	162 Spc.	93 Spc.	
Adjusted Gross Spaces[4]	3,354 Spc.	1,166 Spc.	131 Spc.	93 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	83	0	103	0	186
7:00 AM	181	0	103	18	302
8:00 AM	429	0	106	53	588
9:00 AM	986	0	95	71	1,152
10:00 AM	1,375	0	86	79	1,540
11:00 AM	1,683	0	86	89	1,858
12:00 PM	1,959	229	81	79	2,348
1:00 PM	2,120	491	81	71	2,763
2:00 PM	**2,281**	**594**	**86**	**53**	**3,014**
3:00 PM	2,281	600	86	35	3,002
4:00 PM	2,200	600	90	18	2,908
5:00 PM	2,086	663	91	9	2,849
6:00 PM	1,858	663	93	4	2,618
7:00 PM	1,744	870	92	0	2,706
8:00 PM	1,549	1,076	98	0	2,723
9:00 PM	1,241	1,076	103	0	2,420
10:00 PM	865	1,076	112	0	2,053
11:00 PM	342	857	117	0	1,316
12:00 AM	0	539	114	0	653
Effective Pkg Rate at Peak Hour	2.20 /KSF	0.12 /Seat	0.57 /Rm	0.18 /KSF	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates reflect relationships between the weekend parking demand ratios and the peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

Table 7

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Peak Holiday/Shopping Month (December) Conditions

Month: Dec

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekday Pkg Rate[3]	4.0 /KSF	0.20 /Seat	1.25 /Rm	3.1 /KSF	
Gross Spaces	4,140 Spc.	960 Spc.	188 Spc.	927 Spc.	
Adjusted Gross Spaces[4]	2,981 Spc.	864 Spc.	152 Spc.	927 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	97	0	79	26	202
7:00 AM	224	0	82	259	565
8:00 AM	633	0	93	659	1,385
9:00 AM	1,230	0	85	858	2,173
10:00 AM	1,863	0	80	927	2,870
11:00 AM	2,385	0	80	891	3,356
12:00 PM	2,757	49	76	785	3,667
1:00 PM	2,981	98	76	805	3,960
2:00 PM	**2,981**	**117**	**80**	**927**	**4,105**
3:00 PM	2,981	120	80	891	4,072
4:00 PM	2,869	120	81	785	3,855
5:00 PM	2,608	135	79	438	3,260
6:00 PM	2,496	135	73	218	2,922
7:00 PM	2,385	173	67	87	2,712
8:00 PM	2,124	211	71	61	2,467
9:00 PM	1,677	211	75	26	1,989
10:00 PM	969	173	83	9	1,234
11:00 PM	336	138	84	0	558
12:00 AM	0	87	83	0	170
Effective Pkg Rate at Peak Hour	2.88 /KSF	0.02 /Seat	0.53 /Rm	3.09 /KSF	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

Table 7 (Continued)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Peak Holiday/Shopping Month (December) Conditions

Month: Dec

Land Use	Retail	Multiplex	Business Hotel	Office	
Size	1,035.0 KSF	4,800 Seats[5]	150 Rms	300.0 KSF	
Peak Pkg Rate[2]	4.5 /KSF	0.27 /Seat	1.25 /Rm	3.1 /KSF	
Weekend Pkg Rate[3]	4.5 /KSF	0.27 /Seat	1.08 /Rm	0.31 /KSF	
Gross Spaces	4,658 Spc.	1,296 Spc.	162 Spc.	93 Spc.	
Adjusted Gross Spaces[4]	3,354 Spc.	1,166 Spc.	131 Spc.	93 Spc.	
Time of Day	Number of Spaces	Number of Spaces	Number of Spaces	Number of Spaces	Shared Parking Demand
6:00 AM	106	0	71	0	177
7:00 AM	252	0	73	18	343
8:00 AM	588	0	79	56	723
9:00 AM	1,509	0	71	75	1,655
10:00 AM	2,222	0	66	83	2,371
11:00 AM	2,558	0	66	93	2,717
12:00 PM	2,977	167	62	83	3,289
1:00 PM	3,228	360	62	75	3,725
2:00 PM	**3,354**	**435**	**66**	**56**	**3,911**
3:00 PM	3,354	440	66	37	3,897
4:00 PM	3,228	440	68	18	3,754
5:00 PM	3,061	485	67	10	3,623
6:00 PM	2,725	485	68	4	3,282
7:00 PM	2,557	636	67	0	3,260
8:00 PM	2,264	786	71	0	3,121
9:00 PM	1,803	786	74	0	2,663
10:00 PM	1,257	786	80	0	2,123
11:00 PM	503	626	83	0	1,212
12:00 AM	0	393	80	0	473
Effective Pkg Rate at Peak Hour	**3.24 /KSF**	**0.09 /Seat**	**0.44 /Rm**	**0.19 /KSF**	

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates reflect relationships between the weekend parking demand ratios and the peak parking demand ratios, as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

[5] Assumed 300 seats are accommodated for each of the 16 screens.

APPENDIX A

INTERNAL CAPTURE WORKSHEETS
DAILY AND PM PEAK HOUR

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Analyst: CST
Date: 4/28/2011

Name of Dvlpt: Tierra Luna Specific Plan
Time Period: Weekday Daily

LAND USE A Retail

ITE LU Code: 820: Shopping Center
Size: 1,035,000 GLSF

	Total	*Internal*	*External*
Enter	13959	474	13485
Exit	13959	354	13605
Total	27918	**828**	27090
%	100%	3%	97%

Exit to External: 13605
Enter from External: 13485

11% 1535 Demand
144 Balanced
33% 144 Demand

9% 1256 Demand
166 Balanced
38% 166 Demand

3% 419 Demand
210 Balanced
15% 210 Demand

4% 558 Demand
308 Balanced
22% 308 Demand

LAND USE B Residential

ITE LU Code: 310: Hotel
Size: 150 rms

	Total	*Internal*	*External*
Enter	436	157	279
Exit	436	166	270
Total	872	**323**	549
%	100%	37%	63%

Exit to External: 270
Enter from External: 279

LAND USE C Office

ITE LU Code: 710: General Office
Size: 300,000 GSF

	Total	*Internal*	*External*
Enter	1399	210	1189
Exit	1399	321	1078
Total	2798	**531**	2267
%	100%	19%	81%

Enter from External: 1189
Exit to External: 1078

Demand: 3% 13
Balanced: 13
Demand: 2% 28

Demand: 0% 0
Balanced: 0
Demand: 0% 0

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total
Enter	13485	279	1189	14953
Exit	13605	270	1078	14953
Total	27090	549	2267	29906
Single-Use Trip Gen. Est.	27918	872	2798	31588

INTERNAL CAPTURE
5%

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Analyst: CST
Date: 4/28/2011

Name of Dvlpt: Tierra Luna Specific Plan
Time Period: PM Peak Hour

LAND USE A Retail

ITE LU Code 820: Shopping Center
Size 1,035,000 GLSF

	Total	*Internal*	*External*
Enter	1264	**41**	1223
Exit	1370	**31**	1339
Total	2634	72	2562
%	100%	3%	97%

Exit to External: 1339
Enter from External: 1223

12% 164 Demand
9% 114 Demand
3% 41 Demand
2% 25 Demand

11 Balanced
16 Balanced
20 Balanced
25 Balanced

31% 11 Demand
53% 16 Demand
31% 20 Demand
23% 71 Demand

LAND USE B Residential

ITE LU Code 310: Hotel
Size 150 rms

	Total	*Internal*	*External*
Enter	35	**12**	23
Exit	31	**16**	15
Total	66	28	38
%	100%	42%	58%

Exit to External: 15
Enter from External: 23

LAND USE C Office

ITE LU Code 710: General Office
Size 300,000 GSF

	Total	*Internal*	*External*
Enter	64	**20**	44
Exit	310	**26**	284
Total	374	46	328
%	100%	12%	88%

Enter from External: 44
Exit to External: 284

Demand: 2% 1
Balanced: 1
Demand: 2% 6
Demand: 0% 0
Balanced: 0
Demand: 0% 0

Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total
Enter	1223	23	44	1290
Exit	1339	15	284	1638
Total	2562	38	328	2928
Single-Use Trip Gen. Est.	2634	66	374	3074

INTERNAL CAPTURE
5%

APPENDIX B

ICU DATA WORKSHEETS
WITH MANARINO PROJECT ALTERNATIVE –
AM AND PM PEAK HOURS

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ SR-91 WB Ramps
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: SR-91 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU1

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1218	3145	0.387	3	1221	3145	0.388 *	0	1221	3145	0.388 *	0	1221	3145	0.388 *
Nb Right	641	1655	0.387 *	0	641	1655	0.387	0	641	1655	0.387	0	641	1655	0.387
Sb Left	30	1600	0.019 *	0	30	1600	0.019 *	0	30	1600	0.019 *	0	30	1600	0.019 *
Sb Thru	1479	4800	0.314	0	1479	4800	0.314	0	1479	4800	0.314	0	1479	4800	0.314
Sb Right	27	0	-	0	27	0	-	0	27	0	-	0	27	0	-
Eb Left	26	0	0.016	0	26	0	0.016	0	26	0	0.016	0	26	0	0.016
Eb Thru	21	1600	0.075 *	0	21	1600	0.075 *	0	21	1600	0.075 *	0	21	1600	0.075 *
Eb Right	73	0	-	0	73	0	-	0	73	0	-	0	73	0	-
Wb Left	144	2383	0.060 *	0	144	2383	0.060 *	0	144	2383	0.060 *	0	144	2383	0.060 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	117	2152	0.054	0	117	2152	0.054	0	117	2152	0.054	0	117	2152	0.054
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.641				0.642				0.642				0.642
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ SR-91 WB Ramps
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: SR-91 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU1

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1495	3200	0.467 *	11	1506	3200	0.471 *	0	1506	3200	0.471 *	0	1506	3200	0.471 *
Nb Right	627	1600	0.392	0	627	1600	0.392	0	627	1600	0.392	0	627	1600	0.392
Sb Left	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *
Sb Thru	1424	4800	0.301	12	1436	4800	0.304	0	1436	4800	0.304	0	1436	4800	0.304
Sb Right	22	0	-	0	22	0	-	0	22	0	-	0	22	0	-
Eb Left	34	0	0.021	0	34	0	0.021	0	34	0	0.021	0	34	0	0.021
Eb Thru	34	1600	0.107 *	0	34	1600	0.107 *	0	34	1600	0.107 *	0	34	1600	0.107 *
Eb Right	103	0	-	0	103	0	-	0	103	0	-	0	103	0	-
Wb Left	266	2303	0.116 *	0	266	2303	0.116 *	0	266	2303	0.116 *	0	266	2303	0.116 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	233	2241	0.104	0	233	2241	0.104	0	233	2241	0.104	0	233	2241	0.104
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.820				0.824				0.824				0.824
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ SR-91 EB Ramps
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: SR-91 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU2

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1402	4800	0.360 *	3	1405	4800	0.361 *	0	1405	4800	0.361 *	0	1405	4800	0.361 *
Nb Right	327	0	-	0	327	0	-	0	327	0	-	0	327	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	925	3200	0.289	0	925	3200	0.289	0	925	3200	0.289	0	925	3200	0.289
Sb Right	383	1600	0.239	0	383	1600	0.239	0	383	1600	0.239	0	383	1600	0.239
Eb Left	374	2077	0.180	0	374	2077	0.180	0	374	2077	0.180	0	374	2077	0.180
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	404	2493	0.162	0	404	2493	0.162	0	404	2493	0.162	0	404	2493	0.162
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.640				0.641				0.641				0.641
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ SR-91 EB Ramps
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: SR-91 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU2

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1753	4800	0.420 *	11	1764	4800	0.422 *	0	1764	4800	0.422 *	0	1764	4800	0.422 *
Nb Right	262	0	-	0	262	0	-	0	262	0	-	0	262	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	1207	3200	0.377	12	1219	3200	0.381	0	1219	3200	0.381	0	1219	3200	0.381
Sb Right	290	1600	0.181	0	290	1600	0.181	0	290	1600	0.181	0	290	1600	0.181
Eb Left	337	1625	0.207	0	337	1625	0.207	0	337	1625	0.207	0	337	1625	0.207
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	559	2995	0.187	0	559	2995	0.187	0	559	2995	0.187	0	559	2995	0.187
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.727				0.729				0.729				0.729
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Rosecrans Avenue
Peak hr: AM

N-S St: Clark Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU3

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064
Nb Thru	477	3200	0.192 *	16	493	3200	0.197 *	0	493	3200	0.197 *	0	493	3200	0.197 *
Nb Right	138	0	-	0	138	0	-	0	138	0	-	0	138	0	-
Sb Left	105	1600	0.066 *	0	105	1600	0.066 *	0	105	1600	0.066 *	0	105	1600	0.066 *
Sb Thru	303	3200	0.109	8	311	3200	0.111	0	311	3200	0.111	0	311	3200	0.111
Sb Right	45	0	-	0	45	0	-	0	45	0	-	0	45	0	-
Eb Left	68	1600	0.043	0	68	1600	0.043	0	68	1600	0.043	0	68	1600	0.043
Eb Thru	547	4800	0.131 *	0	547	4800	0.131 *	0	547	4800	0.131 *	0	547	4800	0.131 *
Eb Right	81	0	-	0	81	0	-	0	81	0	-	0	81	0	-
Wb Left	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *
Wb Thru	718	4800	0.160	0	718	4800	0.160	0	718	4800	0.160	0	718	4800	0.160
Wb Right	52	0	-	0	52	0	-	0	52	0	-	0	52	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.570				0.575				0.575				0.575
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Rosecrans Avenue
Peak hr: PM

N-S St: Clark Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU3

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *
Nb Thru	420	3200	0.181	33	453	3200	0.192	0	453	3200	0.192	0	453	3200	0.192
Nb Right	160	0	-	0	160	0	-	0	160	0	-	0	160	0	-
Sb Left	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048
Sb Thru	470	3200	0.164 *	41	511	3200	0.177 *	0	511	3200	0.177 *	0	511	3200	0.177 *
Sb Right	55	0	-	0	55	0	-	0	55	0	-	0	55	0	-
Eb Left	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056
Eb Thru	793	4800	0.195 *	0	793	4800	0.195 *	0	793	4800	0.195 *	0	793	4800	0.195 *
Eb Right	142	0	-	0	142	0	-	0	142	0	-	0	142	0	-
Wb Left	153	1600	0.096 *	0	153	1600	0.096 *	0	153	1600	0.096 *	0	153	1600	0.096 *
Wb Thru	596	4800	0.140	0	596	4800	0.140	0	596	4800	0.140	0	596	4800	0.140
Wb Right	78	0	-	0	78	0	-	0	78	0	-	0	78	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.643				0.656				0.656				0.656
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Somerset Boulevard
Peak hr: AM

N-S St: Clark Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU4

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	114	1600	0.071	0	114	1600	0.071	0	114	1600	0.071	0	114	1600	0.071
Nb Thru	652	3200	0.220 *	16	668	3200	0.225 *	0	668	3200	0.225 *	0	668	3200	0.225 *
Nb Right	53	0	-	0	53	0	-	0	53	0	-	0	53	0	-
Sb Left	75	1600	0.047 *	0	75	1600	0.047 *	0	75	1600	0.047 *	0	75	1600	0.047 *
Sb Thru	451	3200	0.167	8	459	3200	0.169	0	459	3200	0.169	0	459	3200	0.169
Sb Right	83	0	-	0	83	0	-	0	83	0	-	0	83	0	-
Eb Left	110	1600	0.069 *	0	110	1600	0.069 *	0	110	1600	0.069 *	0	110	1600	0.069 *
Eb Thru	544	3200	0.195	0	544	3200	0.195	0	544	3200	0.195	0	544	3200	0.195
Eb Right	79	0	-	0	79	0	-	0	79	0	-	0	79	0	-
Wb Left	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Wb Thru	635	3200	0.218 *	0	635	3200	0.218 *	0	635	3200	0.218 *	0	635	3200	0.218 *
Wb Right	61	0	-	0	61	0	-	0	61	0	-	0	61	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.653				0.658				0.658				0.658
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Somerset Boulevard
Peak hr: PM

N-S St: Clark Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU4

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	125	1600	0.078	0	125	1600	0.078	0	125	1600	0.078	0	125	1600	0.078
Nb Thru	533	3200	0.209 *	33	566	3200	0.219 *	0	566	3200	0.219 *	0	566	3200	0.219 *
Nb Right	136	0	-	0	136	0	-	0	136	0	-	0	136	0	-
Sb Left	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *
Sb Thru	566	3200	0.207	41	607	3200	0.219	0	607	3200	0.219	0	607	3200	0.219
Sb Right	95	0	-	0	95	0	-	0	95	0	-	0	95	0	-
Eb Left	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076
Eb Thru	684	3200	0.252 *	0	684	3200	0.252 *	0	684	3200	0.252 *	0	684	3200	0.252 *
Eb Right	122	0	-	0	122	0	-	0	122	0	-	0	122	0	-
Wb Left	107	1600	0.067 *	0	107	1600	0.067 *	0	107	1600	0.067 *	0	107	1600	0.067 *
Wb Thru	390	3200	0.153	0	390	3200	0.153	0	390	3200	0.153	0	390	3200	0.153
Wb Right	100	0	-	0	100	0	-	0	100	0	-	0	100	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.707				0.717				0.717				0.717
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Alondra Boulevard
Peak hr: AM

N-S St: Clark Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU5

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041
Nb Thru	589	3200	0.222 *	9	598	3200	0.225 *	0	598	3200	0.225 *	0	598	3200	0.225 *
Nb Right	122	0	-	0	122	0	-	0	122	0	-	0	122	0	-
Sb Left	69	1600	0.043 *	0	69	1600	0.043 *	0	69	1600	0.043 *	0	69	1600	0.043 *
Sb Thru	475	3200	0.179	2	477	3200	0.180	0	477	3200	0.180	0	477	3200	0.180
Sb Right	98	0	-	0	98	0	-	0	98	0	-	0	98	0	-
Eb Left	98	1600	0.061 *	0	98	1600	0.061 *	0	98	1600	0.061 *	0	98	1600	0.061 *
Eb Thru	480	3200	0.175	0	480	3200	0.175	0	480	3200	0.175	0	480	3200	0.175
Eb Right	80	0	-	0	80	0	-	0	80	0	-	0	80	0	-
Wb Left	125	1600	0.078	0	125	1600	0.078	0	125	1600	0.078	0	125	1600	0.078
Wb Thru	638	3200	0.220 *	0	638	3200	0.220 *	0	638	3200	0.220 *	0	638	3200	0.220 *
Wb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.647				0.649				0.649				0.649
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Alondra Boulevard
Peak hr: PM

N-S St: Clark Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU5

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *
Nb Thru	657	3200	0.245	12	669	3200	0.249	0	669	3200	0.249	0	669	3200	0.249
Nb Right	127	0	-	0	127	0	-	0	127	0	-	0	127	0	-
Sb Left	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053
Sb Thru	718	3200	0.263 *	26	744	3200	0.271 *	0	744	3200	0.271 *	0	744	3200	0.271 *
Sb Right	123	0	-	0	123	0	-	0	123	0	-	0	123	0	-
Eb Left	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085
Eb Thru	806	3200	0.305 *	0	806	3200	0.305 *	0	806	3200	0.305 *	0	806	3200	0.305 *
Eb Right	170	0	-	0	170	0	-	0	170	0	-	0	170	0	-
Wb Left	116	1600	0.073 *	0	116	1600	0.073 *	0	116	1600	0.073 *	0	116	1600	0.073 *
Wb Thru	677	3200	0.233	0	677	3200	0.233	0	677	3200	0.233	0	677	3200	0.233
Wb Right	67	0	-	0	67	0	-	0	67	0	-	0	67	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.812				0.820				0.820				0.820
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ SR-91 WB Off-Ramp
Peak hr: AM

N-S St: Clark Avenue
E-W St: SR-91 WB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU6

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	712	3200	0.223	3	715	3200	0.223	0	715	3200	0.223	0	715	3200	0.223
Nb Right	0	0 -		0	0	0 -		0	0	0 -		0	0	0 -	
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	854	3200	0.267 *	0	854	3200	0.267 *	0	854	3200	0.267 *	0	854	3200	0.267 *
Sb Right	0	0 -		0	0	0 -		0	0	0 -		0	0	0 -	
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0 -		0	0	0 -		0	0	0 -		0	0	0 -	
Wb Left	191	1590	0.120	0	191	1590	0.120	0	191	1590	0.120	0	191	1590	0.120
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	155	1434	0.108	0	155	1434	0.108	0	155	1434	0.108	0	155	1434	0.108
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.487				0.487				0.487				0.487
LOS		A				A				A				A	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ SR-91 WB Off-Ramp
Peak hr: PM

N-S St: Clark Avenue
E-W St: SR-91 WB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU6

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	825	3200	0.258	11	836	3200	0.261	0	836	3200	0.261	0	836	3200	0.261
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1002	3200	0.313 *	12	1014	3200	0.317 *	0	1014	3200	0.317 *	0	1014	3200	0.317 *
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	321	1501	0.214	0	321	1501	0.214	0	321	1501	0.214	0	321	1501	0.214
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	295	1501	0.197	0	295	1501	0.197	0	295	1501	0.197	0	295	1501	0.197
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.627				0.631				0.631				0.631
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Palm Street-SR-91 EB On-Ramp
Peak hr: AM

N-S St: Clark Avenue
E-W St: Palm Street-SR-91 EB On-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU7

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	17	0	0.005	0	17	0	0.005	0	17	0	0.005	0	17	0	0.005
Nb Thru	674	3200	0.282 *	3	677	3200	0.283 *	0	677	3200	0.283 *	0	677	3200	0.283 *
Nb Right	210	0	-	0	210	0	-	0	210	0	-	0	210	0	-
Sb Left	219	1600	0.137 *	0	219	1600	0.137 *	0	219	1600	0.137 *	0	219	1600	0.137 *
Sb Thru	787	3200	0.261	0	787	3200	0.261	0	787	3200	0.261	0	787	3200	0.261
Sb Right	49	0	-	0	49	0	-	0	49	0	-	0	49	0	-
Eb Left	38	0	0.024	0	38	0	0.024	0	38	0	0.024	0	38	0	0.024
Eb Thru	20	1600	0.072 *	0	20	1600	0.072 *	0	20	1600	0.072 *	0	20	1600	0.072 *
Eb Right	57	0	-	0	57	0	-	0	57	0	-	0	57	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.590				0.591				0.591				0.591
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Palm Street-SR-91 EB On-Ramp
Peak hr: PM

N-S St: Clark Avenue
E-W St: Palm Street-SR-91 EB On-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU7

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	28	0	0.009	0	28	0	0.009	0	28	0	0.009	0	28	0	0.009
Nb Thru	754	3200	0.305 *	11	765	3200	0.309 *	0	765	3200	0.309 *	0	765	3200	0.309 *
Nb Right	195	0	-	0	195	0	-	0	195	0	-	0	195	0	-
Sb Left	251	1600	0.157 *	0	251	1600	0.157 *	0	251	1600	0.157 *	0	251	1600	0.157 *
Sb Thru	994	3200	0.333	12	1006	3200	0.336	0	1006	3200	0.336	0	1006	3200	0.336
Sb Right	70	0	-	0	70	0	-	0	70	0	-	0	70	0	-
Eb Left	71	0	0.044	0	71	0	0.044	0	71	0	0.044	0	71	0	0.044
Eb Thru	13	1600	0.084 *	0	13	1600	0.084 *	0	13	1600	0.084 *	0	13	1600	0.084 *
Eb Right	50	0	-	0	50	0	-	0	50	0	-	0	50	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.646				0.649				0.649				0.649
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Rosecrans Avenue
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU8

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037
Nb Thru	655	3200	0.241 *	7	662	3200	0.243 *	0	662	3200	0.243 *	0	662	3200	0.243 *
Nb Right	116	0	-	0	116	0	-	0	116	0	-	0	116	0	-
Sb Left	63	1600	0.039 *	0	63	1600	0.039 *	0	63	1600	0.039 *	0	63	1600	0.039 *
Sb Thru	494	3200	0.175	2	496	3200	0.175	0	496	3200	0.175	0	496	3200	0.175
Sb Right	65	0	-	0	65	0	-	0	65	0	-	0	65	0	-
Eb Left	141	1600	0.088 *	0	141	1600	0.088 *	0	141	1600	0.088 *	0	141	1600	0.088 *
Eb Thru	471	3200	0.168	0	471	3200	0.168	0	471	3200	0.168	0	471	3200	0.168
Eb Right	65	0	-	0	65	0	-	0	65	0	-	0	65	0	-
Wb Left	141	1600	0.088	0	141	1600	0.088	0	141	1600	0.088	0	141	1600	0.088
Wb Thru	783	3200	0.297 *	0	783	3200	0.297 *	0	783	3200	0.297 *	0	783	3200	0.297 *
Wb Right	167	0	-	0	167	0	-	0	167	0	-	0	167	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.765				0.768				0.768				0.768
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Rosecrans Avenue
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU8

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	55	1600	0.034 *	0	55	1600	0.034 *	0	55	1600	0.034 *	0	55	1600	0.034 *
Nb Thru	551	3200	0.200	11	562	3200	0.204	0	562	3200	0.204	0	562	3200	0.204
Nb Right	90	0	-	0	90	0	-	0	90	0	-	0	90	0	-
Sb Left	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081
Sb Thru	728	3200	0.259 *	13	741	3200	0.263 *	0	741	3200	0.263 *	0	741	3200	0.263 *
Sb Right	101	0	-	0	101	0	-	0	101	0	-	0	101	0	-
Eb Left	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076
Eb Thru	1005	3200	0.343 *	0	1005	3200	0.343 *	0	1005	3200	0.343 *	0	1005	3200	0.343 *
Eb Right	92	0	-	0	92	0	-	0	92	0	-	0	92	0	-
Wb Left	127	1600	0.079 *	0	127	1600	0.079 *	0	127	1600	0.079 *	0	127	1600	0.079 *
Wb Thru	653	3200	0.231	0	653	3200	0.231	0	653	3200	0.231	0	653	3200	0.231
Wb Right	85	0	-	0	85	0	-	0	85	0	-	0	85	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.816				0.820				0.820				0.820
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Somerset Boulevard
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU9

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *
Nb Thru	651	3200	0.216	7	658	3200	0.218	0	658	3200	0.218	0	658	3200	0.218
Nb Right	40	0	-	0	40	0	-	0	40	0	-	0	40	0	-
Sb Left	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042
Sb Thru	635	3200	0.218 *	2	637	3200	0.218 *	0	637	3200	0.218 *	0	637	3200	0.218 *
Sb Right	62	0	-	0	62	0	-	0	62	0	-	0	62	0	-
Eb Left	157	1600	0.098 *	0	157	1600	0.098 *	0	157	1600	0.098 *	0	157	1600	0.098 *
Eb Thru	415	3200	0.144	0	415	3200	0.144	0	415	3200	0.144	0	415	3200	0.144
Eb Right	45	0	-	0	45	0	-	0	45	0	-	0	45	0	-
Wb Left	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046
Wb Thru	773	3200	0.268 *	0	773	3200	0.268 *	0	773	3200	0.268 *	0	773	3200	0.268 *
Wb Right	83	0	-	0	83	0	-	0	83	0	-	0	83	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.755				0.756				0.756				0.756
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Somerset Boulevard
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU9

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	136	1600	0.085 *	0	136	1600	0.085 *	0	136	1600	0.085 *	0	136	1600	0.085 *
Nb Thru	607	3200	0.209	11	618	3200	0.212	0	618	3200	0.212	0	618	3200	0.212
Nb Right	61	0	-	0	61	0	-	0	61	0	-	0	61	0	-
Sb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Sb Thru	929	3200	0.313 *	13	942	3200	0.317 *	0	942	3200	0.317 *	0	942	3200	0.317 *
Sb Right	73	0	-	0	73	0	-	0	73	0	-	0	73	0	-
Eb Left	108	1600	0.068	0	108	1600	0.068	0	108	1600	0.068	0	108	1600	0.068
Eb Thru	815	3200	0.286 *	0	815	3200	0.286 *	0	815	3200	0.286 *	0	815	3200	0.286 *
Eb Right	100	0	-	0	100	0	-	0	100	0	-	0	100	0	-
Wb Left	62	1600	0.039 *	0	62	1600	0.039 *	0	62	1600	0.039 *	0	62	1600	0.039 *
Wb Thru	375	3200	0.136	0	375	3200	0.136	0	375	3200	0.136	0	375	3200	0.136
Wb Right	61	0	-	0	61	0	-	0	61	0	-	0	61	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.823				0.827				0.827				0.827
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Alondra Boulevard
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU10

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056
Nb Thru	418	3200	0.171 *	3	421	3200	0.172 *	0	421	3200	0.172 *	0	421	3200	0.172 *
Nb Right	129	0	-	0	129	0	-	0	129	0	-	0	129	0	-
Sb Left	85	1600	0.053 *	0	85	1600	0.053 *	0	85	1600	0.053 *	0	85	1600	0.053 *
Sb Thru	397	3200	0.149	2	399	3200	0.150	0	399	3200	0.150	0	399	3200	0.150
Sb Right	80	0	-	0	80	0	-	0	80	0	-	0	80	0	-
Eb Left	70	1600	0.044	0	70	1600	0.044	0	70	1600	0.044	0	70	1600	0.044
Eb Thru	575	3200	0.215 *	0	575	3200	0.215 *	0	575	3200	0.215 *	0	575	3200	0.215 *
Eb Right	112	0	-	0	112	0	-	0	112	0	-	0	112	0	-
Wb Left	150	1600	0.094 *	0	150	1600	0.094 *	0	150	1600	0.094 *	0	150	1600	0.094 *
Wb Thru	630	3200	0.242	0	630	3200	0.242	0	630	3200	0.242	0	630	3200	0.242
Wb Right	144	0	-	0	144	0	-	0	144	0	-	0	144	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.633				0.633				0.633				0.633
LOS			B				B				B				B

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Alondra Boulevard
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU10

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	118	1600	0.074 *	0	118	1600	0.074 *	0	118	1600	0.074 *	0	118	1600	0.074 *
Nb Thru	552	3200	0.213	0	552	3200	0.213	0	552	3200	0.213	0	552	3200	0.213
Nb Right	130	0	-	0	130	0	-	0	130	0	-	0	130	0	-
Sb Left	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057
Sb Thru	534	3200	0.197 *	1	535	3200	0.198 *	0	535	3200	0.198 *	0	535	3200	0.198 *
Sb Right	97	0	-	0	97	0	-	0	97	0	-	0	97	0	-
Eb Left	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076
Eb Thru	828	3200	0.298 *	0	828	3200	0.298 *	0	828	3200	0.298 *	0	828	3200	0.298 *
Eb Right	126	0	-	0	126	0	-	0	126	0	-	0	126	0	-
Wb Left	209	1600	0.131 *	0	209	1600	0.131 *	0	209	1600	0.131 *	0	209	1600	0.131 *
Wb Thru	656	3200	0.233	0	656	3200	0.233	0	656	3200	0.233	0	656	3200	0.233
Wb Right	90	0	-	0	90	0	-	0	90	0	-	0	90	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.800				0.800				0.800				0.800
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ SR-91 WB Ramps
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: SR-91 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU11

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	499	1600	0.312 *	0	499	1600	0.312 *	0	499	1600	0.312 *	0	499	1600	0.312 *
Nb Thru	627	3200	0.196	3	630	3200	0.197	0	630	3200	0.197	0	630	3200	0.197
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	624	3200	0.195 *	2	626	3200	0.196 *	0	626	3200	0.196 *	0	626	3200	0.196 *
Sb Right	287	1600	0.179	0	287	1600	0.179	0	287	1600	0.179	0	287	1600	0.179
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	249	0	0.156	0	249	0	0.156	0	249	0	0.156	0	249	0	0.156
Wb Thru	1	1600	0.156	0	1	1600	0.156	0	1	1600	0.156	0	1	1600	0.156
Wb Right	295	1600	0.184 *	0	295	1600	0.184 *	0	295	1600	0.184 *	0	295	1600	0.184 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.791				0.792				0.792				0.792
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ SR-91 WB Ramps
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: SR-91 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU11

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
Nb Left	641	1600	0.401 *	0	641	1600	0.401 *	0	641	1600	0.401 *	0	641	1600	0.401 *
Nb Thru	851	3200	0.266	0	851	3200	0.266	0	851	3200	0.266	0	851	3200	0.266
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	781	3200	0.244 *	0	781	3200	0.244 *	0	781	3200	0.244 *	0	781	3200	0.244 *
Sb Right	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	390	0	0.244	0	390	0	0.244	0	390	0	0.244	0	390	0	0.244
Wb Thru	3	1600	0.246	0	3	1600	0.246	0	3	1600	0.246	0	3	1600	0.246
Wb Right	413	1600	0.258 *	0	413	1600	0.258 *	0	413	1600	0.258 *	0	413	1600	0.258 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.003				1.003				1.003				1.003
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Beverly Street-SR-91 EB Ramps
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Beverly Street-SR-91 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU12

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	903	3200	0.282 *	3	906	3200	0.283 *	0	906	3200	0.283 *	0	906	3200	0.283 *
Nb Right	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234
Sb Left	264	1600	0.165 *	0	264	1600	0.165 *	0	264	1600	0.165 *	0	264	1600	0.165 *
Sb Thru	636	3200	0.199	2	638	3200	0.199	0	638	3200	0.199	0	638	3200	0.199
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	268	1600	0.168	0	268	1600	0.168	0	268	1600	0.168	0	268	1600	0.168
Eb Thru	159	1600	0.099	0	159	1600	0.099	0	159	1600	0.099	0	159	1600	0.099
Eb Right	533	1600	0.333 *	0	533	1600	0.333 *	0	533	1600	0.333 *	0	533	1600	0.333 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.880				0.881				0.881				0.881
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Beverly Street-SR-91 EB Ramps
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Beverly Street-SR-91 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU12

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1133	3200	0.354 *	0	1133	3200	0.354 *	0	1133	3200	0.354 *	0	1133	3200	0.354 *
Nb Right	243	1600	0.152	0	243	1600	0.152	0	243	1600	0.152	0	243	1600	0.152
Sb Left	261	1600	0.163 *	0	261	1600	0.163 *	0	261	1600	0.163 *	0	261	1600	0.163 *
Sb Thru	909	3200	0.284	0	909	3200	0.284	0	909	3200	0.284	0	909	3200	0.284
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	327	1600	0.204	0	327	1600	0.204	0	327	1600	0.204	0	327	1600	0.204
Eb Thru	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100
Eb Right	391	1600	0.244 *	0	391	1600	0.244 *	0	391	1600	0.244 *	0	391	1600	0.244 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.862				0.862				0.862				0.862
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Rosecrans Avenue
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU13

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
Nb Left	180	1600	0.113	0	180	1600	0.113	0	180	1600	0.113	0	180	1600	0.113
Nb Thru	622	3200	0.194 *	7	629	3200	0.197 *	0	629	3200	0.197 *	0	629	3200	0.197 *
Nb Right	272	1600	0.059	0	272	1600	0.059	0	272	1600	0.059	0	272	1600	0.059
Sb Left	154	1600	0.096 *	2	156	1600	0.098 *	0	156	1600	0.098 *	0	156	1600	0.098 *
Sb Thru	313	3200	0.098	6	319	3200	0.100	0	319	3200	0.100	0	319	3200	0.100
Sb Right	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057
Eb Left	86	1600	0.054 *	0	86	1600	0.054 *	0	86	1600	0.054 *	0	86	1600	0.054 *
Eb Thru	659	3200	0.240	0	659	3200	0.240	0	659	3200	0.240	0	659	3200	0.240
Eb Right	110	0	-	0	110	0	-	0	110	0	-	0	110	0	-
Wb Left	178	1600	0.111	0	178	1600	0.111	0	178	1600	0.111	0	178	1600	0.111
Wb Thru	997	3200	0.391 *	0	997	3200	0.391 *	0	997	3200	0.391 *	0	997	3200	0.391 *
Wb Right	254	0	-	0	254	0	-	0	254	0	-	0	254	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.835				0.839				0.839				0.839
LOS			D				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Rosecrans Avenue
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU13

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	107	1600	0.067	0	107	1600	0.067	0	107	1600	0.067	0	107	1600	0.067
Nb Thru	503	3200	0.157 *	16	519	3200	0.162 *	0	519	3200	0.162 *	0	519	3200	0.162 *
Nb Right	258	1600	0.044	0	258	1600	0.044	0	258	1600	0.044	0	258	1600	0.044
Sb Left	229	1600	0.143 *	14	243	1600	0.152 *	0	243	1600	0.152 *	0	243	1600	0.152 *
Sb Thru	615	3200	0.192	16	631	3200	0.197	0	631	3200	0.197	0	631	3200	0.197
Sb Right	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065
Eb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Eb Thru	953	3200	0.338 *	0	953	3200	0.338 *	0	953	3200	0.338 *	0	953	3200	0.338 *
Eb Right	130	0	-	0	130	0	-	0	130	0	-	0	130	0	-
Wb Left	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *
Wb Thru	698	3200	0.288	0	698	3200	0.288	0	698	3200	0.288	0	698	3200	0.288
Wb Right	225	0	-	0	225	0	-	0	225	0	-	0	225	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.856				0.870				0.870				0.870
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Somerset Boulevard
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU14

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	152	1600	0.095 *	0	152	1600	0.095 *	0	152	1600	0.095 *	0	152	1600	0.095 *
Nb Thru	770	3200	0.245	6	776	3200	0.247	0	776	3200	0.247	0	776	3200	0.247
Nb Right	13	0	-	0	13	0	-	0	13	0	-	0	13	0	-
Sb Left	11	1600	0.007	2	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008
Sb Thru	571	3200	0.211 *	0	571	3200	0.211 *	0	571	3200	0.211 *	0	571	3200	0.211 *
Sb Right	105	0	-	0	105	0	-	0	105	0	-	0	105	0	-
Eb Left	203	1600	0.127 *	0	203	1600	0.127 *	0	203	1600	0.127 *	0	203	1600	0.127 *
Eb Thru	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051
Eb Right	96	1600	0.060	0	96	1600	0.060	0	96	1600	0.060	0	96	1600	0.060
Wb Left	50	1600	0.031	0	50	1600	0.031	0	50	1600	0.031	0	50	1600	0.031
Wb Thru	120	3200	0.059 *	0	120	3200	0.060 *	0	120	3200	0.060 *	0	120	3200	0.060 *
Wb Right	68	0	-	3	71	0	-	0	71	0	-	0	71	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.592				0.593				0.593				0.593
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Somerset Boulevard
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU14

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *
Nb Thru	746	3200	0.238	11	757	3200	0.242	0	757	3200	0.242	0	757	3200	0.242
Nb Right	16	0	-	0	16	0	-	0	16	0	-	0	16	0	-
Sb Left	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055
Sb Thru	700	3200	0.268 *	14	714	3200	0.272 *	0	714	3200	0.272 *	0	714	3200	0.272 *
Sb Right	157	0	-	0	157	0	-	0	157	0	-	0	157	0	-
Eb Left	160	1600	0.100 *	0	160	1600	0.100 *	0	160	1600	0.100 *	0	160	1600	0.100 *
Eb Thru	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076
Eb Right	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101
Wb Left	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012
Wb Thru	99	3200	0.040 *	0	99	3200	0.042 *	0	99	3200	0.042 *	0	99	3200	0.042 *
Wb Right	30	0	-	5	35	0	-	0	35	0	-	0	35	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.626				0.632				0.632				0.632
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Alondra Boulevard
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU15

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	132	1600	0.083	0	132	1600	0.083	0	132	1600	0.083	0	132	1600	0.083
Nb Thru	611	3200	0.246 *	6	617	3200	0.248 *	0	617	3200	0.248 *	0	617	3200	0.248 *
Nb Right	176	0	-	0	176	0	-	0	176	0	-	0	176	0	-
Sb Left	144	1600	0.090 *	0	144	1600	0.090 *	0	144	1600	0.090 *	0	144	1600	0.090 *
Sb Thru	489	3200	0.178	0	489	3200	0.178	0	489	3200	0.178	0	489	3200	0.178
Sb Right	82	0	-	0	82	0	-	0	82	0	-	0	82	0	-
Eb Left	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089
Eb Thru	588	3200	0.218 *	0	588	3200	0.218 *	0	588	3200	0.218 *	0	588	3200	0.218 *
Eb Right	111	0	-	0	111	0	-	0	111	0	-	0	111	0	-
Wb Left	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *
Wb Thru	585	3200	0.183	0	585	3200	0.183	0	585	3200	0.183	0	585	3200	0.183
Wb Right	138	1600	0.086	0	138	1600	0.086	0	138	1600	0.086	0	138	1600	0.086
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.760				0.762				0.762				0.762
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Alondra Boulevard
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU15

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	171	1600	0.107	0	171	1600	0.107	0	171	1600	0.107	0	171	1600	0.107
Nb Thru	626	3200	0.258 *	11	637	3200	0.261 *	0	637	3200	0.261 *	0	637	3200	0.261 *
Nb Right	198	0	-	0	198	0	-	0	198	0	-	0	198	0	-
Sb Left	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *
Sb Thru	662	3200	0.229	14	676	3200	0.234	0	676	3200	0.234	0	676	3200	0.234
Sb Right	72	0	-	0	72	0	-	0	72	0	-	0	72	0	-
Eb Left	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Eb Thru	1063	3200	0.369 *	0	1063	3200	0.369 *	0	1063	3200	0.369 *	0	1063	3200	0.369 *
Eb Right	118	0	-	0	118	0	-	0	118	0	-	0	118	0	-
Wb Left	228	1600	0.143 *	0	228	1600	0.143 *	0	228	1600	0.143 *	0	228	1600	0.143 *
Wb Thru	882	3200	0.276	0	882	3200	0.276	0	882	3200	0.276	0	882	3200	0.276
Wb Right	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.970				0.973				0.973				0.973
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Bellflower Boulevard
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Bellflower Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU16

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	11	1600	0.007	0	11	1600	0.007	0	11	1600	0.007	0	11	1600	0.007
Nb Thru	611	4800	0.129 *	49	660	4800	0.139 *	0	660	4800	0.139 *	0	660	4800	0.139 *
Nb Right	6	0	-	0	6	0	-	0	6	0	-	0	6	0	-
Sb Left	382	1600	0.239 *	6	388	1600	0.243 *	0	388	1600	0.243 *	0	388	1600	0.243 *
Sb Thru	636	4800	0.135	102	738	4800	0.157	0	738	4800	0.157	0	738	4800	0.157
Sb Right	14	0	-	0	14	0	-	0	14	0	-	0	14	0	-
Eb Left	10	1600	0.006 *	0	10	1600	0.006 *	0	10	1600	0.006 *	0	10	1600	0.006 *
Eb Thru	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
Eb Right	9	1600	0.006	0	9	1600	0.006	0	9	1600	0.006	0	9	1600	0.006
Wb Left	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
Wb Thru	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002
Wb Right	636	3200	0.079 *	6	642	3200	0.079 *	0	642	3200	0.079 *	0	642	3200	0.079 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.553				0.567				0.567				0.567
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Bellflower Boulevard
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Bellflower Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU16

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004
Nb Thru	893	4800	0.187 *	272	1165	4800	0.244 *	0	1165	4800	0.244 *	0	1165	4800	0.244 *
Nb Right	4	0	-	0	4	0	-	0	4	0	-	0	4	0	-
Sb Left	367	1600	0.229 *	11	378	1600	0.236 *	0	378	1600	0.236 *	0	378	1600	0.236 *
Sb Thru	1001	4800	0.210	198	1199	4800	0.251	0	1199	4800	0.251	0	1199	4800	0.251
Sb Right	8	0	-	0	8	0	-	0	8	0	-	0	8	0	-
Eb Left	6	1600	0.004 *	0	6	1600	0.004 *	0	6	1600	0.004 *	0	6	1600	0.004 *
Eb Thru	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
Eb Right	7	1600	0.004	0	7	1600	0.004	0	7	1600	0.004	0	7	1600	0.004
Wb Left	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002
Wb Thru	2	1600	0.001	0	2	1600	0.001	0	2	1600	0.001	0	2	1600	0.001
Wb Right	484	3200	0.037 *	12	496	3200	0.037 *	0	496	3200	0.037 *	0	496	3200	0.037 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.557				0.620				0.620				0.620
LOS			A				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Stewart and Gray Road
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU17

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	239	1600	0.149 *	9	248	1600	0.155 *	0	248	1600	0.155 *	0	248	1600	0.155 *
Nb Thru	799	4800	0.166	49	848	4800	0.177	0	848	4800	0.177	0	848	4800	0.177
Nb Right	70	1600	0.044	0	70	1600	0.044	0	70	1600	0.044	0	70	1600	0.044
Sb Left	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081
Sb Thru	782	4800	0.177 *	102	884	4800	0.198 *	0	884	4800	0.198 *	0	884	4800	0.198 *
Sb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Eb Left	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041
Eb Thru	809	3200	0.288 *	0	809	3200	0.297 *	0	809	3200	0.297 *	0	809	3200	0.297 *
Eb Right	114	0	-	28	142	0	-	0	142	0	-	0	142	0	-
Wb Left	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *
Wb Thru	572	3200	0.179	0	572	3200	0.179	0	572	3200	0.179	0	572	3200	0.179
Wb Right	57	1600	0.036	0	57	1600	0.036	0	57	1600	0.036	0	57	1600	0.036
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.778				0.813				0.813				0.813
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Stewart and Gray Road
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU17

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	301	1600	0.188 *	57	358	1600	0.224 *	0	358	1600	0.224 *	0	358	1600	0.224 *
Nb Thru	1026	4800	0.214	272	1298	4800	0.270	0	1298	4800	0.270	0	1298	4800	0.270
Nb Right	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063
Sb Left	235	1600	0.147	0	235	1600	0.147	0	235	1600	0.147	0	235	1600	0.147
Sb Thru	942	4800	0.216 *	198	1140	4800	0.258 *	0	1140	4800	0.258 *	0	1140	4800	0.258 *
Sb Right	96	0	-	0	96	0	-	0	96	0	-	0	96	0	-
Eb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Eb Thru	880	3200	0.323 *	0	880	3200	0.340 *	0	880	3200	0.340 *	0	880	3200	0.340 *
Eb Right	155	0	-	54	209	0	-	0	209	0	-	0	209	0	-
Wb Left	92	1600	0.058 *	0	92	1600	0.058 *	0	92	1600	0.058 *	0	92	1600	0.058 *
Wb Thru	776	3200	0.243	0	776	3200	0.243	0	776	3200	0.243	0	776	3200	0.243
Wb Right	29	1600	0.018	0	29	1600	0.018	0	29	1600	0.018	0	29	1600	0.018
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.885				0.979				0.979				0.979
LOS			D				E				E				E

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Landing Center Driveway
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Landing Center Driveway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU18

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021
Nb Thru	1201	4800	0.250 *	59	1260	4800	0.263 *	0	1260	4800	0.263 *	0	1260	4800	0.263 *
Nb Right	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035
Sb Left	44	1600	0.028 *	0	44	1600	0.028 *	0	44	1600	0.028 *	0	44	1600	0.028 *
Sb Thru	938	4800	0.195	130	1068	4800	0.223	0	1068	4800	0.223	0	1068	4800	0.223
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	55	1523	0.036	0	55	1620	0.034	0	55	1620	0.034	0	55	1620	0.034
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	49	1508	0.005	0	49	1400	0.008	0	49	1400	0.008	0	49	1400	0.008
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.414				0.424				0.424				0.424
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Landing Center Driveway
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Landing Center Driveway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU18

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015
Nb Thru	1297	4800	0.270 *	329	1626	4800	0.339 *	0	1626	4800	0.339 *	0	1626	4800	0.339 *
Nb Right	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054
Sb Left	167	1600	0.104 *	0	167	1600	0.104 *	0	167	1600	0.104 *	0	167	1600	0.104 *
Sb Thru	872	4800	0.182	252	1124	4800	0.234	0	1124	4800	0.234	0	1124	4800	0.234
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	218	1600	0.136	0	218	1620	0.135	0	218	1620	0.135	0	218	1620	0.135
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	235	1600	0.043	0	235	1400	0.063	0	235	1400	0.063	0	235	1400	0.063
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.611				0.678				0.678				0.678
LOS		B				B				B				B	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Alameda Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU19

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	82	1600	0.051	6	88	1600	0.055 *	0	88	1600	0.055 *	0	88	1600	0.055 *
Nb Thru	1195	4800	0.249 *	60	1255	4800	0.261	0	1255	4800	0.261	0	1255	4800	0.261
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	803	4800	0.191	130	933	4800	0.218 *	0	933	4800	0.218 *	0	933	4800	0.218 *
Sb Right	113	0	-	0	113	0	-	0	113	0	-	0	113	0	-
Eb Left	52	1600	0.033	0	52	1600	0.033	0	52	1600	0.033	0	52	1600	0.033
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	109	1600	0.017	10	119	1600	0.019	0	119	1600	0.019	0	119	1600	0.019
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.381				0.405				0.405				0.405
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Alameda Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU19

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	192	1600	0.120 *	24	216	1600	0.135 *	0	216	1600	0.135 *	0	216	1600	0.135 *
Nb Thru	1425	4800	0.297	329	1754	4800	0.365	0	1754	4800	0.365	0	1754	4800	0.365
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1131	4800	0.254 *	252	1383	4800	0.306 *	0	1383	4800	0.306 *	0	1383	4800	0.306 *
Sb Right	86	0	-	0	86	0	-	0	86	0	-	0	86	0	-
Eb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	161	1600	0.000	22	183	1600	0.000	0	183	1600	0.000	0	183	1600	0.000
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.547				0.615				0.615				0.615
LOS			A				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Clark Avenue
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Clark Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU20

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	943	4800	0.199	113	1056	4800	0.223 *	0	1056	4800	0.223 *	0	1056	4800	0.223 *
Nb Right	14	0	-	0	14	0	-	0	14	0	-	0	14	0	-
Sb Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	975	4800	0.203 *	48	1023	4800	0.213	0	1023	4800	0.213	0	1023	4800	0.213
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	376	3200	0.118 *	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.421				0.323				0.323				0.323
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Clark Avenue
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Clark Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU20

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	1133	4800	0.239	206	1339	4800	0.281	0	1339	4800	0.281	0	1339	4800	0.281
Nb Right	12	0	-	0	12	0	-	0	12	0	-	0	12	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1156	4800	0.241 *	358	1514	4800	0.315 *	0	1514	4800	0.315 *	0	1514	4800	0.315 *
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	446	3200	0.139 *	0	0	0	-	0	0	3200	0.000	0	0	3200	0.000
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.480				0.415				0.415				0.415
LOS		A				A				A				A	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Imperial Highway
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU21

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	250	2880	0.087	0	250	2880	0.087	0	250	2880	0.087	0	250	2880	0.087
Nb Thru	898	4800	0.241 *	98	996	4800	0.268 *	0	996	4800	0.268 *	0	996	4800	0.268 *
Nb Right	261	0	-	31	292	0	-	0	292	0	-	0	292	0	-
Sb Left	181	2880	0.063 *	0	181	2880	0.063 *	0	181	2880	0.063 *	0	181	2880	0.063 *
Sb Thru	719	4800	0.175	35	754	4800	0.185	0	754	4800	0.185	0	754	4800	0.185
Sb Right	122	0	-	13	135	0	-	0	135	0	-	0	135	0	-
Eb Left	91	1600	0.057	15	106	1600	0.066 *	0	106	1600	0.066 *	0	106	1600	0.066 *
Eb Thru	847	4800	0.176 *	8	855	4800	0.178	0	855	4800	0.178	0	855	4800	0.178
Eb Right	193	1600	0.121	0	193	1600	0.121	0	193	1600	0.121	0	193	1600	0.121
Wb Left	133	1600	0.083 *	6	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Wb Thru	861	4800	0.202	1	862	4800	0.203 *	0	862	4800	0.203 *	0	862	4800	0.203 *
Wb Right	110	0	-	0	110	0	-	0	110	0	-	0	110	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.664				0.700				0.700				0.700
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Imperial Highway
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU21

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	253	2880	0.088	0	253	2880	0.088 *	0	253	2880	0.088 *	0	253	2880	0.088 *
Nb Thru	1101	4800	0.264 *	162	1263	4800	0.298	0	1263	4800	0.298	0	1263	4800	0.298
Nb Right	167	0	-	0	167	0	-	0	167	0	-	0	167	0	-
Sb Left	146	2880	0.051 *	0	146	2880	0.051	0	146	2880	0.051	0	146	2880	0.051
Sb Thru	814	4800	0.209	226	1040	4800	0.266 *	0	1040	4800	0.266 *	0	1040	4800	0.266 *
Sb Right	189	0	-	47	236	0	-	0	236	0	-	0	236	0	-
Eb Left	161	1600	0.101	44	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128
Eb Thru	1009	4800	0.210 *	11	1020	4800	0.213 *	0	1020	4800	0.213 *	0	1020	4800	0.213 *
Eb Right	256	1600	0.160	0	256	1600	0.160	0	256	1600	0.160	0	256	1600	0.160
Wb Left	267	1600	0.167 *	0	267	1600	0.167 *	0	267	1600	0.167 *	0	267	1600	0.167 *
Wb Thru	959	4800	0.221	41	1000	4800	0.229	0	1000	4800	0.229	0	1000	4800	0.229
Wb Right	101	0	-	0	101	0	-	0	101	0	-	0	101	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.792				0.833				0.833				0.833
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Imperial Highway
Peak hr: AM

N-S St: Clark Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU22

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091
Nb Thru	263	3200	0.135 *	20	283	3200	0.141 *	0	283	3200	0.141 *	0	283	3200	0.141 *
Nb Right	168	0	-	0	168	0	-	0	168	0	-	0	168	0	-
Sb Left	103	1600	0.064 *	2	105	1600	0.066 *	0	105	1600	0.066 *	0	105	1600	0.066 *
Sb Thru	176	3200	0.059	6	182	3200	0.063	0	182	3200	0.063	0	182	3200	0.063
Sb Right	14	0	-	5	19	0	-	0	19	0	-	0	19	0	-
Eb Left	70	1600	0.044	40	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Eb Thru	1087	4800	0.277 *	0	1087	4800	0.277 *	0	1087	4800	0.277 *	0	1087	4800	0.277 *
Eb Right	243	0	-	0	243	0	-	0	243	0	-	0	243	0	-
Wb Left	152	1600	0.095 *	0	152	1600	0.095 *	0	152	1600	0.095 *	0	152	1600	0.095 *
Wb Thru	930	4800	0.212	2	932	4800	0.219	0	932	4800	0.219	0	932	4800	0.219
Wb Right	87	0	-	33	120	0	-	0	120	0	-	0	120	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.671				0.679				0.679				0.679
LOS			B				B				B				B

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Imperial Highway
Peak hr: PM

N-S St: Clark Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU22

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	183	1600	0.114 *	0	183	1600	0.114 *	0	183	1600	0.114 *	0	183	1600	0.114 *
Nb Thru	249	3200	0.108	44	293	3200	0.122	0	293	3200	0.122	0	293	3200	0.122
Nb Right	97	0	-	0	97	0	-	0	97	0	-	0	97	0	-
Sb Left	76	1600	0.048	28	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065
Sb Thru	106	3200	0.043 *	56	162	3200	0.077 *	0	162	3200	0.077 *	0	162	3200	0.077 *
Sb Right	32	0	-	53	85	0	-	0	85	0	-	0	85	0	-
Eb Left	106	1600	0.066	21	127	1600	0.079 *	0	127	1600	0.079 *	0	127	1600	0.079 *
Eb Thru	1031	4800	0.239 *	0	1031	4800	0.239	0	1031	4800	0.239	0	1031	4800	0.239
Eb Right	118	0	-	0	118	0	-	0	118	0	-	0	118	0	-
Wb Left	139	1600	0.087 *	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Wb Thru	995	4800	0.236	7	1002	4800	0.251 *	0	1002	4800	0.251 *	0	1002	4800	0.251 *
Wb Right	140	0	-	64	204	0	-	0	204	0	-	0	204	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.584				0.622				0.622				0.622
LOS			A				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Ardis Avenue @ Imperial Highway
Peak hr: AM

N-S St: Ardis Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU23

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	67	1600	0.042	0	67	1600	0.042 *	0	67	1600	0.042 *	0	67	1600	0.042 *
Nb Thru	0	0	0.000	7	7	1600	0.039	0	7	1600	0.039	0	7	1600	0.039
Nb Right	55	1600	0.000	0	55	0	-	0	55	0	-	0	55	0	-
Sb Left	0	0	0.000	6	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004
Sb Thru	0	0	0.000	3	3	1600	0.003 *	0	3	1600	0.003 *	0	3	1600	0.003 *
Sb Right	0	0	-	2	2	0	-	0	2	0	-	0	2	0	-
Eb Left	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008
Eb Thru	1375	4800	0.315 *	2	1377	4800	0.315 *	0	1377	4800	0.315 *	0	1377	4800	0.315 *
Eb Right	136	0	-	0	136	0	-	0	136	0	-	0	136	0	-
Wb Left	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *
Wb Thru	1074	4800	0.224	33	1107	4800	0.236	0	1107	4800	0.236	0	1107	4800	0.236
Wb Right	0	0	-	26	26	0	-	0	26	0	-	0	26	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.528				0.531				0.531				0.531
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Ardis Avenue @ Imperial Highway
Peak hr: PM

N-S St: Ardis Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU23

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	68	1600	0.043	0	68	1600	0.043	0	68	1600	0.043 ***	0	68	1600	0.043 ***
Nb Thru	0	0	0.000	21	21	1600	0.093 *	0	21	1600	0.093 ***	0	21	1600	0.093 ***
Nb Right	127	1600	0.008	0	127	0	-	0	127	0	- ***	0	127	0	- ***
Sb Left	0	0	0.000	14	14	1600	0.009 *	0	14	0	ERR ***	0	14	0	ERR ***
Sb Thru	0	0	0.000	41	41	1600	0.030	0	41	0	0.000 ***	0	41	0	0.000 ***
Sb Right	0	0	-	7	7	0	-	0	7	0	- ***	0	7	0	- ***
Eb Left	32	1600	0.020	0	32	1600	0.020	0	32	1600	0.020	0	32	1600	0.020
Eb Thru	1479	4800	0.320 *	28	1507	4800	0.326 *	0	1507	4800	0.326 *	0	1507	4800	0.326 *
Eb Right	56	0	-	0	56	0	-	0	56	0	-	0	56	0	-
Wb Left	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *
Wb Thru	1177	4800	0.245	64	1241	4800	0.270	0	1241	4800	0.270	0	1241	4800	0.270
Wb Right	0	0	-	53	53	0	-	0	53	0	-	0	53	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.534				0.599				ERR				ERR
LOS		A				A					ERR				ERR

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Imperial Highway
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU24

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	530	1600	0.331 *	32	562	1600	0.351 *	0	562	2880	0.195	0	562	2880	0.195
Nb Thru	1233	3200	0.385	57	1290	3200	0.403	0	1290	3200	0.403 *	0	1290	3200	0.403 *
Nb Right	190	1600	0.119	0	190	1600	0.119	0	190	1600	0.119	0	190	1600	0.119
Sb Left	134	1600	0.084	14	148	1600	0.093	0	148	2880	0.051 *	0	148	2880	0.051 *
Sb Thru	696	3200	0.218 *	37	733	3200	0.229 *	0	733	3200	0.229	0	733	3200	0.229
Sb Right	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Eb Left	261	1600	0.163 *	0	261	1600	0.163 *	0	261	1600	0.163 *	0	261	1600	0.163 *
Eb Thru	1248	4800	0.260	6	1254	4800	0.261	0	1254	4800	0.261	0	1254	4800	0.261
Eb Right	75	1600	0.047	2	77	1600	0.048	0	77	1600	0.048	0	77	1600	0.048
Wb Left	316	1600	0.198	0	316	1600	0.198	0	316	1600	0.198	0	316	1600	0.198
Wb Thru	1612	4800	0.361 *	27	1639	4800	0.373 *	0	1639	4800	0.373 *	0	1639	4800	0.373 *
Wb Right	120	0 -		31	151	0 -		0	151	0 -		0	151	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.173				1.216				1.091				1.091
LOS		F				F				F				F	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Imperial Highway
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU24

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	334	1600	0.209	74	408	1600	0.255	0	408	2880	0.142	0	408	2880	0.142
Nb Thru	1056	3200	0.330 *	131	1187	3200	0.371 *	0	1187	3200	0.371 *	0	1187	3200	0.371 *
Nb Right	163	1600	0.102	0	163	1600	0.102	0	163	1600	0.102	0	163	1600	0.102
Sb Left	316	1600	0.198 *	84	400	1600	0.250 *	0	400	2880	0.139 *	0	400	2880	0.139 *
Sb Thru	981	3200	0.307	163	1144	3200	0.358	0	1144	3200	0.358	0	1144	3200	0.358
Sb Right	105	1600	0.066	0	105	1600	0.066	0	105	1600	0.066	0	105	1600	0.066
Eb Left	203	1600	0.127	0	203	1600	0.127	0	203	1600	0.127	0	203	1600	0.127
Eb Thru	1738	4800	0.362 *	28	1766	4800	0.368 *	0	1766	4800	0.368 *	0	1766	4800	0.368 *
Eb Right	113	1600	0.071	14	127	1600	0.079	0	127	1600	0.079	0	127	1600	0.079
Wb Left	375	1600	0.234 *	0	375	1600	0.234 *	0	375	1600	0.234 *	0	375	1600	0.234 *
Wb Thru	1140	4800	0.251	43	1183	4800	0.271	0	1183	4800	0.271	0	1183	4800	0.271
Wb Right	64	0 -		54	118	0 -		0	118	0 -		0	118	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.224				1.323				1.212				1.212
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Steve Horn Way
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Steve Horn Way
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU25

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	1600	0.000	20	20	1600	0.013	0	20	1600	0.013	0	20	1600	0.013
Nb Thru	842	3200	0.303 *	67	909	3200	0.324 *	0	909	3200	0.324 *	0	909	3200	0.324 *
Nb Right	129	0	-	0	129	0	-	0	129	0	-	0	129	0	-
Sb Left	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *
Sb Thru	703	3200	0.220	39	742	3200	0.232	0	742	3200	0.232	0	742	3200	0.232
Sb Right	0	1600	0.000	27	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017
Eb Left	0	0	0.000	10	10	1600	0.006	0	10	1600	0.006	0	10	1600	0.006
Eb Thru	0	0	0.000	0	0	1600	0.008 *	0	0	1600	0.008 *	0	0	1600	0.008 *
Eb Right	0	0	-	12	12	0	-	0	12	0	-	0	12	0	-
Wb Left	18	1600	0.011	0	18	1600	0.011 *	0	18	1600	0.011 *	0	18	1600	0.011 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.447				0.476				0.476				0.476
LOS		A				A				A				A	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Steve Horn Way
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Steve Horn Way
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU25

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	1600	0.000	45	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Nb Thru	759	3200	0.241 *	141	900	3200	0.285 *	0	900	3200	0.285 *	0	900	3200	0.285 *
Nb Right	13	0	-	0	13	0	-	0	13	0	-	0	13	0	-
Sb Left	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *
Sb Thru	611	3200	0.191	150	761	3200	0.238	0	761	3200	0.238	0	761	3200	0.238
Sb Right	0	1600	0.000	44	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028
Eb Left	0	0	0.000	60	60	1600	0.038	0	60	0	ERR ***	0	60	0	ERR ***
Eb Thru	0	0	0.000	0	0	1600	0.059 *	0	0	0	0.000 ***	0	0	0	0.000 ***
Eb Right	0	0	-	95	95	0	-	0	95	0	- ***	0	95	0	- ***
Wb Left	106	1600	0.066	0	106	1600	0.066 *	0	106	1600	0.066 ***	0	106	1600	0.066 ***
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000 ***	0	0	0	0.000 ***
Wb Right	47	1600	0.029	0	47	1600	0.029	0	47	1600	0.029 ***	0	47	1600	0.029 ***
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.440				0.543				ERR				ERR
LOS		A				A					ERR				ERR

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Washburn Road
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Washburn Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU26

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Nb Thru	827	3200	0.285 *	41	868	3200	0.299 *	0	868	3200	0.299 *	0	868	3200	0.299 *
Nb Right	84	0	-	4	88	0	-	0	88	0	-	0	88	0	-
Sb Left	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *
Sb Thru	683	3200	0.213	121	804	3200	0.251	0	804	3200	0.251	0	804	3200	0.251
Sb Right	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Eb Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	42	1600	0.026	6	48	1600	0.030	0	48	1600	0.030	0	48	1600	0.030
Wb Thru	0	0	0.000	0	0	1600	0.088 *	0	0	1600	0.088 *	0	0	1600	0.088 *
Wb Right	141	1600	0.000	0	141	0	-	0	141	0	-	0	141	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.527				0.603				0.603				0.603
LOS			A				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Washburn Road
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Washburn Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU26

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Nb Thru	704	3200	0.248 *	223	927	3200	0.326 *	0	927	3200	0.326 *	0	927	3200	0.326 *
Nb Right	89	0	-	26	115	0	-	0	115	0	-	0	115	0	-
Sb Left	121	1600	0.076 *	0	121	1600	0.076 *	0	121	1600	0.076 *	0	121	1600	0.076 *
Sb Thru	610	3200	0.191	195	805	3200	0.252	0	805	3200	0.252	0	805	3200	0.252
Sb Right	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Eb Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	1600	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	50	1600	0.031	21	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044
Wb Thru	0	0	0.000	0	0	1600	0.091 *	0	0	1600	0.091 *	0	0	1600	0.091 *
Wb Right	146	1600	0.016	0	146	0	-	0	146	0	-	0	146	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.455				0.593				0.593				0.593
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Stewart and Gray Road
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU27

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	313	1600	0.196 *	0	313	1600	0.196 *	0	313	1600	0.196 *	0	313	1600	0.196 *
Nb Thru	502	3200	0.186	9	511	3200	0.198	0	511	3200	0.198	0	511	3200	0.198
Nb Right	92	0	-	31	123	0	-	0	123	0	-	0	123	0	-
Sb Left	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024
Sb Thru	426	3200	0.140 *	15	441	3200	0.144 *	0	441	3200	0.144 *	0	441	3200	0.144 *
Sb Right	21	0	-	0	21	0	-	0	21	0	-	0	21	0	-
Eb Left	18	1600	0.011	0	18	1600	0.011	0	18	1600	0.011	0	18	1600	0.011
Eb Thru	628	3200	0.196 *	0	628	3200	0.196 *	0	628	3200	0.196 *	0	628	3200	0.196 *
Eb Right	352	1600	0.024	0	352	1600	0.024	0	352	1600	0.024	0	352	1600	0.024
Wb Left	148	1600	0.093 *	103	251	1600	0.157 *	0	251	1600	0.157 *	0	251	1600	0.157 *
Wb Thru	352	3200	0.119	0	352	3200	0.119	0	352	3200	0.119	0	352	3200	0.119
Wb Right	29	0	-	0	29	0	-	0	29	0	-	0	29	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.724				0.793				0.793				0.793
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Stewart and Gray Road
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU27

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	316	1600	0.198 *	0	316	1600	0.198 *	0	316	1600	0.198 *	0	316	1600	0.198 *
Nb Thru	353	3200	0.155	41	394	3200	0.217	0	394	3200	0.217	0	394	3200	0.217
Nb Right	143	0	-	158	301	0	-	0	301	0	-	0	301	0	-
Sb Left	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019
Sb Thru	286	3200	0.097 *	44	330	3200	0.111 *	0	330	3200	0.111 *	0	330	3200	0.111 *
Sb Right	25	0	-	0	25	0	-	0	25	0	-	0	25	0	-
Eb Left	58	1600	0.036	0	58	1600	0.036	0	58	1600	0.036	0	58	1600	0.036
Eb Thru	702	3200	0.219 *	0	702	3200	0.219 *	0	702	3200	0.219 *	0	702	3200	0.219 *
Eb Right	283	1600	0.000	0	283	1600	0.000	0	283	1600	0.000	0	283	1600	0.000
Wb Left	165	1600	0.103 *	152	317	1600	0.198 *	0	317	1600	0.198 *	0	317	1600	0.198 *
Wb Thru	603	3200	0.198	0	603	3200	0.198	0	603	3200	0.198	0	603	3200	0.198
Wb Right	32	0	-	0	32	0	-	0	32	0	-	0	32	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.717				0.826				0.826				0.826
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ I-105 WB Ramps-EB Off-Ramp
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: I-105 WB Ramps-EB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU28

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	312	2880	0.108 *	0	312	2880	0.108 *	0	312	2880	0.108 *	0	312	2880	0.108 *
Nb Thru	581	3200	0.182	32	613	3200	0.192	0	613	3200	0.192	0	613	3200	0.192
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	646	3200	0.202 *	14	660	3200	0.206 *	0	660	3200	0.206 *	0	660	3200	0.206 *
Sb Right	209	3200	0.065	24	233	3200	0.073	0	233	3200	0.073	0	233	3200	0.073
Eb Left	191	2880	0.066 *	75	266	2880	0.092 *	0	266	2880	0.092 *	0	266	2880	0.092 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	179	1600	0.004	0	179	1600	0.004	0	179	1600	0.004	0	179	1600	0.004
Wb Left	603	2880	0.209	0	603	2880	0.209	0	603	2880	0.209	0	603	2880	0.209
Wb Thru	0	1600	0.209 *	0	0	1600	0.209 *	0	0	1600	0.209 *	0	0	1600	0.209 *
Wb Right	335	0	-	0	335	0	-	0	335	0	-	0	335	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.686				0.716				0.716				0.716
LOS			B				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ I-105 WB Ramps-EB Off-Ramp
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: I-105 WB Ramps-EB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU28

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	336	2880	0.117 *	0	336	2880	0.117 *	0	336	2880	0.117 *	0	336	2880	0.117 *
Nb Thru	752	3200	0.235	55	807	3200	0.252	0	807	3200	0.252	0	807	3200	0.252
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	850	3200	0.266 *	83	933	3200	0.292 *	0	933	3200	0.292 *	0	933	3200	0.292 *
Sb Right	405	3200	0.127	145	550	3200	0.172	0	550	3200	0.172	0	550	3200	0.172
Eb Left	440	2880	0.153 *	87	527	2880	0.183 *	0	527	2880	0.183 *	0	527	2880	0.183 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	385	1600	0.124	0	385	1600	0.124	0	385	1600	0.124	0	385	1600	0.124
Wb Left	330	2880	0.115	0	330	2880	0.115	0	330	2880	0.115	0	330	2880	0.115
Wb Thru	0	1600	0.196 *	0	0	1600	0.196 *	0	0	1600	0.196 *	0	0	1600	0.196 *
Wb Right	314	0	-	0	314	0	-	0	314	0	-	0	314	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.831				0.887				0.887				0.887
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Gardendale Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU29

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *
Nb Thru	806	3200	0.268	28	834	3200	0.277	0	834	3200	0.277	0	834	3200	0.277
Nb Right	53	0	-	0	53	0	-	0	53	0	-	0	53	0	-
Sb Left	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056
Sb Thru	964	3200	0.339 *	13	977	3200	0.343 *	0	977	3200	0.343 *	0	977	3200	0.343 *
Sb Right	122	0	-	0	122	0	-	0	122	0	-	0	122	0	-
Eb Left	177	1600	0.111 *	3	180	1600	0.113 *	0	180	1600	0.113 *	0	180	1600	0.113 *
Eb Thru	594	3200	0.254	0	594	3200	0.254	0	594	3200	0.254	0	594	3200	0.254
Eb Right	218	0	-	0	218	0	-	0	218	0	-	0	218	0	-
Wb Left	60	1600	0.038	0	60	1600	0.038	0	60	1600	0.038	0	60	1600	0.038
Wb Thru	526	3200	0.204 *	0	526	3200	0.204 *	0	526	3200	0.204 *	0	526	3200	0.204 *
Wb Right	126	0	-	0	126	0	-	0	126	0	-	0	126	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.906				0.912				0.912				0.912
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Gardendale Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU29

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *
Nb Thru	940	3200	0.313	55	995	3200	0.331	0	995	3200	0.331	0	995	3200	0.331
Nb Right	63	0	-	0	63	0	-	0	63	0	-	0	63	0	-
Sb Left	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091
Sb Thru	1167	3200	0.457 *	81	1248	3200	0.483 *	0	1248	3200	0.483 *	0	1248	3200	0.483 *
Sb Right	294	0	-	2	296	0	-	0	296	0	-	0	296	0	-
Eb Left	197	1600	0.123 *	0	197	1600	0.123 *	0	197	1600	0.123 *	0	197	1600	0.123 *
Eb Thru	511	3200	0.214	0	511	3200	0.214	0	511	3200	0.214	0	511	3200	0.214
Eb Right	173	0	-	0	173	0	-	0	173	0	-	0	173	0	-
Wb Left	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035
Wb Thru	330	3200	0.128 *	0	330	3200	0.128 *	0	330	3200	0.128 *	0	330	3200	0.128 *
Wb Right	79	0	-	0	79	0	-	0	79	0	-	0	79	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.925				0.951				0.951				0.951
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Rosecrans Avenue
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU30

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052
Nb Thru	761	3200	0.283 *	19	780	3200	0.288 *	0	780	3200	0.288 *	0	780	3200	0.288 *
Nb Right	143	0	-	0	143	0	-	0	143	0	-	0	143	0	-
Sb Left	198	1600	0.124 *	0	198	1600	0.124 *	0	198	1600	0.124 *	0	198	1600	0.124 *
Sb Thru	807	3200	0.252	8	815	3200	0.255	0	815	3200	0.255	0	815	3200	0.255
Sb Right	124	1600	0.078	5	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
Eb Left	122	1600	0.076 *	9	131	1600	0.082 *	0	131	1600	0.082 *	0	131	1600	0.082 *
Eb Thru	279	3200	0.087	0	279	3200	0.087	0	279	3200	0.087	0	279	3200	0.087
Eb Right	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044
Wb Left	150	1600	0.094	0	150	1600	0.094	0	150	1600	0.094	0	150	1600	0.094
Wb Thru	526	3200	0.216 *	0	526	3200	0.216 *	0	526	3200	0.216 *	0	526	3200	0.216 *
Wb Right	165	0	-	0	165	0	-	0	165	0	-	0	165	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.798				0.810				0.810				0.810
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Rosecrans Avenue
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU30

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	164	1600	0.103	0	164	1600	0.103	0	164	1600	0.103	0	164	1600	0.103
Nb Thru	831	3200	0.310 *	44	875	3200	0.323 *	0	875	3200	0.323 *	0	875	3200	0.323 *
Nb Right	160	0	-	0	160	0	-	0	160	0	-	0	160	0	-
Sb Left	258	1600	0.161 *	0	258	1600	0.161 *	0	258	1600	0.161 *	0	258	1600	0.161 *
Sb Thru	936	3200	0.293	54	990	3200	0.309	0	990	3200	0.309	0	990	3200	0.309
Sb Right	200	1600	0.125	27	227	1600	0.142	0	227	1600	0.142	0	227	1600	0.142
Eb Left	160	1600	0.100 *	16	176	1600	0.110 *	0	176	1600	0.110 *	0	176	1600	0.110 *
Eb Thru	595	3200	0.186	0	595	3200	0.186	0	595	3200	0.186	0	595	3200	0.186
Eb Right	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051
Wb Left	194	1600	0.121	0	194	1600	0.121	0	194	1600	0.121	0	194	1600	0.121
Wb Thru	473	3200	0.208 *	0	473	3200	0.208 *	0	473	3200	0.208 *	0	473	3200	0.208 *
Wb Right	193	0	-	0	193	0	-	0	193	0	-	0	193	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.879				0.903				0.903				0.903
LOS			D				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Foster Road
Peak hr: AM

N-S St: Clark Avenue
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU31

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093
Nb Thru	348	3200	0.146 *	16	364	3200	0.151 *	0	364	3200	0.151 *	0	364	3200	0.151 *
Nb Right	118	0	-	0	118	0	-	0	118	0	-	0	118	0	-
Sb Left	180	1600	0.113 *	0	180	1600	0.113 *	0	180	1600	0.113 *	0	180	1600	0.113 *
Sb Thru	251	3200	0.089	6	257	3200	0.091	0	257	3200	0.091	0	257	3200	0.091
Sb Right	35	0	-	0	35	0	-	0	35	0	-	0	35	0	-
Eb Left	38	1600	0.024 *	3	41	1600	0.026 *	0	41	1600	0.026 *	0	41	1600	0.026 *
Eb Thru	496	3200	0.184	0	496	3200	0.184	0	496	3200	0.184	0	496	3200	0.184
Eb Right	92	0	-	0	92	0	-	0	92	0	-	0	92	0	-
Wb Left	151	0	0.047	0	151	0	0.047	0	151	0	0.047	0	151	0	0.047
Wb Thru	587	3200	0.308 *	0	587	3200	0.308 *	0	587	3200	0.308 *	0	587	3200	0.308 *
Wb Right	246	0	-	0	246	0	-	0	246	0	-	0	246	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.689				0.696				0.696				0.696
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Clark Avenue @ Foster Road
Peak hr: PM

N-S St: Clark Avenue
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU31

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	125	1600	0.078 *	0	125	1600	0.078 *	0	125	1600	0.078 *	0	125	1600	0.078 *
Nb Thru	286	3200	0.109	33	319	3200	0.120	0	319	3200	0.120	0	319	3200	0.120
Nb Right	64	0	-	0	64	0	-	0	64	0	-	0	64	0	-
Sb Left	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037
Sb Thru	303	3200	0.103 *	41	344	3200	0.117 *	0	344	3200	0.117 *	0	344	3200	0.117 *
Sb Right	28	0	-	2	30	0	-	0	30	0	-	0	30	0	-
Eb Left	17	0	0.005	5	22	0	0.007	0	22	0	0.007	0	22	0	0.007
Eb Thru	430	3200	0.181 *	0	430	3200	0.183 *	0	430	3200	0.183 *	0	430	3200	0.183 *
Eb Right	132	0	-	0	132	0	-	0	132	0	-	0	132	0	-
Wb Left	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *
Wb Thru	314	3200	0.118	0	314	3200	0.118	0	314	3200	0.118	0	314	3200	0.118
Wb Right	65	0	-	0	65	0	-	0	65	0	-	0	65	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.534				0.549				0.549				0.549
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ I-105 WB Ramps
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: I-105 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU32

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	329	1600	0.206	0	329	1600	0.206	0	329	1600	0.206	0	329	1600	0.206
Nb Thru	1227	3200	0.383 *	28	1255	3200	0.392 *	0	1255	3200	0.392 *	0	1255	3200	0.392 *
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	580	4800	0.168	29	609	4800	0.175	0	609	4800	0.175	0	609	4800	0.175
Sb Right	224	0	-	9	233	0	-	0	233	0	-	0	233	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	178	1600	0.111	0	178	1600	0.111	0	178	1600	0.111	0	178	1600	0.111
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	691	3200	0.216 *	57	748	3200	0.234 *	0	748	3200	0.234 *	0	748	3200	0.234 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.699				0.726				0.726				0.726
LOS			B				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ I-105 WB Ramps
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: I-105 WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU32

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	231	1600	0.144 *	0	231	1600	0.144 *	0	231	1600	0.144 *	0	231	1600	0.144 *
Nb Thru	780	3200	0.244	81	861	3200	0.269	0	861	3200	0.269	0	861	3200	0.269
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1000	4800	0.309 *	159	1159	4800	0.346 *	0	1159	4800	0.346 *	0	1159	4800	0.346 *
Sb Right	482	0	-	18	500	0	-	0	500	0	-	0	500	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	241	1979	0.122	0	241	1573	0.153	0	241	1573	0.153	0	241	1573	0.153
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	285	2601	0.110	99	384	3053	0.126	0	384	3053	0.126	0	384	3053	0.126
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.675				0.743				0.743				0.743
LOS			B				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ I-105 EB Ramps
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: I-105 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU33

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1081	4800	0.260 *	19	1100	4800	0.264 *	0	1100	4800	0.264 *	0	1100	4800	0.264 *
Nb Right	165	0	-	0	165	0	-	0	165	0	-	0	165	0	-
Sb Left	161	1600	0.101 *	18	179	1600	0.112 *	0	179	1600	0.112 *	0	179	1600	0.112 *
Sb Thru	619	3200	0.193	9	628	3200	0.196	0	628	3200	0.196	0	628	3200	0.196
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	548	2785	0.197	9	557	2819	0.198	0	557	2819	0.198	0	557	2819	0.198
Eb Thru	7	0	0.000	0	7	39	0.179	0	7	39	0.179	0	7	39	0.179
Eb Right	295	1666	0.177	0	295	1629	0.181	0	295	1629	0.181	0	295	1629	0.181
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.657				0.673				0.673				0.673
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ I-105 EB Ramps
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: I-105 EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU33

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	729	4800	0.185 *	38	767	4800	0.193 *	0	767	4800	0.193 *	0	767	4800	0.193 *
Nb Right	157	0	-	0	157	0	-	0	157	0	-	0	157	0	-
Sb Left	390	1600	0.244 *	104	494	1600	0.309 *	0	494	1600	0.309 *	0	494	1600	0.309 *
Sb Thru	865	3200	0.270	53	918	3200	0.287	0	918	3200	0.287	0	918	3200	0.287
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	311	1705	0.182	43	354	1929	0.184	0	354	1705	0.208	0	354	1705	0.208
Eb Thru	3	0	0.000	0	3	17	0.176	0	3	0	0.000	0	3	0	0.000
Eb Right	474	2887	0.164	0	474	2639	0.180	0	474	2887	0.164	0	474	2887	0.164
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.711				0.785				0.809				0.809
LOS			C				C				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Foster Road
Peak hr: AM

N-S St: Bellflower Boulevard
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU34

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052
Nb Thru	986	3200	0.343 *	7	993	3200	0.345 *	0	993	3200	0.345 *	0	993	3200	0.345 *
Nb Right	110	0	-	0	110	0	-	0	110	0	-	0	110	0	-
Sb Left	98	1600	0.061 *	4	102	1600	0.064 *	0	102	1600	0.064 *	0	102	1600	0.064 *
Sb Thru	604	3200	0.221	2	606	3200	0.222	0	606	3200	0.222	0	606	3200	0.222
Sb Right	103	0	-	2	105	0	-	0	105	0	-	0	105	0	-
Eb Left	106	1600	0.066	4	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Eb Thru	239	3200	0.146 *	0	239	3200	0.146 *	0	239	3200	0.146 *	0	239	3200	0.146 *
Eb Right	228	0	-	0	228	0	-	0	228	0	-	0	228	0	-
Wb Left	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *
Wb Thru	272	3200	0.136	0	272	3200	0.139	0	272	3200	0.139	0	272	3200	0.139
Wb Right	164	0	-	9	173	0	-	0	173	0	-	0	173	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.755				0.760				0.760				0.760
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Bellflower Boulevard @ Foster Road
Peak hr: PM

N-S St: Bellflower Boulevard
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU34

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039
Nb Thru	658	3200	0.237 *	11	669	3200	0.241 *	0	669	3200	0.241 *	0	669	3200	0.241 *
Nb Right	101	0	-	0	101	0	-	0	101	0	-	0	101	0	-
Sb Left	218	1600	0.136 *	26	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *
Sb Thru	881	3200	0.330	13	894	3200	0.338	0	894	3200	0.338	0	894	3200	0.338
Sb Right	176	0	-	13	189	0	-	0	189	0	-	0	189	0	-
Eb Left	117	1600	0.073	11	128	1600	0.080 *	0	128	1600	0.080 *	0	128	1600	0.080 *
Eb Thru	382	3200	0.152 *	0	382	3200	0.152	0	382	3200	0.152	0	382	3200	0.152
Eb Right	103	0	-	0	103	0	-	0	103	0	-	0	103	0	-
Wb Left	54	1600	0.034 *	0	54	1600	0.034	0	54	1600	0.034	0	54	1600	0.034
Wb Thru	237	3200	0.105	0	237	3200	0.110 *	0	237	3200	0.110 *	0	237	3200	0.110 *
Wb Right	98	0	-	16	114	0	-	0	114	0	-	0	114	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.659				0.683				0.683				0.683
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rosemead Boulevard @ Telegraph Road
Peak hr: AM

N-S St: Rosemead Boulevard
E-W St: Telegraph Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU35

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	291	1600	0.182 *	0	291	1600	0.182 *	0	291	1600	0.182 *	0	291	1600	0.182 *
Nb Thru	624	3200	0.335	2	626	3200	0.336	0	626	3200	0.336	0	626	3200	0.336
Nb Right	448	0	-	2	450	0	-	0	450	0	-	0	450	0	-
Sb Left	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008	0	13	1600	0.008
Sb Thru	806	3200	0.291 *	7	813	3200	0.293 *	0	813	3200	0.293 *	0	813	3200	0.293 *
Sb Right	125	0	-	0	125	0	-	0	125	0	-	0	125	0	-
Eb Left	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053
Eb Thru	624	4800	0.154 *	0	624	4800	0.154 *	0	624	4800	0.154 *	0	624	4800	0.154 *
Eb Right	117	0	-	0	117	0	-	0	117	0	-	0	117	0	-
Wb Left	499	1600	0.312 *	4	503	1600	0.314 *	0	503	1600	0.314 *	0	503	1600	0.314 *
Wb Thru	1505	4800	0.338	0	1505	4800	0.338	0	1505	4800	0.338	0	1505	4800	0.338
Wb Right	115	0	-	0	115	0	-	0	115	0	-	0	115	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.039				1.044				1.044				1.044
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rosemead Boulevard @ Telegraph Road
Peak hr: PM

N-S St: Rosemead Boulevard
E-W St: Telegraph Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU35

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	177	1600	0.111	0	177	1600	0.111	0	177	1600	0.111	0	177	1600	0.111
Nb Thru	922	3200	0.443 *	14	936	3200	0.452 *	0	936	3200	0.452 *	0	936	3200	0.452 *
Nb Right	497	0	-	13	510	0	-	0	510	0	-	0	510	0	-
Sb Left	160	1600	0.100 *	0	160	1600	0.100 *	0	160	1600	0.100 *	0	160	1600	0.100 *
Sb Thru	827	3200	0.282	11	838	3200	0.285	0	838	3200	0.285	0	838	3200	0.285
Sb Right	74	0	-	0	74	0	-	0	74	0	-	0	74	0	-
Eb Left	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089
Eb Thru	1210	4800	0.313 *	0	1210	4800	0.313 *	0	1210	4800	0.313 *	0	1210	4800	0.313 *
Eb Right	290	0	-	0	290	0	-	0	290	0	-	0	290	0	-
Wb Left	414	1600	0.259 *	0	414	1600	0.259 *	0	414	1600	0.259 *	0	414	1600	0.259 *
Wb Thru	727	4800	0.186	0	727	4800	0.186	0	727	4800	0.186	0	727	4800	0.186
Wb Right	167	0	-	0	167	0	-	0	167	0	-	0	167	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.215				1.223				1.223				1.223
LOS			F				F				F				F

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Vista Del Rosa Street-I-5 NB Off-Ramp
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Vista Del Rosa Street-I-5 NB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU36

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053
Nb Thru	1192	3200	0.373 *	4	1196	3200	0.379 *	0	1196	3200	0.379 *	0	1196	3200	0.379 *
Nb Right	0	0	-	17	17	0	-	0	17	0	-	0	17	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	1307	4800	0.272	11	1318	4800	0.275	0	1318	4800	0.275	0	1318	4800	0.275
Sb Right	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004
Eb Left	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004	0	6	1600	0.004
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	279	1600	0.122 *	0	279	1600	0.122 *	0	279	1600	0.122 *	0	279	1600	0.122 *
Wb Left	202	1547	0.131	0	202	1547	0.131	0	202	1547	0.131	0	202	1547	0.131
Wb Thru	19	1481	0.117 *	0	19	1481	0.117 *	0	19	1481	0.117 *	0	19	1481	0.117 *
Wb Right	155	0	-	0	155	0	-	0	155	0	-	0	155	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.725				0.732				0.732				0.732
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Vista Del Rosa Street-I-5 NB Off-Ramp
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Vista Del Rosa Street-I-5 NB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU36

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	79	1600	0.049	0	79	1600	0.049	0	79	1600	0.049	0	79	1600	0.049
Nb Thru	1573	3200	0.566 *	27	1600	3200	0.602 *	0	1600	3200	0.602 *	0	1600	3200	0.602 *
Nb Right	238	0	-	88	326	0	-	0	326	0	-	0	326	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	1321	4800	0.275	11	1332	4800	0.278	0	1332	4800	0.278	0	1332	4800	0.278
Sb Right	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071
Eb Left	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	146	1600	0.042 *	0	146	1600	0.042 *	0	146	1600	0.042 *	0	146	1600	0.042 *
Wb Left	261	1600	0.163	0	261	1600	0.163	0	261	1600	0.163	0	261	1600	0.163
Wb Thru	63	1600	0.208 *	0	63	1600	0.208 *	0	63	1600	0.208 *	0	63	1600	0.208 *
Wb Right	270	0	-	0	270	0	-	0	270	0	-	0	270	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.916				0.952				0.952				0.952
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ I-5 SB Ramps
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: I-5 SB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU37

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1596	4800	0.333 *	20	1616	4800	0.337 *	0	1616	4800	0.337 *	0	1616	4800	0.337 *
Nb Right	298	1600	0.186	0	298	1600	0.186	0	298	1600	0.186	0	298	1600	0.186
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	952	4800	0.198	11	963	4800	0.201	0	963	4800	0.201	0	963	4800	0.201
Sb Right	275	1600	0.172	0	275	1600	0.172	0	275	1600	0.172	0	275	1600	0.172
Eb Left	257	2880	0.089	0	257	2880	0.089	0	257	2880	0.089	0	257	2880	0.089
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	410	1600	0.256 *	38	448	1600	0.280 *	0	448	1600	0.280 *	0	448	1600	0.280 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.689				0.717				0.717				0.717
LOS			B				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ I-5 SB Ramps
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: I-5 SB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU37

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1618	4800	0.337 *	114	1732	4800	0.361 *	0	1732	4800	0.361 *	0	1732	4800	0.361 *
Nb Right	215	1600	0.134	0	215	1600	0.134	0	215	1600	0.134	0	215	1600	0.134
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	1390	4800	0.290	11	1401	4800	0.292	0	1401	4800	0.292	0	1401	4800	0.292
Sb Right	215	1600	0.134	0	215	1600	0.134	0	215	1600	0.134	0	215	1600	0.134
Eb Left	574	2880	0.199	0	574	2880	0.199	0	574	2880	0.199	0	574	2880	0.199
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	447	1600	0.279 *	67	514	1600	0.321 *	0	514	1600	0.321 *	0	514	1600	0.321 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.716				0.782				0.782				0.782
LOS		C				C				C				C	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Gallatin Road
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Gallatin Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU38

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047
Nb Thru	1361	3200	0.458 *	20	1381	3200	0.464 *	0	1381	3200	0.464 *	0	1381	3200	0.464 *
Nb Right	104	0	-	0	104	0	-	0	104	0	-	0	104	0	-
Sb Left	132	1600	0.083 *	0	132	1600	0.083 *	0	132	1600	0.083 *	0	132	1600	0.083 *
Sb Thru	992	3200	0.383	48	1040	3200	0.398	0	1040	3200	0.398	0	1040	3200	0.398
Sb Right	233	0	-	0	233	0	-	0	233	0	-	0	233	0	-
Eb Left [3]	356	1600	0.223 *	0	356	1600	0.223 *	0	356	2030	0.175 *	0	356	2030	0.175 *
Eb Thru [3]	149	1600	0.093	0	149	1600	0.093	0	149	944	0.158	0	149	944	0.158
Eb Right [3]	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054
Wb Left [3]	127	1600	0.079	0	127	1600	0.079	0	127	1600	0.079	0	127	1600	0.079
Wb Thru [3]	154	1600	0.226 *	0	154	1600	0.226 *	0	154	1600	0.226 *	0	154	1600	0.226 *
Wb Right [3]	207	0	-	0	207	0	-	0	207	0	-	0	207	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.088				1.095				1.048				1.048
LOS			F				F				F				F

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green
3 Project mitigation also includes traffic signal modification to provide eastbound and westbound split phase operations.

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Gallatin Road
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Gallatin Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU38

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
Nb Left	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046
Nb Thru	1410	3200	0.470 *	114	1524	3200	0.506 *	0	1524	3200	0.506 *	0	1524	3200	0.506 *
Nb Right	95	0	-	0	95	0	-	0	95	0	-	0	95	0	-
Sb Left	238	1600	0.149 *	0	238	1600	0.149 *	0	238	1600	0.149 *	0	238	1600	0.149 *
Sb Thru	1283	3200	0.486	77	1360	3200	0.510	0	1360	3200	0.510	0	1360	3200	0.510
Sb Right	271	0	-	0	271	0	-	0	271	0	-	0	271	0	-
Eb Left [3]	354	1600	0.221 *	0	354	1600	0.221 *	0	354	1938	0.183 *	0	354	1938	0.183 *
Eb Thru [3]	172	1600	0.108	0	172	1600	0.108	0	172	1046	0.164	0	172	1046	0.164
Eb Right [3]	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047
Wb Left [3]	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063
Wb Thru [3]	116	1600	0.137 *	0	116	1600	0.137 *	0	116	1600	0.137 *	0	116	1600	0.137 *
Wb Right [3]	103	0	-	0	103	0	-	0	103	0	-	0	103	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.077				1.113				1.074				1.074
LOS			F				F				F				F

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green
3 Project mitigation also includes traffic signal modification to provide eastbound and westbound split phase operations.

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Florence Avenue
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU39

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	224	1600	0.140 *	3	227	1600	0.142 *	0	227	1600	0.142 *	0	227	1600	0.142 *
Nb Thru	987	4800	0.243	20	1007	4800	0.248	0	1007	4800	0.248	0	1007	4800	0.248
Nb Right	180	0	-	5	185	0	-	0	185	0	-	0	185	0	-
Sb Left	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089
Sb Thru	868	4800	0.211 *	48	916	4800	0.221 *	0	916	4800	0.221 *	0	916	4800	0.221 *
Sb Right	146	0	-	0	146	0	-	0	146	0	-	0	146	0	-
Eb Left	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *
Eb Thru	765	4800	0.194	0	765	4800	0.196	0	765	4800	0.196	0	765	4800	0.196
Eb Right	166	0	-	12	178	0	-	0	178	0	-	0	178	0	-
Wb Left	144	1600	0.090	3	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092
Wb Thru	1154	4800	0.304 *	0	1154	4800	0.304 *	0	1154	4800	0.304 *	0	1154	4800	0.304 *
Wb Right	305	0	-	0	305	0	-	0	305	0	-	0	305	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.872				0.884				0.884				0.884
LOS			D				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Florence Avenue
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU39

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	330	1600	0.206 *	26	356	1600	0.223 *	0	356	1600	0.223 *	0	356	1600	0.223 *
Nb Thru	1238	4800	0.301	114	1352	4800	0.329	0	1352	4800	0.329	0	1352	4800	0.329
Nb Right	208	0	-	17	225	0	-	0	225	0	-	0	225	0	-
Sb Left	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128
Sb Thru	977	4800	0.245 *	77	1054	4800	0.261 *	0	1054	4800	0.261 *	0	1054	4800	0.261 *
Sb Right	197	0	-	0	197	0	-	0	197	0	-	0	197	0	-
Eb Left	191	1600	0.119	0	191	1600	0.119	0	191	1600	0.119	0	191	1600	0.119
Eb Thru	1002	4800	0.281 *	0	1002	4800	0.285 *	0	1002	4800	0.285 *	0	1002	4800	0.285 *
Eb Right	345	0	-	21	366	0	-	0	366	0	-	0	366	0	-
Wb Left	166	1600	0.104 *	1	167	1600	0.104 *	0	167	1600	0.104 *	0	167	1600	0.104 *
Wb Thru	978	4800	0.246	0	978	4800	0.246	0	978	4800	0.246	0	978	4800	0.246
Wb Right	203	0	-	0	203	0	-	0	203	0	-	0	203	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.935				0.973				0.973				0.973
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ 5th Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: 5th Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU40

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048
Nb Thru	1223	3200	0.382 *	34	1257	3200	0.393 *	0	1257	3200	0.393 *	0	1257	3200	0.393 *
Nb Right	184	1600	0.115	0	184	1600	0.115	0	184	1600	0.115	0	184	1600	0.115
Sb Left	153	1600	0.096 *	0	153	1600	0.096 *	0	153	1600	0.096 *	0	153	1600	0.096 *
Sb Thru	1063	3200	0.348	70	1133	3200	0.369	0	1133	3200	0.369	0	1133	3200	0.369
Sb Right	49	0	-	0	49	0	-	0	49	0	-	0	49	0	-
Eb Left	43	1600	0.027	0	43	1600	0.027	0	43	1600	0.027	0	43	1600	0.027
Eb Thru	257	3200	0.126 *	0	257	3200	0.126 *	0	257	3200	0.126 *	0	257	3200	0.126 *
Eb Right	146	0	-	0	146	0	-	0	146	0	-	0	146	0	-
Wb Left	217	1600	0.136 *	0	217	1600	0.136 *	0	217	1600	0.136 *	0	217	1600	0.136 *
Wb Thru	282	1600	0.176	0	282	1600	0.176	0	282	1600	0.176	0	282	1600	0.176
Wb Right	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.839				0.850				0.850				0.850
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ 5th Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: 5th Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU40

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081
Nb Thru	1463	3200	0.457 *	184	1647	3200	0.515 *	0	1647	3200	0.515 *	0	1647	3200	0.515 *
Nb Right	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076
Sb Left	259	1600	0.162 *	0	259	1600	0.162 *	0	259	1600	0.162 *	0	259	1600	0.162 *
Sb Thru	1228	3200	0.399	126	1354	3200	0.439	0	1354	3200	0.439	0	1354	3200	0.439
Sb Right	50	0	-	0	50	0	-	0	50	0	-	0	50	0	-
Eb Left	42	1600	0.026	0	42	1600	0.026	0	42	1600	0.026	0	42	1600	0.026
Eb Thru	385	3200	0.148 *	0	385	3200	0.148 *	0	385	3200	0.148 *	0	385	3200	0.148 *
Eb Right	87	0	-	0	87	0	-	0	87	0	-	0	87	0	-
Wb Left	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *
Wb Thru	246	1600	0.154	0	246	1600	0.154	0	246	1600	0.154	0	246	1600	0.154
Wb Right	193	1600	0.121	0	193	1600	0.121	0	193	1600	0.121	0	193	1600	0.121
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.918				0.975				0.975				0.975
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Firestone Boulevard
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU41

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	377	1600	0.236	19	396	1600	0.248 *	0	396	1600	0.248 *	0	396	1600	0.248 *
Nb Thru	1147	4800	0.239 *	37	1184	4800	0.247	0	1184	4800	0.247	0	1184	4800	0.247
Nb Right	150	1600	0.094	0	150	1600	0.094	0	150	1600	0.094	0	150	1600	0.094
Sb Left	240	1600	0.150 *	0	240	1600	0.150	0	240	1600	0.150	0	240	1600	0.150
Sb Thru	713	4800	0.149	69	782	4800	0.163 *	0	782	4800	0.163 *	0	782	4800	0.163 *
Sb Right	215	1600	0.069	0	215	1600	0.069	0	215	1600	0.069	0	215	1600	0.069
Eb Left	188	2880	0.065 *	0	188	2880	0.065 *	0	188	2880	0.065 *	0	188	2880	0.065 *
Eb Thru	775	4800	0.161	0	775	4800	0.161	0	775	4800	0.161	0	775	4800	0.161
Eb Right	147	1600	0.092	37	184	1600	0.115	0	184	1600	0.115	0	184	1600	0.115
Wb Left	109	2880	0.038	0	109	2880	0.038	0	109	2880	0.038	0	109	2880	0.038
Wb Thru	1243	4800	0.259 *	0	1243	4800	0.259 *	0	1243	4800	0.259 *	0	1243	4800	0.259 *
Wb Right	321	1600	0.201	0	321	1600	0.201	0	321	1600	0.201	0	321	1600	0.201
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.813				0.835				0.835				0.835
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Firestone Boulevard
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU41

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
Nb Left	402	1600	0.251 *	101	503	1600	0.314 *	0	503	1600	0.314 *	0	503	1600	0.314 *
Nb Thru	1094	4800	0.228	183	1277	4800	0.266	0	1277	4800	0.266	0	1277	4800	0.266
Nb Right	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158
Sb Left	255	1600	0.159	0	255	1600	0.159	0	255	1600	0.159	0	255	1600	0.159
Sb Thru	677	4800	0.141 *	121	798	4800	0.166 *	0	798	4800	0.166 *	0	798	4800	0.166 *
Sb Right	262	1600	0.051	0	262	1600	0.051	0	262	1600	0.051	0	262	1600	0.051
Eb Left	325	2880	0.113	0	325	2880	0.113	0	325	2880	0.113	0	325	2880	0.113
Eb Thru	1281	4800	0.267 *	0	1281	4800	0.267 *	0	1281	4800	0.267 *	0	1281	4800	0.267 *
Eb Right	203	1600	0.127	83	286	1600	0.179	0	286	1600	0.179	0	286	1600	0.179
Wb Left	225	2880	0.078 *	0	225	2880	0.078 *	0	225	2880	0.078 *	0	225	2880	0.078 *
Wb Thru	1107	4800	0.231	0	1107	4800	0.231	0	1107	4800	0.231	0	1107	4800	0.231
Wb Right	240	1600	0.150	0	240	1600	0.150	0	240	1600	0.150	0	240	1600	0.150
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.837				0.926				0.926				0.926
LOS			D				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Firestone Boulevard (East)
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Firestone Boulevard (East)
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU42

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	512	2874	0.178 *	0	512	2874	0.178 *	0	512	2874	0.178 *	0	512	2874	0.178 *
Nb Thru	1	6	0.167	0	1	6	0.167	0	1	6	0.167	0	1	6	0.167
Nb Right	293	1600	0.031	0	293	1600	0.031	0	293	1600	0.031	0	293	1600	0.031
Sb Left	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001	0	1	1600	0.001
Sb Thru	0	1600	0.002 *	0	0	1600	0.002 *	0	0	1600	0.002 *	0	0	1600	0.002 *
Sb Right	3	0	-	0	3	0	-	0	3	0	-	0	3	0	-
Eb Left	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002
Eb Thru	894	4800	0.186 *	0	894	4800	0.186 *	0	894	4800	0.186 *	0	894	4800	0.186 *
Eb Right	376	1600	0.057	0	376	1600	0.057	0	376	1600	0.057	0	376	1600	0.057
Wb Left	243	1600	0.152 *	0	243	1600	0.152 *	0	243	1600	0.152 *	0	243	1600	0.152 *
Wb Thru	1317	4800	0.275	0	1317	4800	0.275	0	1317	4800	0.275	0	1317	4800	0.275
Wb Right	5	0	-	0	5	0	-	0	5	0	-	0	5	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.618				0.618				0.618				0.618
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Firestone Boulevard (East)
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Firestone Boulevard (East)
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU42

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	385	2745	0.140 *	0	385	2745	0.140 *	0	385	2745	0.140 *	0	385	2745	0.140 *
Nb Thru	19	150	0.127	0	19	150	0.127	0	19	150	0.127	0	19	150	0.127
Nb Right	259	1600	0.000	0	259	1600	0.000	0	259	1600	0.000	0	259	1600	0.000
Sb Left	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002	0	3	1600	0.002
Sb Thru	1	1600	0.036 *	0	1	1600	0.036 *	0	1	1600	0.036 *	0	1	1600	0.036 *
Sb Right	57	0	-	0	57	0	-	0	57	0	-	0	57	0	-
Eb Left	31	1600	0.019	0	31	1600	0.019	0	31	1600	0.019	0	31	1600	0.019
Eb Thru	1106	4800	0.230 *	0	1106	4800	0.230 *	0	1106	4800	0.230 *	0	1106	4800	0.230 *
Eb Right	382	1600	0.098	0	382	1600	0.098	0	382	1600	0.098	0	382	1600	0.098
Wb Left	262	1600	0.164 *	0	262	1600	0.164 *	0	262	1600	0.164 *	0	262	1600	0.164 *
Wb Thru	997	4800	0.216	0	997	4800	0.216	0	997	4800	0.216	0	997	4800	0.216
Wb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.671				0.671				0.671				0.671
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Stewart and Gray Road
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU43

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092
Nb Thru	537	3200	0.197 *	0	537	3200	0.197 *	0	537	3200	0.197 *	0	537	3200	0.197 *
Nb Right	94	0	-	0	94	0	-	0	94	0	-	0	94	0	-
Sb Left	35	1600	0.022 *	0	35	1600	0.022 *	0	35	1600	0.022 *	0	35	1600	0.022 *
Sb Thru	339	3200	0.106	0	339	3200	0.106	0	339	3200	0.106	0	339	3200	0.106
Sb Right	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073
Eb Left	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042
Eb Thru	459	3200	0.143 *	31	490	3200	0.153 *	0	490	3200	0.153 *	0	490	3200	0.153 *
Eb Right	241	1600	0.059	0	241	1600	0.059	0	241	1600	0.059	0	241	1600	0.059
Wb Left	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *
Wb Thru	311	3200	0.123	103	414	3200	0.155	0	414	3200	0.155	0	414	3200	0.155
Wb Right	82	0	-	0	82	0	-	0	82	0	-	0	82	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.526				0.535				0.535				0.535
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Stewart and Gray Road
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU43

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *
Nb Thru	396	3200	0.168	0	396	3200	0.168	0	396	3200	0.168	0	396	3200	0.168
Nb Right	141	0	-	0	141	0	-	0	141	0	-	0	141	0	-
Sb Left	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Sb Thru	399	3200	0.125 *	0	399	3200	0.125 *	0	399	3200	0.125 *	0	399	3200	0.125 *
Sb Right	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088
Eb Left	195	1600	0.122 *	0	195	1600	0.122 *	0	195	1600	0.122 *	0	195	1600	0.122 *
Eb Thru	460	3200	0.144	158	618	3200	0.193	0	618	3200	0.193	0	618	3200	0.193
Eb Right	312	1600	0.106	0	312	1600	0.106	0	312	1600	0.106	0	312	1600	0.106
Wb Left	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093	0	149	1600	0.093
Wb Thru	599	3200	0.220 *	152	751	3200	0.267 *	0	751	3200	0.267 *	0	751	3200	0.267 *
Wb Right	104	0	-	0	104	0	-	0	104	0	-	0	104	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.655				0.703				0.703				0.703
LOS			B				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Washburn Road
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Washburn Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU44

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039
Nb Thru	657	3200	0.205 *	0	657	3200	0.205 *	0	657	3200	0.205 *	0	657	3200	0.205 *
Nb Right	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053
Sb Left	34	1600	0.021 *	0	34	1600	0.021 *	0	34	1600	0.021 *	0	34	1600	0.021 *
Sb Thru	593	3200	0.185	0	593	3200	0.185	0	593	3200	0.185	0	593	3200	0.185
Sb Right	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083
Eb Left	94	1600	0.059	0	94	1600	0.059	0	94	1600	0.059	0	94	1600	0.059
Eb Thru	34	1600	0.103 *	0	34	1600	0.103 *	0	34	1600	0.103 *	0	34	1600	0.103 *
Eb Right	130	0	-	0	130	0	-	0	130	0	-	0	130	0	-
Wb Left	45	1600	0.028 *	0	45	1600	0.028 *	0	45	1600	0.028 *	0	45	1600	0.028 *
Wb Thru	9	1600	0.006	0	9	1600	0.006	0	9	1600	0.006	0	9	1600	0.006
Wb Right	21	1600	0.013	0	21	1600	0.013	0	21	1600	0.013	0	21	1600	0.013
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.457				0.457				0.457				0.457
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Washburn Road
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Washburn Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU44

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	68	1600	0.043 *	0	68	1600	0.043 *	0	68	1600	0.043 *	0	68	1600	0.043 *
Nb Thru	614	3200	0.192	0	614	3200	0.192	0	614	3200	0.192	0	614	3200	0.192
Nb Right	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042
Sb Left	37	1600	0.023	0	37	1600	0.023	0	37	1600	0.023	0	37	1600	0.023
Sb Thru	644	3200	0.201 *	0	644	3200	0.201 *	0	644	3200	0.201 *	0	644	3200	0.201 *
Sb Right	79	1600	0.049	0	79	1600	0.049	0	79	1600	0.049	0	79	1600	0.049
Eb Left	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042
Eb Thru	17	1600	0.078 *	0	17	1600	0.078 *	0	17	1600	0.078 *	0	17	1600	0.078 *
Eb Right	108	0	-	0	108	0	-	0	108	0	-	0	108	0	-
Wb Left	118	1600	0.074 *	0	118	1600	0.074 *	0	118	1600	0.074 *	0	118	1600	0.074 *
Wb Thru	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021
Wb Right	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.496				0.496				0.496				0.496
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Imperial Highway
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU45

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	195	1600	0.122 *	7	202	1600	0.126 *	0	202	1600	0.126 *	0	202	1600	0.126 *
Nb Thru	481	3200	0.150	0	481	3200	0.150	0	481	3200	0.150	0	481	3200	0.150
Nb Right	299	1600	0.102	0	299	1600	0.102	0	299	1600	0.102	0	299	1600	0.102
Sb Left	166	1600	0.104	0	166	1600	0.104	0	166	1600	0.104	0	166	1600	0.104
Sb Thru	426	3200	0.133 *	0	426	3200	0.133 *	0	426	3200	0.133 *	0	426	3200	0.133 *
Sb Right	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099
Eb Left	139	1600	0.087 *	0	139	1600	0.087 *	0	139	1600	0.087 *	0	139	1600	0.087 *
Eb Thru	699	4800	0.169	7	706	4800	0.173	0	706	4800	0.173	0	706	4800	0.173
Eb Right	113	0	-	9	122	0	-	0	122	0	-	0	122	0	-
Wb Left	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085
Wb Thru	1152	4800	0.279 *	24	1176	4800	0.284 *	0	1176	4800	0.284 *	0	1176	4800	0.284 *
Wb Right	187	0	-	0	187	0	-	0	187	0	-	0	187	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.721				0.730				0.730				0.730
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Imperial Highway
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU45

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	137	1600	0.086	16	153	1600	0.096	0	153	1600	0.096	0	153	1600	0.096
Nb Thru	391	3200	0.122 *	0	391	3200	0.122 *	0	391	3200	0.122 *	0	391	3200	0.122 *
Nb Right	323	1600	0.064	0	323	1600	0.064	0	323	1600	0.064	0	323	1600	0.064
Sb Left	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *	0	188	1600	0.118 *
Sb Thru	423	3200	0.132	0	423	3200	0.132	0	423	3200	0.132	0	423	3200	0.132
Sb Right	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128
Eb Left	166	1600	0.104	0	166	1600	0.104	0	166	1600	0.104	0	166	1600	0.104
Eb Thru	1396	4800	0.319 *	57	1453	4800	0.337 *	0	1453	4800	0.337 *	0	1453	4800	0.337 *
Eb Right	135	0	-	30	165	0	-	0	165	0	-	0	165	0	-
Wb Left	220	1600	0.138 *	0	220	1600	0.138 *	0	220	1600	0.138 *	0	220	1600	0.138 *
Wb Thru	744	4800	0.191	32	776	4800	0.198	0	776	4800	0.198	0	776	4800	0.198
Wb Right	174	0	-	0	174	0	-	0	174	0	-	0	174	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.796				0.814				0.814				0.814
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Foster Road
Peak hr: AM

N-S St: Woodruff Avenue
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU46

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063
Nb Thru	755	3200	0.245 *	7	762	3200	0.247 *	0	762	3200	0.247 *	0	762	3200	0.247 *
Nb Right	28	0	-	0	28	0	-	0	28	0	-	0	28	0	-
Sb Left	108	1600	0.068 *	0	108	1600	0.068 *	0	108	1600	0.068 *	0	108	1600	0.068 *
Sb Thru	446	3200	0.139	8	454	3200	0.142	0	454	3200	0.142	0	454	3200	0.142
Sb Right	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021
Eb Left	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043
Eb Thru	103	3200	0.063 *	0	103	3200	0.063 *	0	103	3200	0.063 *	0	103	3200	0.063 *
Eb Right	98	0	-	0	98	0	-	0	98	0	-	0	98	0	-
Wb Left	40	1600	0.025 *	0	40	1600	0.025 *	0	40	1600	0.025 *	0	40	1600	0.025 *
Wb Thru	100	3200	0.042	0	100	3200	0.042	0	100	3200	0.042	0	100	3200	0.042
Wb Right	34	0	-	0	34	0	-	0	34	0	-	0	34	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.500				0.502				0.502				0.502
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Woodruff Avenue @ Foster Road
Peak hr: PM

N-S St: Woodruff Avenue
E-W St: Foster Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU46

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *
Nb Thru	706	3200	0.238	16	722	3200	0.243	0	722	3200	0.243	0	722	3200	0.243
Nb Right	55	0	-	0	55	0	-	0	55	0	-	0	55	0	-
Sb Left	48	1600	0.030	0	48	1600	0.030	0	48	1600	0.030	0	48	1600	0.030
Sb Thru	681	3200	0.213 *	30	711	3200	0.222 *	0	711	3200	0.222 *	0	711	3200	0.222 *
Sb Right	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064
Eb Left	199	1600	0.124	0	199	1600	0.124	0	199	1600	0.124	0	199	1600	0.124
Eb Thru	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081
Eb Right	206	1600	0.129 *	0	206	1600	0.129 *	0	206	1600	0.129 *	0	206	1600	0.129 *
Wb Left	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *
Wb Thru	68	3200	0.027	0	68	3200	0.027	0	68	3200	0.027	0	68	3200	0.027
Wb Right	19	0	-	0	19	0	-	0	19	0	-	0	19	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.551				0.560				0.560				0.560
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Stewart and Gray Road @ Firestone Boulevard
Peak hr: AM

N-S St: Stewart and Gray Road
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU47

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	655	3200	0.060 *	31	686	3200	0.038 *	0	686	3200	0.038 *	0	686	3200	0.038 *
Sb Left	102	1600	0.064 *	0	102	1600	0.064 *	0	102	1600	0.064 *	0	102	1600	0.064 *
Sb Thru	27	1600	0.027	0	27	1600	0.027	0	27	1600	0.027	0	27	1600	0.027
Sb Right	16	0	-	0	16	0	-	0	16	0	-	0	16	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1052	4800	0.224 *	0	1052	4800	0.224 *	0	1052	4800	0.224 *	0	1052	4800	0.224 *
Eb Right	24	0	-	0	24	0	-	0	24	0	-	0	24	0	-
Wb Left	463	2880	0.161 *	103	566	2880	0.197 *	0	566	2880	0.197 *	0	566	2880	0.197 *
Wb Thru	1675	4800	0.354	0	1675	4800	0.354	0	1675	4800	0.354	0	1675	4800	0.354
Wb Right	26	0	-	0	26	0	-	0	26	0	-	0	26	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.609				0.622				0.622				0.622
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Stewart and Gray Road @ Firestone Boulevard
Peak hr: PM

N-S St: Stewart and Gray Road
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU47

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	935	3200	0.088 *	158	1093	3200	0.090 *	0	1093	3200	0.090 *	0	1093	3200	0.090 *
Sb Left	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *
Sb Thru	18	1600	0.033	0	18	1600	0.033	0	18	1600	0.033	0	18	1600	0.033
Sb Right	34	0	-	0	34	0	-	0	34	0	-	0	34	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1746	4800	0.369 *	0	1746	4800	0.369 *	0	1746	4800	0.369 *	0	1746	4800	0.369 *
Eb Right	24	0	-	0	24	0	-	0	24	0	-	0	24	0	-
Wb Left	652	2880	0.226 *	152	804	2880	0.279 *	0	804	2880	0.279 *	0	804	2880	0.279 *
Wb Thru	1488	4800	0.320	0	1488	4800	0.320	0	1488	4800	0.320	0	1488	4800	0.320
Wb Right	50	0	-	0	50	0	-	0	50	0	-	0	50	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.847				0.901				0.901				0.901
LOS			D				E				E				E

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Little Lake Road-I-605 SB Ramps @ Florence Avenue
Peak hr: AM

N-S St: Little Lake Road-I-605 SB Ramps
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU48

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	27	1108	0.024 *	0	27	1108	0.024 *	0	27	1108	0.024 *	0	27	1108	0.024 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	12	492	0.024	0	12	492	0.024	0	12	492	0.024	0	12	492	0.024
Sb Left	382	2880	0.133	0	382	2880	0.133	0	382	2880	0.133	0	382	2880	0.133
Sb Thru	52	1600	0.166 *	0	52	1600	0.166 *	0	52	1600	0.166 *	0	52	1600	0.166 *
Sb Right	214	0	-	0	214	0	-	0	214	0	-	0	214	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	897	4800	0.245 *	2	899	4800	0.246 *	0	899	4800	0.246 *	0	899	4800	0.246 *
Eb Right	281	0	-	0	281	0	-	0	281	0	-	0	281	0	-
Wb Left	750	2880	0.260 *	7	757	2880	0.263 *	0	757	2880	0.263 *	0	757	2880	0.263 *
Wb Thru	1077	3200	0.337	0	1077	3200	0.337	0	1077	3200	0.337	0	1077	3200	0.337
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.796				0.799				0.799				0.799
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Little Lake Road-I-605 SB Ramps @ Florence Avenue
Peak hr: PM

N-S St: Little Lake Road-I-605 SB Ramps
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU48

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	20	941	0.021 *	0	20	941	0.021 *	0	20	941	0.021 *	0	20	941	0.021 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	14	659	0.021	0	14	659	0.021	0	14	659	0.021	0	14	659	0.021
Sb Left	482	2880	0.167	0	482	2880	0.167	0	482	2880	0.167	0	482	2880	0.167
Sb Thru	161	1600	0.236 *	0	161	1600	0.236 *	0	161	1600	0.236 *	0	161	1600	0.236 *
Sb Right	217	0	-	0	217	0	-	0	217	0	-	0	217	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1159	4800	0.311 *	14	1173	4800	0.314 *	0	1173	4800	0.314 *	0	1173	4800	0.314 *
Eb Right	336	0	-	0	336	0	-	0	336	0	-	0	336	0	-
Wb Left	811	2880	0.282 *	11	822	2880	0.285 *	0	822	2880	0.285 *	0	822	2880	0.285 *
Wb Thru	956	3200	0.299	0	956	3200	0.299	0	956	3200	0.299	0	956	3200	0.299
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.951				0.957				0.957				0.957
LOS			E				E				E				E

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Florence Avenue
Peak hr: AM

N-S St: Studebaker Road
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU49

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	609	2802	0.217 *	0	609	2802	0.217 *	0	609	2802	0.217 *	0	609	2802	0.217 *
Nb Thru	17	87	0.195	0	17	87	0.195	0	17	87	0.195	0	17	87	0.195
Nb Right	708	3200	0.185	0	708	3200	0.185	0	708	3200	0.185	0	708	3200	0.185
Sb Left	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003
Sb Thru	9	1600	0.009 *	0	9	1600	0.009 *	0	9	1600	0.009 *	0	9	1600	0.009 *
Sb Right	6	0	-	0	6	0	-	0	6	0	-	0	6	0	-
Eb Left	12	1600	0.008 *	0	12	1600	0.008 *	0	12	1600	0.008 *	0	12	1600	0.008 *
Eb Thru	1100	3200	0.344	2	1102	3200	0.344	0	1102	3200	0.344	0	1102	3200	0.344
Eb Right	479	1600	0.299	0	479	1600	0.299	0	479	1600	0.299	0	479	1600	0.299
Wb Left	233	2880	0.081	0	233	2880	0.081	0	233	2880	0.081	0	233	2880	0.081
Wb Thru	1640	3200	0.516 *	7	1647	3200	0.518 *	0	1647	3200	0.518 *	0	1647	3200	0.518 *
Wb Right	11	0	-	0	11	0	-	0	11	0	-	0	11	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.850				0.852				0.852				0.852
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Florence Avenue
Peak hr: PM

N-S St: Studebaker Road
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU49

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	375	2762	0.136	0	375	2762	0.136	0	375	2762	0.136	0	375	2762	0.136
Nb Thru	16	131	0.122	0	16	131	0.122	0	16	131	0.122	0	16	131	0.122
Nb Right	859	3200	0.231 *	0	859	3200	0.231 *	0	859	3200	0.231 *	0	859	3200	0.231 *
Sb Left	17	1600	0.011 *	0	17	1600	0.011 *	0	17	1600	0.011 *	0	17	1600	0.011 *
Sb Thru	14	1600	0.012	0	14	1600	0.012	0	14	1600	0.012	0	14	1600	0.012
Sb Right	5	0	-	0	5	0	-	0	5	0	-	0	5	0	-
Eb Left	5	1600	0.003 *	0	5	1600	0.003 *	0	5	1600	0.003 *	0	5	1600	0.003 *
Eb Thru	1168	3200	0.365	14	1182	3200	0.369	0	1182	3200	0.369	0	1182	3200	0.369
Eb Right	550	1600	0.344	0	550	1600	0.344	0	550	1600	0.344	0	550	1600	0.344
Wb Left	242	2880	0.084	0	242	2880	0.084	0	242	2880	0.084	0	242	2880	0.084
Wb Thru	1578	3200	0.495 *	11	1589	3200	0.498 *	0	1589	3200	0.498 *	0	1589	3200	0.498 *
Wb Right	5	0	-	0	5	0	-	0	5	0	-	0	5	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.839				0.843				0.843				0.843
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Florence Avenue
Peak hr: AM

N-S St: Downey Avenue
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU50

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	177	1600	0.111 *	0	177	1600	0.111 *	0	177	1600	0.111 *	0	177	1600	0.111 *
Nb Thru	343	3200	0.151	0	343	3200	0.151	0	343	3200	0.151	0	343	3200	0.151
Nb Right	141	0	-	0	141	0	-	0	141	0	-	0	141	0	-
Sb Left	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015
Sb Thru	297	3200	0.123 *	0	297	3200	0.123 *	0	297	3200	0.123 *	0	297	3200	0.123 *
Sb Right	95	0	-	0	95	0	-	0	95	0	-	0	95	0	-
Eb Left	81	1600	0.051 *	0	81	1600	0.051	0	81	1600	0.051	0	81	1600	0.051
Eb Thru	1308	4800	0.288	6	1314	4800	0.289	0	1314	4800	0.289	0	1314	4800	0.289
Eb Right	73	0	-	0	73	0	-	0	73	0	-	0	73	0	-
Wb Left	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052
Wb Thru	1342	4800	0.290 *	2	1344	4800	0.290	0	1344	4800	0.290	0	1344	4800	0.290
Wb Right	49	0	-	0	49	0	-	0	49	0	-	0	49	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.674				0.674				0.674				0.674
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Florence Avenue
Peak hr: PM

N-S St: Downey Avenue
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU50

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	136	1600	0.085 *	0	136	1600	0.085 *	0	136	1600	0.085 *	0	136	1600	0.085 *
Nb Thru	268	3200	0.123	0	268	3200	0.123	0	268	3200	0.123	0	268	3200	0.123
Nb Right	126	0	-	0	126	0	-	0	126	0	-	0	126	0	-
Sb Left	29	1600	0.018	0	29	1600	0.018	0	29	1600	0.018	0	29	1600	0.018
Sb Thru	193	3200	0.082 *	0	193	3200	0.082 *	0	193	3200	0.082 *	0	193	3200	0.082 *
Sb Right	68	0	-	0	68	0	-	0	68	0	-	0	68	0	-
Eb Left	55	1600	0.034	0	55	1600	0.034	0	55	1600	0.034	0	55	1600	0.034
Eb Thru	1621	4800	0.364 *	11	1632	4800	0.366 *	0	1632	4800	0.366 *	0	1632	4800	0.366 *
Eb Right	127	0	-	0	127	0	-	0	127	0	-	0	127	0	-
Wb Left	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *
Wb Thru	1347	4800	0.288	13	1360	4800	0.291	0	1360	4800	0.291	0	1360	4800	0.291
Wb Right	37	0	-	0	37	0	-	0	37	0	-	0	37	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.682				0.684				0.684				0.684
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Firestone Boulevard
Peak hr: AM

N-S St: Downey Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU51

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *	0	169	1600	0.106 *
Nb Thru	200	1600	0.125	0	200	1600	0.125	0	200	1600	0.125	0	200	1600	0.125
Nb Right	115	1600	0.072	3	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Sb Left	116	1600	0.073	0	116	1600	0.073	0	116	1600	0.073	0	116	1600	0.073
Sb Thru	270	3200	0.094 *	0	270	3200	0.094 *	0	270	3200	0.094 *	0	270	3200	0.094 *
Sb Right	30	0	-	0	30	0	-	0	30	0	-	0	30	0	-
Eb Left	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021
Eb Thru	734	3200	0.229 *	21	755	3200	0.236 *	0	755	3200	0.236 *	0	755	3200	0.236 *
Eb Right	77	1600	0.048	0	77	1600	0.048	0	77	1600	0.048	0	77	1600	0.048
Wb Left	88	1600	0.055 *	5	93	1600	0.058 *	0	93	1600	0.058 *	0	93	1600	0.058 *
Wb Thru	1026	4800	0.227	9	1035	4800	0.229	0	1035	4800	0.229	0	1035	4800	0.229
Wb Right	64	0	-	0	64	0	-	0	64	0	-	0	64	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.584				0.593				0.593				0.593
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Firestone Boulevard
Peak hr: PM

N-S St: Downey Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU51

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088
Nb Thru	288	1600	0.180 *	0	288	1600	0.180 *	0	288	1600	0.180 *	0	288	1600	0.180 *
Nb Right	153	1600	0.096	12	165	1600	0.103	0	165	1600	0.103	0	165	1600	0.103
Sb Left	158	1600	0.099 *	0	158	1600	0.099 *	0	158	1600	0.099 *	0	158	1600	0.099 *
Sb Thru	377	3200	0.133	0	377	3200	0.133	0	377	3200	0.133	0	377	3200	0.133
Sb Right	48	0	-	0	48	0	-	0	48	0	-	0	48	0	-
Eb Left	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046
Eb Thru	1124	3200	0.351 *	34	1158	3200	0.362 *	0	1158	3200	0.362 *	0	1158	3200	0.362 *
Eb Right	124	1600	0.078	0	124	1600	0.078	0	124	1600	0.078	0	124	1600	0.078
Wb Left	108	1600	0.068 *	12	120	1600	0.075 *	0	120	1600	0.075 *	0	120	1600	0.075 *
Wb Thru	1192	4800	0.266	56	1248	4800	0.279	0	1248	4800	0.279	0	1248	4800	0.279
Wb Right	87	0	-	2	89	0	-	0	89	0	-	0	89	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.798				0.816				0.816				0.816
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Stewart and Gray Road
Peak hr: AM

N-S St: Downey Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU52

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059
Nb Thru	465	3200	0.168 *	0	465	3200	0.168 *	0	465	3200	0.168 *	0	465	3200	0.168 *
Nb Right	71	0	-	0	71	0	-	0	71	0	-	0	71	0	-
Sb Left	117	1600	0.073 *	7	124	1600	0.078 *	0	124	1600	0.078 *	0	124	1600	0.078 *
Sb Thru	374	3200	0.153	0	374	3200	0.153	0	374	3200	0.153	0	374	3200	0.153
Sb Right	117	0	-	0	117	0	-	0	117	0	-	0	117	0	-
Eb Left	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *	0	101	1600	0.063 *
Eb Thru	528	3200	0.183	17	545	3200	0.188	0	545	3200	0.188	0	545	3200	0.188
Eb Right	56	0	-	0	56	0	-	0	56	0	-	0	56	0	-
Wb Left	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047
Wb Thru	464	3200	0.180 *	5	469	3200	0.183 *	0	469	3200	0.183 *	0	469	3200	0.183 *
Wb Right	112	0	-	4	116	0	-	0	116	0	-	0	116	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.584				0.591				0.591				0.591
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Stewart and Gray Road
Peak hr: PM

N-S St: Downey Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU52

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	103	1600	0.064	0	103	1600	0.064	0	103	1600	0.064	0	103	1600	0.064
Nb Thru	430	3200	0.159 *	0	430	3200	0.159 *	0	430	3200	0.159 *	0	430	3200	0.159 *
Nb Right	80	0	-	0	80	0	-	0	80	0	-	0	80	0	-
Sb Left	160	1600	0.100 *	21	181	1600	0.113 *	0	181	1600	0.113 *	0	181	1600	0.113 *
Sb Thru	494	3200	0.191	0	494	3200	0.191	0	494	3200	0.191	0	494	3200	0.191
Sb Right	117	0	-	0	117	0	-	0	117	0	-	0	117	0	-
Eb Left	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *	0	115	1600	0.072 *
Eb Thru	801	3200	0.279	33	834	3200	0.289	0	834	3200	0.289	0	834	3200	0.289
Eb Right	91	0	-	0	91	0	-	0	91	0	-	0	91	0	-
Wb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Wb Thru	849	3200	0.304 *	32	881	3200	0.322 *	0	881	3200	0.322 *	0	881	3200	0.322 *
Wb Right	125	0	-	25	150	0	-	0	150	0	-	0	150	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.736				0.767				0.767				0.767
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Alameda Street
Peak hr: AM

N-S St: Downey Avenue
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU53

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017
Nb Thru	516	3200	0.168 *	0	516	3200	0.168 *	0	516	3200	0.168 *	0	516	3200	0.168 *
Nb Right	21	0	-	0	21	0	-	0	21	0	-	0	21	0	-
Sb Left	45	1600	0.028 *	0	45	1600	0.028 *	0	45	1600	0.028 *	0	45	1600	0.028 *
Sb Thru	402	3200	0.143	0	402	3200	0.143	0	402	3200	0.143	0	402	3200	0.143
Sb Right	57	0	-	0	57	0	-	0	57	0	-	0	57	0	-
Eb Left	59	0	0.037 *	0	59	0	0.037 *	0	59	0	0.037 *	0	59	0	0.037 *
Eb Thru	95	1600	0.096	6	101	1600	0.100	0	101	1600	0.100	0	101	1600	0.100
Eb Right	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031
Wb Left	26	0	0.016	0	26	0	0.016	0	26	0	0.016	0	26	0	0.016
Wb Thru	109	1600	0.084 *	3	112	1600	0.086 *	0	112	1600	0.086 *	0	112	1600	0.086 *
Wb Right	52	1600	0.033	0	52	1600	0.033	0	52	1600	0.033	0	52	1600	0.033
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.417				0.419				0.419				0.419
LOS		A				A				A				A	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Alameda Street
Peak hr: PM

N-S St: Downey Avenue
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU53

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *
Nb Thru	486	3200	0.163	0	486	3200	0.163	0	486	3200	0.163	0	486	3200	0.163
Nb Right	35	0	-	0	35	0	-	0	35	0	-	0	35	0	-
Sb Left	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Sb Thru	575	3200	0.200 *	0	575	3200	0.200 *	0	575	3200	0.200 *	0	575	3200	0.200 *
Sb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Eb Left	49	0	0.031	0	49	0	0.031 *	0	49	0	0.031 *	0	49	0	0.031 *
Eb Thru	119	1600	0.105 *	11	130	1600	0.112	0	130	1600	0.112	0	130	1600	0.112
Eb Right	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031
Wb Left	29	0	0.018 *	0	29	0	0.018	0	29	0	0.018	0	29	0	0.018
Wb Thru	116	1600	0.091	15	131	1600	0.100 *	0	131	1600	0.100 *	0	131	1600	0.100 *
Wb Right	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.454				0.462				0.462				0.462
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Imperial Highway
Peak hr: AM

N-S St: Downey Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU54

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	109	1600	0.068	0	109	1600	0.068	0	109	1600	0.068	0	109	1600	0.068
Nb Thru	554	3200	0.211 *	0	554	3200	0.213 *	0	554	3200	0.213 *	0	554	3200	0.213 *
Nb Right	121	0	-	6	127	0	-	0	127	0	-	0	127	0	-
Sb Left	102	1600	0.064 *	0	102	1600	0.064 *	0	102	1600	0.064 *	0	102	1600	0.064 *
Sb Thru	414	3200	0.171	0	414	3200	0.171	0	414	3200	0.171	0	414	3200	0.171
Sb Right	134	0	-	0	134	0	-	0	134	0	-	0	134	0	-
Eb Left	106	1600	0.066 *	0	106	1600	0.066 *	0	106	1600	0.066 *	0	106	1600	0.066 *
Eb Thru	1099	4800	0.238	15	1114	4800	0.241	0	1114	4800	0.241	0	1114	4800	0.241
Eb Right	45	0	-	0	45	0	-	0	45	0	-	0	45	0	-
Wb Left	51	1600	0.032	0	51	1600	0.032	0	51	1600	0.032	0	51	1600	0.032
Wb Thru	1239	4800	0.280 *	11	1250	4800	0.282 *	0	1250	4800	0.282 *	0	1250	4800	0.282 *
Wb Right	104	0	-	0	104	0	-	0	104	0	-	0	104	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.721				0.725				0.725				0.725
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Imperial Highway
Peak hr: PM

N-S St: Downey Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU54

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054
Nb Thru	410	3200	0.157 *	0	410	3200	0.160 *	0	410	3200	0.160 *	0	410	3200	0.160 *
Nb Right	92	0	-	11	103	0	-	0	103	0	-	0	103	0	-
Sb Left	54	1600	0.034 *	0	54	1600	0.034 *	0	54	1600	0.034 *	0	54	1600	0.034 *
Sb Thru	297	3200	0.118	0	297	3200	0.118	0	297	3200	0.118	0	297	3200	0.118
Sb Right	80	0	-	0	80	0	-	0	80	0	-	0	80	0	-
Eb Left	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056	0	89	1600	0.056
Eb Thru	1230	4800	0.270 *	32	1262	4800	0.276 *	0	1262	4800	0.276 *	0	1262	4800	0.276 *
Eb Right	65	0	-	0	65	0	-	0	65	0	-	0	65	0	-
Wb Left	75	1600	0.047 *	6	81	1600	0.051 *	0	81	1600	0.051 *	0	81	1600	0.051 *
Wb Thru	1070	4800	0.254	56	1126	4800	0.265	0	1126	4800	0.265	0	1126	4800	0.265
Wb Right	148	0	-	0	148	0	-	0	148	0	-	0	148	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.607				0.621				0.621				0.621
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Gardendale Street
Peak hr: AM

N-S St: Downey Avenue
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU55

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079
Nb Thru	321	3200	0.110 *	0	321	3200	0.110 *	0	321	3200	0.110 *	0	321	3200	0.110 *
Nb Right	30	0	-	0	30	0	-	0	30	0	-	0	30	0	-
Sb Left	120	1600	0.075 *	0	120	1600	0.075 *	0	120	1600	0.075 *	0	120	1600	0.075 *
Sb Thru	231	3200	0.098	0	231	3200	0.098	0	231	3200	0.098	0	231	3200	0.098
Sb Right	82	0	-	0	82	0	-	0	82	0	-	0	82	0	-
Eb Left	53	1600	0.033 *	0	53	1600	0.033 *	0	53	1600	0.033 *	0	53	1600	0.033 *
Eb Thru	397	3200	0.144	0	397	3200	0.144	0	397	3200	0.144	0	397	3200	0.144
Eb Right	65	0	-	0	65	0	-	0	65	0	-	0	65	0	-
Wb Left	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Wb Thru	527	3200	0.198 *	0	527	3200	0.198 *	0	527	3200	0.198 *	0	527	3200	0.198 *
Wb Right	105	0	-	0	105	0	-	0	105	0	-	0	105	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.515				0.515				0.515				0.515
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Gardendale Street
Peak hr: PM

N-S St: Downey Avenue
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU55

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Nb Thru	428	3200	0.150 *	0	428	3200	0.150 *	0	428	3200	0.150 *	0	428	3200	0.150 *
Nb Right	53	0	-	0	53	0	-	0	53	0	-	0	53	0	-
Sb Left	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *
Sb Thru	303	3200	0.107	0	303	3200	0.107	0	303	3200	0.107	0	303	3200	0.107
Sb Right	40	0	-	0	40	0	-	0	40	0	-	0	40	0	-
Eb Left	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021
Eb Thru	539	3200	0.191 *	0	539	3200	0.191 *	0	539	3200	0.191 *	0	539	3200	0.191 *
Eb Right	72	0	-	0	72	0	-	0	72	0	-	0	72	0	-
Wb Left	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *
Wb Thru	406	3200	0.159	0	406	3200	0.159	0	406	3200	0.159	0	406	3200	0.159
Wb Right	102	0	-	0	102	0	-	0	102	0	-	0	102	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.555				0.555				0.555				0.555
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Telegraph Road
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Telegraph Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU56

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	141	1600	0.088 *	0	141	1600	0.088 *	0	141	1600	0.088 *	0	141	1600	0.088 *
Nb Thru	571	3200	0.178	2	573	3200	0.179	0	573	3200	0.179	0	573	3200	0.179
Nb Right	182	1600	0.114	0	182	1600	0.114	0	182	1600	0.114	0	182	1600	0.114
Sb Left	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084
Sb Thru	840	3200	0.280 *	6	846	3200	0.282 *	0	846	3200	0.282 *	0	846	3200	0.282 *
Sb Right	57	0	-	0	57	0	-	0	57	0	-	0	57	0	-
Eb Left	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019
Eb Thru	478	3200	0.149	0	478	3200	0.149	0	478	3200	0.149	0	478	3200	0.149
Eb Right	241	1600	0.151 *	3	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *
Wb Left	345	1600	0.216 *	0	345	1600	0.216 *	0	345	1600	0.216 *	0	345	1600	0.216 *
Wb Thru	1107	4800	0.257	0	1107	4800	0.257	0	1107	4800	0.257	0	1107	4800	0.257
Wb Right	127	0	-	0	127	0	-	0	127	0	-	0	127	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.835				0.838				0.838				0.838
LOS			D				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Telegraph Road
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Telegraph Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU56

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	118	1600	0.074 *	12	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *
Nb Thru	848	3200	0.265	14	862	3200	0.269	0	862	3200	0.269	0	862	3200	0.269
Nb Right	328	1600	0.205	0	328	1600	0.205	0	328	1600	0.205	0	328	1600	0.205
Sb Left	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079
Sb Thru	970	3200	0.318 *	11	981	3200	0.321 *	0	981	3200	0.321 *	0	981	3200	0.321 *
Sb Right	46	0	-	0	46	0	-	0	46	0	-	0	46	0	-
Eb Left	64	1600	0.040	0	64	1600	0.040	0	64	1600	0.040	0	64	1600	0.040
Eb Thru	872	4800	0.260 *	0	872	4800	0.260 *	0	872	4800	0.260 *	0	872	4800	0.260 *
Eb Right	376	0	-	0	376	0	-	0	376	0	-	0	376	0	-
Wb Left	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *
Wb Thru	478	4800	0.122	0	478	4800	0.122	0	478	4800	0.122	0	478	4800	0.122
Wb Right	106	0	-	0	106	0	-	0	106	0	-	0	106	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.852				0.863				0.863				0.863
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ I-5 NB Ramps
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: I-5 NB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU57

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1151	3200	0.360	2	1153	3200	0.360	0	1153	3200	0.360	0	1153	3200	0.360
Nb Right	758	1600	0.435 *	0	758	1600	0.435 *	0	758	1600	0.435 *	0	758	1600	0.435 *
Sb Left	294	1600	0.184 *	0	294	1600	0.184 *	0	294	1600	0.184 *	0	294	1600	0.184 *
Sb Thru	1350	3200	0.422	9	1359	3200	0.425	0	1359	3200	0.425	0	1359	3200	0.425
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.758				0.758				0.758				0.758
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ I-5 NB Ramps
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: I-5 NB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU57

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1546	3200	0.483 *	27	1573	3200	0.492 *	0	1573	3200	0.492 *	0	1573	3200	0.492 *
Nb Right	273	1600	0.000	0	273	1600	0.000	0	273	1600	0.000	0	273	1600	0.000
Sb Left	143	1600	0.089 *	0	143	1600	0.089 *	0	143	1600	0.089 *	0	143	1600	0.089 *
Sb Thru	1742	3200	0.544	11	1753	3200	0.548	0	1753	3200	0.548	0	1753	3200	0.548
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	581	1600	0.363	0	581	1600	0.363	0	581	1600	0.363	0	581	1600	0.363
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	222	1600	0.139	0	222	1600	0.139	0	222	1600	0.139	0	222	1600	0.139
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.036				1.044				1.044				1.044
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ I-5 SB Ramps
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: I-5 SB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU58

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1782	3200	0.557 *	2	1784	3200	0.558 *	0	1784	3200	0.558 *	0	1784	3200	0.558 *
Nb Right	529	1600	0.331	0	529	1600	0.331	0	529	1600	0.331	0	529	1600	0.331
Sb Left	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *
Sb Thru	1225	3200	0.383	9	1234	3200	0.386	0	1234	3200	0.386	0	1234	3200	0.386
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	61	1600	0.038	0	61	1600	0.038	0	61	1600	0.038	0	61	1600	0.038
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.890				0.891				0.891				0.891
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ I-5 SB Ramps
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: I-5 SB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU58

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1618	3200	0.506 *	27	1645	3200	0.514 *	0	1645	3200	0.514 *	0	1645	3200	0.514 *
Nb Right	266	1600	0.166	0	266	1600	0.166	0	266	1600	0.166	0	266	1600	0.166
Sb Left	290	1600	0.181 *	0	290	1600	0.181 *	0	290	1600	0.181 *	0	290	1600	0.181 *
Sb Thru	2046	3200	0.639	11	2057	3200	0.643	0	2057	3200	0.643	0	2057	3200	0.643
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076	0	122	1600	0.076
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	489	1600	0.306 *	0	489	1600	0.306 *	0	489	1600	0.306 *	0	489	1600	0.306 *
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.093				1.101				1.101				1.101
LOS			F				F				F				F

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Florence Avenue
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU59

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	292	2880	0.101 *	0	292	2880	0.101 *	0	292	2880	0.101 *	0	292	2880	0.101 *
Nb Thru	779	3200	0.243	2	781	3200	0.244	0	781	3200	0.244	0	781	3200	0.244
Nb Right	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064	0	102	1600	0.064
Sb Left	153	2880	0.053	0	153	2880	0.053	0	153	2880	0.053	0	153	2880	0.053
Sb Thru	701	3200	0.219 *	9	710	3200	0.222 *	0	710	3200	0.222 *	0	710	3200	0.222 *
Sb Right	425	1600	0.078	0	425	1600	0.078	0	425	1600	0.078	0	425	1600	0.078
Eb Left	300	1600	0.188 *	0	300	1600	0.188 *	0	300	1600	0.188 *	0	300	1600	0.188 *
Eb Thru	1161	4800	0.302	6	1167	4800	0.303	0	1167	4800	0.303	0	1167	4800	0.303
Eb Right	289	0	-	0	289	0	-	0	289	0	-	0	289	0	-
Wb Left	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083
Wb Thru	1436	4800	0.323 *	2	1438	4800	0.324 *	0	1438	4800	0.324 *	0	1438	4800	0.324 *
Wb Right	115	0	-	0	115	0	-	0	115	0	-	0	115	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.931				0.934				0.934				0.934
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Florence Avenue
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU59

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	292	2880	0.101 *	0	292	2880	0.101 *	0	292	2880	0.101 *	0	292	2880	0.101 *
Nb Thru	872	3200	0.273	27	899	3200	0.281	0	899	3200	0.281	0	899	3200	0.281
Nb Right	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Sb Left	305	2880	0.106	0	305	2880	0.106	0	305	2880	0.106	0	305	2880	0.106
Sb Thru	987	3200	0.308 *	11	998	3200	0.312 *	0	998	3200	0.312 *	0	998	3200	0.312 *
Sb Right	193	1600	0.000	0	193	1600	0.000	0	193	1600	0.000	0	193	1600	0.000
Eb Left	403	1600	0.252 *	0	403	1600	0.252 *	0	403	1600	0.252 *	0	403	1600	0.252 *
Eb Thru	1474	4800	0.373	11	1485	4800	0.375	0	1485	4800	0.375	0	1485	4800	0.375
Eb Right	317	0	-	0	317	0	-	0	317	0	-	0	317	0	-
Wb Left	243	1600	0.152	0	243	1600	0.152	0	243	1600	0.152	0	243	1600	0.152
Wb Thru	1419	4800	0.306 *	13	1432	4800	0.309 *	0	1432	4800	0.309 *	0	1432	4800	0.309 *
Wb Right	52	0	-	0	52	0	-	0	52	0	-	0	52	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.068				1.074				1.074				1.074
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Firestone Boulevard
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU60

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	148	1600	0.093 *	0	148	1600	0.093 *	0	148	1600	0.093 *	0	148	1600	0.093 *
Nb Thru	969	3200	0.303	2	971	3200	0.303	0	971	3200	0.303	0	971	3200	0.303
Nb Right	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065
Sb Left	131	1600	0.082	4	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084
Sb Thru	954	3200	0.298 *	6	960	3200	0.300 *	0	960	3200	0.300 *	0	960	3200	0.300 *
Sb Right	175	1600	0.109	0	175	1600	0.109	0	175	1600	0.109	0	175	1600	0.109
Eb Left	228	1600	0.143 *	0	228	1600	0.143 *	0	228	1600	0.143 *	0	228	1600	0.143 *
Eb Thru	743	3200	0.232	18	761	3200	0.238	0	761	3200	0.238	0	761	3200	0.238
Eb Right	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092
Wb Left	131	1600	0.082	0	131	1600	0.082	0	131	1600	0.082	0	131	1600	0.082
Wb Thru	976	4800	0.241 *	7	983	4800	0.243 *	0	983	4800	0.243 *	0	983	4800	0.243 *
Wb Right	181	0 -		2	183	0 -		0	183	0 -		0	183	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.874				0.878				0.878				0.878
LOS		D				D				D				D	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Firestone Boulevard
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU60

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Nb Thru	900	3200	0.281 *	3	903	3200	0.282 *	0	903	3200	0.282 *	0	903	3200	0.282 *
Nb Right	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099
Sb Left	195	1600	0.122 *	0	195	1600	0.122 *	0	195	1600	0.122 *	0	195	1600	0.122 *
Sb Thru	918	3200	0.287	11	929	3200	0.290	0	929	3200	0.290	0	929	3200	0.290
Sb Right	223	1600	0.139	0	223	1600	0.139	0	223	1600	0.139	0	223	1600	0.139
Eb Left	277	1600	0.173	0	277	1600	0.173	0	277	1600	0.173	0	277	1600	0.173
Eb Thru	1158	3200	0.362 *	33	1191	3200	0.372 *	0	1191	3200	0.372 *	0	1191	3200	0.372 *
Eb Right	144	1600	0.090	0	144	1600	0.090	0	144	1600	0.090	0	144	1600	0.090
Wb Left	210	1600	0.131 *	0	210	1600	0.131 *	0	210	1600	0.131 *	0	210	1600	0.131 *
Wb Thru	1146	4800	0.270	40	1186	4800	0.281	0	1186	4800	0.281	0	1186	4800	0.281
Wb Right	150	0 -		15	165	0 -		0	165	0 -		0	165	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.996				1.008				1.008				1.008
LOS		E				F				F				F	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Stewart and Gray Road
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU61

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073
Nb Thru	907	3200	0.309 *	0	907	3200	0.309 *	0	907	3200	0.309 *	0	907	3200	0.309 *
Nb Right	81	0	-	0	81	0	-	0	81	0	-	0	81	0	-
Sb Left	138	1600	0.086 *	5	143	1600	0.089 *	0	143	1600	0.089 *	0	143	1600	0.089 *
Sb Thru	832	3200	0.310	0	832	3200	0.310	0	832	3200	0.310	0	832	3200	0.310
Sb Right	161	0	-	0	161	0	-	0	161	0	-	0	161	0	-
Eb Left	199	1600	0.124 *	0	199	1600	0.124 *	0	199	1600	0.124 *	0	199	1600	0.124 *
Eb Thru	579	3200	0.211	12	591	3200	0.215	0	591	3200	0.215	0	591	3200	0.215
Eb Right	97	0	-	0	97	0	-	0	97	0	-	0	97	0	-
Wb Left	138	1600	0.086	0	138	1600	0.086	0	138	1600	0.086	0	138	1600	0.086
Wb Thru	532	3200	0.221 *	3	535	3200	0.223 *	0	535	3200	0.223 *	0	535	3200	0.223 *
Wb Right	175	0	-	2	177	0	-	0	177	0	-	0	177	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.840				0.845				0.845				0.845
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Stewart and Gray Road
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU61

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *
Nb Thru	942	3200	0.330	0	942	3200	0.330	0	942	3200	0.330	0	942	3200	0.330
Nb Right	115	0	-	0	115	0	-	0	115	0	-	0	115	0	-
Sb Left	194	1600	0.121	11	205	1600	0.128	0	205	1600	0.128	0	205	1600	0.128
Sb Thru	1144	3200	0.400 *	0	1144	3200	0.400 *	0	1144	3200	0.400 *	0	1144	3200	0.400 *
Sb Right	137	0	-	0	137	0	-	0	137	0	-	0	137	0	-
Eb Left	96	1600	0.060	0	96	1600	0.060	0	96	1600	0.060	0	96	1600	0.060
Eb Thru	736	3200	0.251 *	21	757	3200	0.258 *	0	757	3200	0.258 *	0	757	3200	0.258 *
Eb Right	68	0	-	0	68	0	-	0	68	0	-	0	68	0	-
Wb Left	148	1600	0.093 *	0	148	1600	0.093 *	0	148	1600	0.093 *	0	148	1600	0.093 *
Wb Thru	714	3200	0.251	28	742	3200	0.260	0	742	3200	0.260	0	742	3200	0.260
Wb Right	88	0	-	3	91	0	-	0	91	0	-	0	91	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.928				0.935				0.935				0.935
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Alameda Street
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU62

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1145	3200	0.381 *	0	1145	3200	0.383 *	0	1145	3200	0.383 *	0	1145	3200	0.383 *
Nb Right	73	0	-	6	79	0	-	0	79	0	-	0	79	0	-
Sb Left	56	1600	0.035 *	0	56	1600	0.035 *	0	56	1600	0.035 *	0	56	1600	0.035 *
Sb Thru	1063	3200	0.332	0	1063	3200	0.332	0	1063	3200	0.332	0	1063	3200	0.332
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	112	841	0.133	3	115	859	0.134	0	115	859	0.134	0	115	859	0.134
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	101	759	0.133	0	101	741	0.136 *	0	101	741	0.136 *	0	101	741	0.136 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.649				0.654				0.654				0.654
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Alameda Street
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Alameda Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU62

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1242	3200	0.412 *	0	1242	3200	0.415 *	0	1242	3200	0.415 *	0	1242	3200	0.415 *
Nb Right	76	0	-	11	87	0	-	0	87	0	-	0	87	0	-
Sb Left	116	1600	0.073 *	0	116	1600	0.073 *	0	116	1600	0.073 *	0	116	1600	0.073 *
Sb Thru	1048	3200	0.328	0	1048	3200	0.328	0	1048	3200	0.328	0	1048	3200	0.328
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	62	584	0.106	15	77	695	0.111	0	77	695	0.111	0	77	695	0.111
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	108	1016	0.106 *	0	108	905	0.119 *	0	108	905	0.119 *	0	108	905	0.119 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.691				0.707				0.707				0.707
LOS		B				C				C				C	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Imperial Highway
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU63

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	302	2880	0.105 *	0	302	2880	0.105 *	0	302	2880	0.105 *	0	302	2880	0.105 *
Nb Thru	739	3200	0.231	0	739	3200	0.231	0	739	3200	0.231	0	739	3200	0.231
Nb Right	82	1600	0.051	3	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053
Sb Left	192	1600	0.120	0	192	1600	0.120	0	192	1600	0.120	0	192	1600	0.120
Sb Thru	844	3200	0.264 *	0	844	3200	0.264 *	0	844	3200	0.264 *	0	844	3200	0.264 *
Sb Right	225	1600	0.141	0	225	1600	0.141	0	225	1600	0.141	0	225	1600	0.141
Eb Left	233	2880	0.081 *	0	233	2880	0.081 *	0	233	2880	0.081 *	0	233	2880	0.081 *
Eb Thru	952	4800	0.225	12	964	4800	0.228	0	964	4800	0.228	0	964	4800	0.228
Eb Right	130	0	-	0	130	0	-	0	130	0	-	0	130	0	-
Wb Left	143	1600	0.089	4	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092
Wb Thru	1141	4800	0.263 *	7	1148	4800	0.264 *	0	1148	4800	0.264 *	0	1148	4800	0.264 *
Wb Right	120	0	-	0	120	0	-	0	120	0	-	0	120	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.812				0.814				0.814				0.814
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Imperial Highway
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU63

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	249	2880	0.086	0	249	2880	0.086	0	249	2880	0.086	0	249	2880	0.086
Nb Thru	960	3200	0.300 *	0	960	3200	0.300 *	0	960	3200	0.300 *	0	960	3200	0.300 *
Nb Right	109	1600	0.068	11	120	1600	0.075	0	120	1600	0.075	0	120	1600	0.075
Sb Left	221	1600	0.138 *	0	221	1600	0.138 *	0	221	1600	0.138 *	0	221	1600	0.138 *
Sb Thru	785	3200	0.245	0	785	3200	0.245	0	785	3200	0.245	0	785	3200	0.245
Sb Right	225	1600	0.141	0	225	1600	0.141	0	225	1600	0.141	0	225	1600	0.141
Eb Left	300	2880	0.104	0	300	2880	0.104	0	300	2880	0.104	0	300	2880	0.104
Eb Thru	1340	4800	0.320 *	21	1361	4800	0.324 *	0	1361	4800	0.324 *	0	1361	4800	0.324 *
Eb Right	194	0	-	0	194	0	-	0	194	0	-	0	194	0	-
Wb Left	152	1600	0.095 *	12	164	1600	0.103 *	0	164	1600	0.103 *	0	164	1600	0.103 *
Wb Thru	1005	4800	0.249	43	1048	4800	0.258	0	1048	4800	0.258	0	1048	4800	0.258
Wb Right	191	0	-	0	191	0	-	0	191	0	-	0	191	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.953				0.965				0.965				0.965
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Gardendale Street
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU64

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	144	1600	0.090 *	0	144	1600	0.090 *	0	144	1600	0.090 *	0	144	1600	0.090 *
Nb Thru	807	3200	0.252	3	810	3200	0.253	0	810	3200	0.253	0	810	3200	0.253
Nb Right	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048
Sb Left	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083	0	133	1600	0.083
Sb Thru	926	3200	0.289 *	4	930	3200	0.291 *	0	930	3200	0.291 *	0	930	3200	0.291 *
Sb Right	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033
Eb Left	66	1600	0.041 *	0	66	1600	0.041 *	0	66	1600	0.041 *	0	66	1600	0.041 *
Eb Thru	240	3200	0.075	0	240	3200	0.075	0	240	3200	0.075	0	240	3200	0.075
Eb Right	55	1600	0.034	0	55	1600	0.034	0	55	1600	0.034	0	55	1600	0.034
Wb Left	154	1600	0.096	0	154	1600	0.096	0	154	1600	0.096	0	154	1600	0.096
Wb Thru	458	3200	0.143 *	0	458	3200	0.143 *	0	458	3200	0.143 *	0	458	3200	0.143 *
Wb Right	174	1600	0.109	0	174	1600	0.109	0	174	1600	0.109	0	174	1600	0.109
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.664				0.665				0.665				0.665
LOS		B				B				B				B	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Gardendale Street
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Gardendale Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU64

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Nb Thru	1197	3200	0.374 *	11	1208	3200	0.378 *	0	1208	3200	0.378 *	0	1208	3200	0.378 *
Nb Right	116	1600	0.073	0	116	1600	0.073	0	116	1600	0.073	0	116	1600	0.073
Sb Left	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *
Sb Thru	801	3200	0.250	12	813	3200	0.254	0	813	3200	0.254	0	813	3200	0.254
Sb Right	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041
Eb Left	80	1600	0.050	0	80	1600	0.050	0	80	1600	0.050	0	80	1600	0.050
Eb Thru	329	3200	0.103 *	0	329	3200	0.103 *	0	329	3200	0.103 *	0	329	3200	0.103 *
Eb Right	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
Wb Left	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *
Wb Thru	279	3200	0.087	0	279	3200	0.087	0	279	3200	0.087	0	279	3200	0.087
Wb Right	141	1600	0.088	0	141	1600	0.088	0	141	1600	0.088	0	141	1600	0.088
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.761				0.764				0.764				0.764
LOS		C				C				C				C	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Firestone Boulevard
Peak hr: AM

N-S St: Rives Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU65

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101
Nb Thru	263	1600	0.235 *	0	263	1600	0.235 *	0	263	1600	0.235 *	0	263	1600	0.235 *
Nb Right	113	0	-	0	113	0	-	0	113	0	-	0	113	0	-
Sb Left	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *
Sb Thru	198	1600	0.163	0	198	1600	0.163	0	198	1600	0.163	0	198	1600	0.163
Sb Right	63	0	-	0	63	0	-	0	63	0	-	0	63	0	-
Eb Left	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033
Eb Thru	1009	4800	0.210 *	18	1027	4800	0.214 *	0	1027	4800	0.214 *	0	1027	4800	0.214 *
Eb Right	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031
Wb Left	99	1600	0.062 *	0	99	1600	0.062 *	0	99	1600	0.062 *	0	99	1600	0.062 *
Wb Thru	1092	4800	0.235	7	1099	4800	0.237	0	1099	4800	0.237	0	1099	4800	0.237
Wb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.678				0.682				0.682				0.682
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Firestone Boulevard
Peak hr: PM

N-S St: Rives Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU65

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	123	1600	0.077 *	0	123	1600	0.077 *	0	123	1600	0.077 *	0	123	1600	0.077 *
Nb Thru	235	1600	0.201	0	235	1600	0.201	0	235	1600	0.201	0	235	1600	0.201
Nb Right	86	0	-	0	86	0	-	0	86	0	-	0	86	0	-
Sb Left	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047	0	75	1600	0.047
Sb Thru	248	1600	0.188 *	0	248	1600	0.188 *	0	248	1600	0.188 *	0	248	1600	0.188 *
Sb Right	52	0	-	0	52	0	-	0	52	0	-	0	52	0	-
Eb Left	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061
Eb Thru	1292	4800	0.269 *	33	1325	4800	0.276 *	0	1325	4800	0.276 *	0	1325	4800	0.276 *
Eb Right	51	1600	0.032	0	51	1600	0.032	0	51	1600	0.032	0	51	1600	0.032
Wb Left	167	1600	0.104 *	0	167	1600	0.104 *	0	167	1600	0.104 *	0	167	1600	0.104 *
Wb Thru	1197	4800	0.265	40	1237	4800	0.273	0	1237	4800	0.273	0	1237	4800	0.273
Wb Right	74	0	-	0	74	0	-	0	74	0	-	0	74	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.738				0.745				0.745				0.745
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Stewart and Gray Road
Peak hr: AM

N-S St: Rives Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU66

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	75	0	0.047	0	75	0	0.047	0	75	0	0.047	0	75	0	0.047
Nb Thru	171	1600	0.183 *	0	171	1600	0.183 *	0	171	1600	0.183 *	0	171	1600	0.183 *
Nb Right	46	0	-	0	46	0	-	0	46	0	-	0	46	0	-
Sb Left	120	0	0.075 *	0	120	0	0.075 *	0	120	0	0.075 *	0	120	0	0.075 *
Sb Thru	166	1600	0.206	0	166	1600	0.206	0	166	1600	0.206	0	166	1600	0.206
Sb Right	43	0	-	0	43	0	-	0	43	0	-	0	43	0	-
Eb Left	21	1600	0.013 *	0	21	1600	0.013 *	0	21	1600	0.013 *	0	21	1600	0.013 *
Eb Thru	537	3200	0.180	12	549	3200	0.184	0	549	3200	0.184	0	549	3200	0.184
Eb Right	40	0	-	0	40	0	-	0	40	0	-	0	40	0	-
Wb Left	37	1600	0.023	0	37	1600	0.023	0	37	1600	0.023	0	37	1600	0.023
Wb Thru	571	3200	0.201 *	3	574	3200	0.202 *	0	574	3200	0.202 *	0	574	3200	0.202 *
Wb Right	72	0	-	0	72	0	-	0	72	0	-	0	72	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.572				0.573				0.573				0.573
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Stewart and Gray Road
Peak hr: PM

N-S St: Rives Avenue
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU66

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	61	0	0.038	0	61	0	0.038	0	61	0	0.038	0	61	0	0.038
Nb Thru	237	1600	0.254 *	0	237	1600	0.254 *	0	237	1600	0.254 *	0	237	1600	0.254 *
Nb Right	109	0	-	0	109	0	-	0	109	0	-	0	109	0	-
Sb Left	92	0	0.058 *	0	92	0	0.058 *	0	92	0	0.058 *	0	92	0	0.058 *
Sb Thru	149	1600	0.208	0	149	1600	0.208	0	149	1600	0.208	0	149	1600	0.208
Sb Right	91	0	-	0	91	0	-	0	91	0	-	0	91	0	-
Eb Left	55	1600	0.034 *	0	55	1600	0.034 *	0	55	1600	0.034 *	0	55	1600	0.034 *
Eb Thru	663	3200	0.229	21	684	3200	0.236	0	684	3200	0.236	0	684	3200	0.236
Eb Right	71	0	-	0	71	0	-	0	71	0	-	0	71	0	-
Wb Left	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035
Wb Thru	665	3200	0.236 *	28	693	3200	0.245 *	0	693	3200	0.245 *	0	693	3200	0.245 *
Wb Right	90	0	-	0	90	0	-	0	90	0	-	0	90	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.682				0.691				0.691				0.691
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Imperial Highway
Peak hr: AM

N-S St: Rives Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU67

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	24	1600	0.015	3	27	1600	0.017	0	27	1600	0.017	0	27	1600	0.017
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	176	1600	0.048 *	0	176	1600	0.048 *	0	176	1600	0.048 *	0	176	1600	0.048 *
Eb Left	99	1600	0.062 *	0	99	1600	0.062 *	0	99	1600	0.062 *	0	99	1600	0.062 *
Eb Thru	1095	4800	0.228	10	1105	4800	0.230	0	1105	4800	0.230	0	1105	4800	0.230
Eb Right	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	1151	4800	0.280 *	4	1155	4800	0.281 *	0	1155	4800	0.281 *	0	1155	4800	0.281 *
Wb Right	191	0 -		4	195	0 -		0	195	0 -		0	195	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.490				0.491				0.491				0.491
LOS		A				A				A				A	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Rives Avenue @ Imperial Highway
Peak hr: PM

N-S St: Rives Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU67

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	65	1600	0.041 *	11	76	1600	0.048 *	0	76	1600	0.048 *	0	76	1600	0.048 *
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	141	1600	0.005	0	141	1600	0.005	0	141	1600	0.005	0	141	1600	0.005
Eb Left	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *	0	133	1600	0.083 *
Eb Thru	1513	4800	0.315	11	1524	4800	0.318	0	1524	4800	0.318	0	1524	4800	0.318
Eb Right	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	1106	4800	0.283 *	31	1137	4800	0.292 *	0	1137	4800	0.292 *	0	1137	4800	0.292 *
Wb Right	252	0	-	12	264	0	-	0	264	0	-	0	264	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.507				0.523				0.523				0.523
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Old River School Road/Tecum Road @ Florence Avenue
Peak hr: AM

N-S St: Old River School Road/Tecum Road
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU68

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	584	2604	0.224 *	0	584	2604	0.224 *	0	584	2604	0.224 *	0	584	2604	0.224 *
Nb Thru	62	307	0.202	0	62	307	0.202	0	62	307	0.202	0	62	307	0.202
Nb Right	245	1600	0.153	0	245	1600	0.153	0	245	1600	0.153	0	245	1600	0.153
Sb Left	42	0	0.013	0	42	0	0.013	0	42	0	0.013	0	42	0	0.013
Sb Thru	100	3200	0.053 *	0	100	3200	0.053 *	0	100	3200	0.053 *	0	100	3200	0.053 *
Sb Right	29	0	-	0	29	0	-	0	29	0	-	0	29	0	-
Eb Left	14	1600	0.009	0	14	1600	0.009	0	14	1600	0.009	0	14	1600	0.009
Eb Thru	1223	4800	0.279 *	6	1229	4800	0.280 *	0	1229	4800	0.280 *	0	1229	4800	0.280 *
Eb Right	115	0	-	0	115	0	-	0	115	0	-	0	115	0	-
Wb Left	319	1600	0.199 *	0	319	1600	0.199 *	0	319	1600	0.199 *	0	319	1600	0.199 *
Wb Thru	1714	4800	0.365	2	1716	4800	0.365	0	1716	4800	0.365	0	1716	4800	0.365
Wb Right	36	0	-	0	36	0	-	0	36	0	-	0	36	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.856				0.857				0.857				0.857
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road/Tecum Road @ Florence Avenue
Peak hr: PM

N-S St: Old River School Road/Tecum Road
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU68

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	399	2116	0.189 *	0	399	2116	0.189 *	0	399	2116	0.189 *	0	399	2116	0.189 *
Nb Thru	144	849	0.170	0	144	849	0.170	0	144	849	0.170	0	144	849	0.170
Nb Right	269	1600	0.168	0	269	1600	0.168	0	269	1600	0.168	0	269	1600	0.168
Sb Left	68	0	0.021	0	68	0	0.021	0	68	0	0.021	0	68	0	0.021
Sb Thru	136	3200	0.074 *	0	136	3200	0.074 *	0	136	3200	0.074 *	0	136	3200	0.074 *
Sb Right	34	0	-	0	34	0	-	0	34	0	-	0	34	0	-
Eb Left	32	1600	0.020	0	32	1600	0.020	0	32	1600	0.020	0	32	1600	0.020
Eb Thru	1764	4800	0.436 *	11	1775	4800	0.438 *	0	1775	4800	0.438 *	0	1775	4800	0.438 *
Eb Right	327	0	-	0	327	0	-	0	327	0	-	0	327	0	-
Wb Left	293	1600	0.183 *	0	293	1600	0.183 *	0	293	1600	0.183 *	0	293	1600	0.183 *
Wb Thru	1506	4800	0.325	13	1519	4800	0.328	0	1519	4800	0.328	0	1519	4800	0.328
Wb Right	54	0	-	0	54	0	-	0	54	0	-	0	54	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.982				0.984				0.984				0.984
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Firestone Boulevard-Burns Avenue
Peak hr: AM

N-S St: Old River School Road
E-W St: Firestone Boulevard-Burns Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU69

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *
Nb Thru	437	3200	0.179	0	437	3200	0.179	0	437	3200	0.179	0	437	3200	0.179
Nb Right	136	0	-	0	136	0	-	0	136	0	-	0	136	0	-
Sb Left	114	1600	0.071	0	114	1600	0.071	0	114	1600	0.071	0	114	1600	0.071
Sb Thru	389	3200	0.185 *	0	389	3200	0.185 *	0	389	3200	0.185 *	0	389	3200	0.185 *
Sb Right	202	0	-	0	202	0	-	0	202	0	-	0	202	0	-
Eb Left	113	1600	0.071 *	0	113	1600	0.071 *	0	113	1600	0.071 *	0	113	1600	0.071 *
Eb Thru	683	3200	0.213	17	700	3200	0.219	0	700	3200	0.219	0	700	3200	0.219
Eb Right	50	1600	0.031	0	50	1600	0.031	0	50	1600	0.031	0	50	1600	0.031
Wb Left	115	1600	0.072	0	115	1600	0.072	0	115	1600	0.072	0	115	1600	0.072
Wb Thru	899	3200	0.281 *	7	906	3200	0.283 *	0	906	3200	0.283 *	0	906	3200	0.283 *
Wb Right	176	1600	0.110	0	176	1600	0.110	0	176	1600	0.110	0	176	1600	0.110
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.713				0.715				0.715				0.715
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Firestone Boulevard-Burns Avenue
Peak hr: PM

N-S St: Old River School Road
E-W St: Firestone Boulevard-Burns Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU69

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *
Nb Thru	375	3200	0.150	0	375	3200	0.150	0	375	3200	0.150	0	375	3200	0.150
Nb Right	104	0	-	0	104	0	-	0	104	0	-	0	104	0	-
Sb Left	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100
Sb Thru	686	3200	0.274 *	0	686	3200	0.274 *	0	686	3200	0.274 *	0	686	3200	0.274 *
Sb Right	192	0	-	0	192	0	-	0	192	0	-	0	192	0	-
Eb Left	209	1600	0.131 *	0	209	1600	0.131 *	0	209	1600	0.131 *	0	209	1600	0.131 *
Eb Thru	1018	3200	0.318	22	1040	3200	0.325	0	1040	3200	0.325	0	1040	3200	0.325
Eb Right	78	1600	0.049	0	78	1600	0.049	0	78	1600	0.049	0	78	1600	0.049
Wb Left	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Wb Thru	1169	3200	0.365 *	29	1198	3200	0.374 *	0	1198	3200	0.374 *	0	1198	3200	0.374 *
Wb Right	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.955				0.964				0.964				0.964
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Stewart and Gray Road
Peak hr: AM

N-S St: Old River School Road
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU70

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	154	1600	0.096 *	0	154	1600	0.096 *	0	154	1600	0.096 *	0	154	1600	0.096 *
Nb Thru	532	3200	0.226	0	532	3200	0.226	0	532	3200	0.226	0	532	3200	0.226
Nb Right	191	0	-	0	191	0	-	0	191	0	-	0	191	0	-
Sb Left	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066
Sb Thru	560	3200	0.207 *	0	560	3200	0.207 *	0	560	3200	0.207 *	0	560	3200	0.207 *
Sb Right	102	0	-	0	102	0	-	0	102	0	-	0	102	0	-
Eb Left	120	1600	0.075	0	120	1600	0.075	0	120	1600	0.075	0	120	1600	0.075
Eb Thru	530	3200	0.166 *	9	539	3200	0.168 *	0	539	3200	0.168 *	0	539	3200	0.168 *
Eb Right	191	1600	0.119	0	191	1600	0.119	0	191	1600	0.119	0	191	1600	0.119
Wb Left	272	1600	0.170 *	0	272	1600	0.170 *	0	272	1600	0.170 *	0	272	1600	0.170 *
Wb Thru	828	3200	0.259	2	830	3200	0.259	0	830	3200	0.259	0	830	3200	0.259
Wb Right	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.739				0.742				0.742				0.742
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Stewart and Gray Road
Peak hr: PM

N-S St: Old River School Road
E-W St: Stewart and Gray Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU70

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066
Nb Thru	454	3200	0.204 *	0	454	3200	0.204 *	0	454	3200	0.204 *	0	454	3200	0.204 *
Nb Right	200	0	-	0	200	0	-	0	200	0	-	0	200	0	-
Sb Left	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *	0	187	1600	0.117 *
Sb Thru	369	3200	0.141	0	369	3200	0.141	0	369	3200	0.141	0	369	3200	0.141
Sb Right	83	0	-	0	83	0	-	0	83	0	-	0	83	0	-
Eb Left	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041	0	65	1600	0.041
Eb Thru	550	3200	0.172 *	11	561	3200	0.175 *	0	561	3200	0.175 *	0	561	3200	0.175 *
Eb Right	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091
Wb Left	234	1600	0.146 *	0	234	1600	0.146 *	0	234	1600	0.146 *	0	234	1600	0.146 *
Wb Thru	578	3200	0.181	14	592	3200	0.185	0	592	3200	0.185	0	592	3200	0.185
Wb Right	187	1600	0.117	0	187	1600	0.117	0	187	1600	0.117	0	187	1600	0.117
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.739				0.743				0.743				0.743
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Imperial Highway
Peak hr: AM

N-S St: Old River School Road
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU71

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	20	1600	0.013	0	20	1600	0.013	0	20	1600	0.013	0	20	1600	0.013
Nb Thru 3	32	3200	0.014 *	0	32	3200	0.014 *	0	32	3200	0.014 *	0	32	3200	0.014 *
Nb Right	13	0	-	0	13	0	-	0	13	0	-	0	13	0	-
Sb Left	317	1600	0.198	0	317	1600	0.198	0	317	1600	0.198	0	317	1600	0.198
Sb Thru 3	78	1600	0.049 *	0	78	1600	0.049 *	0	78	1600	0.049 *	0	78	1600	0.049 *
Sb Right	335	1600	0.209	0	335	1600	0.209	0	335	1600	0.209	0	335	1600	0.209
Eb Left	308	1600	0.193 *	0	308	1600	0.193 *	0	308	1600	0.193 *	0	308	1600	0.193 *
Eb Thru	817	4800	0.170	10	827	4800	0.172	0	827	4800	0.172	0	827	4800	0.172
Eb Right	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061
Wb Left	46	1600	0.029	0	46	1600	0.029	0	46	1600	0.029	0	46	1600	0.029
Wb Thru	931	4800	0.256 *	4	935	4800	0.257 *	0	935	4800	0.257 *	0	935	4800	0.257 *
Wb Right	297	0	-	0	297	0	-	0	297	0	-	0	297	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.772				0.773				0.773				0.773
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green
3 N/S Split Phase

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INTERSECTION CAPACITY UTILIZATION

Old River School Road @ Imperial Highway
Peak hr: PM

N-S St: Old River School Road
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU71

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	74	2076	0.036 *	0	74	2076	0.036 *	0	74	2076	0.036 *	0	74	2076	0.036 *
Nb Thru 3	45	2494	0.032	0	45	2494	0.032	0	45	2494	0.032	0	45	2494	0.032
Nb Right	35	0	-	0	35	0	-	0	35	0	-	0	35	0	-
Sb Left	280	1600	0.175	0	280	1600	0.175	0	280	1600	0.175	0	280	1600	0.175
Sb Thru 3	21	1600	0.013 *	0	21	1600	0.013 *	0	21	1600	0.013 *	0	21	1600	0.013 *
Sb Right	249	1600	0.156	0	249	1600	0.156	0	249	1600	0.156	0	249	1600	0.156
Eb Left	329	1600	0.206 *	0	329	1600	0.206 *	0	329	1600	0.206 *	0	329	1600	0.206 *
Eb Thru	1293	4800	0.269	11	1304	4800	0.272	0	1304	4800	0.272	0	1304	4800	0.272
Eb Right	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012	0	19	1600	0.012
Wb Left	12	1600	0.008	0	12	1600	0.008	0	12	1600	0.008	0	12	1600	0.008
Wb Thru	934	4800	0.250 *	31	965	4800	0.256 *	0	965	4800	0.256 *	0	965	4800	0.256 *
Wb Right	265	0	-	0	265	0	-	0	265	0	-	0	265	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.766				0.773				0.773				0.773
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green
3 N/S Split Phase

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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Florence Avenue
Peak hr: AM

N-S St: Brookshire Avenue
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU72

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	109	1600	0.068 *	0	109	1600	0.068 *	0	109	1600	0.068 *	0	109	1600	0.068 *
Nb Thru	314	3200	0.121	0	314	3200	0.121	0	314	3200	0.121	0	314	3200	0.121
Nb Right	73	0	-	0	73	0	-	0	73	0	-	0	73	0	-
Sb Left	40	1600	0.025	0	40	1600	0.025	0	40	1600	0.025	0	40	1600	0.025
Sb Thru	224	3200	0.089 *	0	224	3200	0.089 *	0	224	3200	0.089 *	0	224	3200	0.089 *
Sb Right	62	0	-	0	62	0	-	0	62	0	-	0	62	0	-
Eb Left	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046
Eb Thru	1316	4800	0.297 *	12	1328	4800	0.299 *	0	1328	4800	0.299 *	0	1328	4800	0.299 *
Eb Right	109	0	-	0	109	0	-	0	109	0	-	0	109	0	-
Wb Left	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *	0	161	1600	0.101 *
Wb Thru	1246	4800	0.273	3	1249	4800	0.274	0	1249	4800	0.274	0	1249	4800	0.274
Wb Right	64	0	-	0	64	0	-	0	64	0	-	0	64	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.655				0.658				0.658				0.658
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Florence Avenue
Peak hr: PM

N-S St: Brookshire Avenue
E-W St: Florence Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU72

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	174	1600	0.109 *	0	174	1600	0.109 *	0	174	1600	0.109 *	0	174	1600	0.109 *
Nb Thru	310	3200	0.142	0	310	3200	0.142	0	310	3200	0.142	0	310	3200	0.142
Nb Right	143	0	-	0	143	0	-	0	143	0	-	0	143	0	-
Sb Left	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028	0	45	1600	0.028
Sb Thru	260	3200	0.100 *	0	260	3200	0.100 *	0	260	3200	0.100 *	0	260	3200	0.100 *
Sb Right	59	0	-	0	59	0	-	0	59	0	-	0	59	0	-
Eb Left	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043
Eb Thru	1577	4800	0.353 *	21	1598	4800	0.357 *	0	1598	4800	0.357 *	0	1598	4800	0.357 *
Eb Right	117	0	-	0	117	0	-	0	117	0	-	0	117	0	-
Wb Left	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *
Wb Thru	1227	4800	0.274	26	1253	4800	0.280	0	1253	4800	0.280	0	1253	4800	0.280
Wb Right	89	0	-	0	89	0	-	0	89	0	-	0	89	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.778				0.782				0.782				0.782
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Firestone Boulevard
Peak hr: AM

N-S St: Brookshire Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU73

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *	0	82	1600	0.051 *
Nb Thru	372	3200	0.137	0	372	3200	0.137	0	372	3200	0.137	0	372	3200	0.137
Nb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Sb Left	119	1600	0.074	0	119	1600	0.074	0	119	1600	0.074	0	119	1600	0.074
Sb Thru	500	3200	0.173 *	0	500	3200	0.173 *	0	500	3200	0.173 *	0	500	3200	0.173 *
Sb Right	55	0	-	0	55	0	-	0	55	0	-	0	55	0	-
Eb Left	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *	0	142	1600	0.089 *
Eb Thru	634	4800	0.147	37	671	4800	0.155	0	671	4800	0.155	0	671	4800	0.155
Eb Right	71	0	-	0	71	0	-	0	71	0	-	0	71	0	-
Wb Left	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100
Wb Thru	972	4800	0.203 *	19	991	4800	0.206 *	0	991	4800	0.206 *	0	991	4800	0.206 *
Wb Right	196	1600	0.123	0	196	1600	0.123	0	196	1600	0.123	0	196	1600	0.123
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.616				0.620				0.620				0.620
LOS		B				B				B				B	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Firestone Boulevard
Peak hr: PM

N-S St: Brookshire Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU73

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091	0	146	1600	0.091
Nb Thru	617	3200	0.229 *	0	617	3200	0.231 *	0	617	3200	0.231 *	0	617	3200	0.231 *
Nb Right	117	0	-	5	122	0	-	0	122	0	-	0	122	0	-
Sb Left	180	1600	0.113 *	0	180	1600	0.113 *	0	180	1600	0.113 *	0	180	1600	0.113 *
Sb Thru	551	3200	0.192	0	551	3200	0.192	0	551	3200	0.192	0	551	3200	0.192
Sb Right	62	0	-	0	62	0	-	0	62	0	-	0	62	0	-
Eb Left	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089
Eb Thru	1300	4800	0.286 *	77	1377	4800	0.302 *	0	1377	4800	0.302 *	0	1377	4800	0.302 *
Eb Right	71	0	-	0	71	0	-	0	71	0	-	0	71	0	-
Wb Left	119	1600	0.074 *	2	121	1600	0.076 *	0	121	1600	0.076 *	0	121	1600	0.076 *
Wb Thru	1272	4800	0.265	97	1369	4800	0.285	0	1369	4800	0.285	0	1369	4800	0.285
Wb Right	198	1600	0.124	2	200	1600	0.125	0	200	1600	0.125	0	200	1600	0.125
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.802				0.821				0.821				0.821
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Imperial Highway
Peak hr: AM

N-S St: Brookshire Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU74

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	77	1600	0.048	0	77	1600	0.048	0	77	1600	0.048	0	77	1600	0.048
Nb Thru	321	3200	0.111 *	0	321	3200	0.111 *	0	321	3200	0.111 *	0	321	3200	0.111 *
Nb Right	33	0	-	0	33	0	-	0	33	0	-	0	33	0	-
Sb Left	282	1600	0.176 *	0	282	1600	0.176 *	0	282	1600	0.176 *	0	282	1600	0.176 *
Sb Thru	256	3200	0.119	0	256	3200	0.119	0	256	3200	0.119	0	256	3200	0.119
Sb Right	126	0	-	0	126	0	-	0	126	0	-	0	126	0	-
Eb Left	146	1600	0.091 *	0	146	1600	0.091 *	0	146	1600	0.091 *	0	146	1600	0.091 *
Eb Thru	1099	4800	0.234	21	1120	4800	0.239	0	1120	4800	0.239	0	1120	4800	0.239
Eb Right	26	0	-	0	26	0	-	0	26	0	-	0	26	0	-
Wb Left	98	1600	0.061	0	98	1600	0.061	0	98	1600	0.061	0	98	1600	0.061
Wb Thru	1181	4800	0.283 *	12	1193	4800	0.286 *	0	1193	4800	0.286 *	0	1193	4800	0.286 *
Wb Right	179	0	-	0	179	0	-	0	179	0	-	0	179	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.761				0.764				0.764				0.764
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Brookshire Avenue @ Imperial Highway
Peak hr: PM

N-S St: Brookshire Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU74

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028
Nb Thru	246	3200	0.089 *	0	246	3200	0.089 *	0	246	3200	0.089 *	0	246	3200	0.089 *
Nb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Sb Left	214	1600	0.134 *	0	214	1600	0.134 *	0	214	1600	0.134 *	0	214	1600	0.134 *
Sb Thru	299	3200	0.138	0	299	3200	0.138	0	299	3200	0.138	0	299	3200	0.138
Sb Right	144	0	-	0	144	0	-	0	144	0	-	0	144	0	-
Eb Left	182	1600	0.114 *	0	182	1600	0.114 *	0	182	1600	0.114 *	0	182	1600	0.114 *
Eb Thru	1449	4800	0.310	44	1493	4800	0.319	0	1493	4800	0.319	0	1493	4800	0.319
Eb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Wb Left	103	1600	0.064	4	107	1600	0.067	0	107	1600	0.067	0	107	1600	0.067
Wb Thru	1367	4800	0.313 *	62	1429	4800	0.326 *	0	1429	4800	0.326 *	0	1429	4800	0.326 *
Wb Right	137	0	-	0	137	0	-	0	137	0	-	0	137	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.750				0.763				0.763				0.763
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Cleta Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Cleta Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU75

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *	0	244	1600	0.153 *
Nb Thru	726	4800	0.152	49	775	4800	0.162	0	775	4800	0.162	0	775	4800	0.162
Nb Right	4	0	-	0	4	0	-	0	4	0	-	0	4	0	-
Sb Left	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003
Sb Thru	673	4800	0.151 *	102	775	4800	0.172 *	0	775	4800	0.172 *	0	775	4800	0.172 *
Sb Right	50	0	-	0	50	0	-	0	50	0	-	0	50	0	-
Eb Left	79	1600	0.049 *	0	79	1600	0.049 *	0	79	1600	0.049 *	0	79	1600	0.049 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	135	1600	0.000	0	135	1600	0.000	0	135	1600	0.000	0	135	1600	0.000
Wb Left	7	0	0.004	0	7	0	0.004	0	7	0	0.004	0	7	0	0.004
Wb Thru	7	1600	0.016 *	0	7	1600	0.016 *	0	7	1600	0.016 *	0	7	1600	0.016 *
Wb Right	12	0	-	0	12	0	-	0	12	0	-	0	12	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.469				0.490				0.490				0.490
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Cleta Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Cleta Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU75

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	96	1600	0.060 *	0	96	1600	0.060 *	0	96	1600	0.060 *	0	96	1600	0.060 *
Nb Thru	1018	4800	0.213	272	1290	4800	0.270	0	1290	4800	0.270	0	1290	4800	0.270
Nb Right	5	0	-	0	5	0	-	0	5	0	-	0	5	0	-
Sb Left	14	1600	0.009	0	14	1600	0.009	0	14	1600	0.009	0	14	1600	0.009
Sb Thru	908	4800	0.199 *	198	1106	4800	0.240 *	0	1106	4800	0.240 *	0	1106	4800	0.240 *
Sb Right	48	0	-	0	48	0	-	0	48	0	-	0	48	0	-
Eb Left	109	1600	0.068 *	0	109	1600	0.068 *	0	109	1600	0.068 *	0	109	1600	0.068 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	147	1600	0.032	0	147	1600	0.032	0	147	1600	0.032	0	147	1600	0.032
Wb Left	3	0	0.002	0	3	0	0.002	0	3	0	0.002	0	3	0	0.002
Wb Thru	3	1600	0.004 *	0	3	1600	0.004 *	0	3	1600	0.004 *	0	3	1600	0.004 *
Wb Right	1	0	-	0	1	0	-	0	1	0	-	0	1	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.432				0.473				0.473				0.473
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Donovan Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Donovan Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU76

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	227	1600	0.142	0	227	1600	0.142	0	227	1600	0.142	0	227	1600	0.142
Nb Thru	853	4800	0.180 *	113	966	4800	0.203 *	0	966	4800	0.203 *	0	966	4800	0.203 *
Nb Right	9	0	-	0	9	0	-	0	9	0	-	0	9	0	-
Sb Left	220	1600	0.138 *	0	220	1600	0.138 *	0	220	1600	0.138 *	0	220	1600	0.138 *
Sb Thru	772	4800	0.166	48	820	4800	0.176	0	820	4800	0.176	0	820	4800	0.176
Sb Right	26	0	-	0	26	0	-	0	26	0	-	0	26	0	-
Eb Left	19	0	0.012	0	19	0	0.012	0	19	0	0.012	0	19	0	0.012
Eb Thru	149	1600	0.183 *	0	149	1600	0.183 *	0	149	1600	0.183 *	0	149	1600	0.183 *
Eb Right	124	0	-	0	124	0	-	0	124	0	-	0	124	0	-
Wb Left	4	0	0.003 *	0	4	0	0.003 *	0	4	0	0.003 *	0	4	0	0.003 *
Wb Thru	94	1600	0.089	0	94	1600	0.089	0	94	1600	0.089	0	94	1600	0.089
Wb Right	44	0	-	0	44	0	-	0	44	0	-	0	44	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.602				0.626				0.626				0.626
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Donovan Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Donovan Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU76

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	146	1600	0.091	0	146	1600	0.091 *	0	146	1600	0.091 *	0	146	1600	0.091 *
Nb Thru	1086	4800	0.230 *	206	1292	4800	0.273	0	1292	4800	0.273	0	1292	4800	0.273
Nb Right	17	0	-	0	17	0	-	0	17	0	-	0	17	0	-
Sb Left	154	1600	0.096 *	0	154	1600	0.096	0	154	1600	0.096	0	154	1600	0.096
Sb Thru	1024	4800	0.217	351	1375	4800	0.290 *	0	1375	4800	0.290 *	0	1375	4800	0.290 *
Sb Right	17	0	-	0	17	0	-	0	17	0	-	0	17	0	-
Eb Left	10	0	0.006	0	10	0	0.006	0	10	0	0.006	0	10	0	0.006
Eb Thru	35	1600	0.049 *	0	35	1600	0.049 *	0	35	1600	0.049 *	0	35	1600	0.049 *
Eb Right	34	0	-	0	34	0	-	0	34	0	-	0	34	0	-
Wb Left	1	0	0.001 *	0	1	0	0.001 *	0	1	0	0.001 *	0	1	0	0.001 *
Wb Thru	16	1600	0.023	0	16	1600	0.023	0	16	1600	0.023	0	16	1600	0.023
Wb Right	20	0	-	0	20	0	-	0	20	0	-	0	20	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.476				0.531				0.531				0.531
LOS			A				A				A				A

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

I-605 SB Ramps @ Firestone Boulevard
Peak hr: AM

N-S St: I-605 SB Ramps
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU77

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
Movement	1 Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio	Added Volume	Total Volume	2 Capacity	V/C Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	127	1600	0.079	0	127	1600	0.079	0	127	1600	0.079	0	127	1600	0.079
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	466	3200	0.146 *	58	524	3200	0.164 *	0	524	3200	0.164 *	0	524	3200	0.164 *
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	1190	3200	0.372	31	1221	3200	0.382	0	1221	3200	0.382	0	1221	3200	0.382
Eb Right	626	1600	0.391 *	0	626	1600	0.391 *	0	626	1600	0.391	0	626	1600	0.391
Wb Left	321	1600	0.201 *	0	321	1600	0.201 *	0	321	2880	0.111	0	321	2880	0.111
Wb Thru	1657	3200	0.518	45	1702	3200	0.532	0	1702	3200	0.532 *	0	1702	3200	0.532 *
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.838				0.856				0.796				0.796
LOS			D				D				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

I-605 SB Ramps @ Firestone Boulevard
Peak hr: PM

N-S St: I-605 SB Ramps
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU77

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT				2020 FUTURE W/PROJECT MITIGATION							
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	277	1600	0.173	0	277	1600	0.173	0	277	1600	0.173	0	277	1600	0.173
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	395	3200	0.123	87	482	3200	0.151	0	482	3200	0.151	0	482	3200	0.151
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1875	3200	0.586 *	158	2033	3200	0.635 *	0	2033	3200	0.635 *	0	2033	3200	0.635 *
Eb Right	903	1600	0.564	0	903	1600	0.564	0	903	1600	0.564	0	903	1600	0.564
Wb Left	177	1600	0.111 *	0	177	1600	0.111 *	0	177	2880	0.061 *	0	177	2880	0.061 *
Wb Thru	1815	3200	0.567	65	1880	3200	0.588	0	1880	3200	0.588	0	1880	3200	0.588
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.970				1.019				0.970				0.970
LOS		E				F				E				E	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Hoxie Avenue-I-605 SB Ramps @ Firestone Boulevard
Peak hr: AM

N-S St: Hoxie Avenue-I-605 SB Ramps
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU78

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	38	1600	0.024	0	38	1600	0.024	0	38	1600	0.024	0	38	1600	0.024
Nb Thru	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051	0	82	1600	0.051
Nb Right	97	1600	0.061 *	0	97	1600	0.061 *	0	97	1600	0.061 *	0	97	1600	0.061 *
Sb Left	176	2880	0.061	0	176	2880	0.061	0	176	2880	0.061	0	176	2880	0.061
Sb Thru	13	1600	0.008 *	0	13	1600	0.008 *	0	13	1600	0.008 *	0	13	1600	0.008 *
Sb Right	620	1600	0.256	0	620	1600	0.251	0	620	1600	0.251	0	620	1600	0.251
Eb Left	421	2880	0.146 *	15	436	2880	0.151 *	0	436	2880	0.151 *	0	436	2880	0.151 *
Eb Thru	563	3200	0.197	16	579	3200	0.202	0	579	3200	0.202	0	579	3200	0.202
Eb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Wb Left	72	1600	0.045	0	72	1600	0.045	0	72	1600	0.045	0	72	1600	0.045
Wb Thru	1110	3200	0.347 *	45	1155	3200	0.361 *	0	1155	3200	0.361 *	0	1155	3200	0.361 *
Wb Right	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101	0	161	1600	0.101
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.910				0.924				0.924				0.924
LOS		E				E				E				E	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Hoxie Avenue-I-605 SB Ramps @ Firestone Boulevard
Peak hr: PM

N-S St: Hoxie Avenue-I-605 SB Ramps
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU78

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	194	1600	0.121 *	0	194	1600	0.121 *	0	194	1600	0.121 *	0	194	1600	0.121 *
Nb Thru	176	1600	0.110	0	176	1600	0.110	0	176	1600	0.110	0	176	1600	0.110
Nb Right	170	1600	0.106	0	170	1600	0.106	0	170	1600	0.106	0	170	1600	0.106
Sb Left	185	2880	0.064	0	185	2880	0.064	0	185	2880	0.064	0	185	2880	0.064
Sb Thru	59	1600	0.037 *	0	59	1600	0.037 *	0	59	1600	0.037 *	0	59	1600	0.037 *
Sb Right	529	1600	0.167	0	529	1600	0.139	0	529	1600	0.139	0	529	1600	0.139
Eb Left	525	2880	0.182 *	89	614	2880	0.213 *	0	614	2880	0.213 *	0	614	2880	0.213 *
Eb Thru	501	3200	0.235	70	571	3200	0.257	0	571	3200	0.257	0	571	3200	0.257
Eb Right	251	0	-	0	251	0	-	0	251	0	-	0	251	0	-
Wb Left	154	1600	0.096	0	154	1600	0.096	0	154	1600	0.096	0	154	1600	0.096
Wb Thru	1077	3200	0.337 *	65	1142	3200	0.357 *	0	1142	3200	0.357 *	0	1142	3200	0.357 *
Wb Right	164	1600	0.103	0	164	1600	0.103	0	164	1600	0.103	0	164	1600	0.103
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.907				0.930				0.930				0.930
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Flatbush Avenue-I605 SB Ramps @ Imperial Highway
Peak hr: AM

N-S St: Flatbush Avenue-I605 SB Ramps
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU79

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	5	0	0.003	0	5	0	0.003	0	5	0	0.003	0	5	0	0.003
Nb Thru	5	1600	0.018 *	0	5	1600	0.018 *	0	5	1600	0.018 *	0	5	1600	0.018 *
Nb Right	18	0	-	0	18	0	-	0	18	0	-	0	18	0	-
Sb Left	202	0	0.183	0	202	0	0.183	0	202	0	0.183	0	202	0	0.183
Sb Thru	1	1105	0.184 *	0	1	1105	0.184 *	0	1	1105	0.184 *	0	1	1105	0.184 *
Sb Right	385	2095	0.081	0	385	2095	0.081	0	385	2095	0.081	0	385	2095	0.081
Eb Left	216	1600	0.135 *	0	216	1600	0.135 *	0	216	1600	0.135 *	0	216	1600	0.135 *
Eb Thru	1253	4800	0.261	7	1260	4800	0.263	0	1260	4800	0.263	0	1260	4800	0.263
Eb Right	2	0	-	0	2	0	-	0	2	0	-	0	2	0	-
Wb Left	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003
Wb Thru	1252	3955	0.317	24	1276	4009	0.318	0	1276	4009	0.318	0	1276	4009	0.318
Wb Right	774	2445	0.317 *	0	774	2391	0.324 *	0	774	2391	0.324 *	0	774	2391	0.324 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.753				0.760				0.760				0.760
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Flatbush Avenue-I605 SB Ramps @ Imperial Highway
Peak hr: PM

N-S St: Flatbush Avenue-I605 SB Ramps
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU79

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	4	0	0.003	0	4	0	0.003	0	4	0	0.003	0	4	0	0.003
Nb Thru	8	1600	0.018 *	0	8	1600	0.018 *	0	8	1600	0.018 *	0	8	1600	0.018 *
Nb Right	17	0	-	0	17	0	-	0	17	0	-	0	17	0	-
Sb Left	163	0	0.103	0	163	0	0.103	0	163	0	0.103	0	163	0	0.103
Sb Thru	0	1581	0.103 *	0	0	1581	0.103 *	0	0	1581	0.103 *	0	0	1581	0.103 *
Sb Right	167	1619	0.103	0	167	1619	0.103	0	167	1619	0.103	0	167	1619	0.103
Eb Left	382	1600	0.239 *	0	382	1600	0.239 *	0	382	1600	0.239 *	0	382	1600	0.239 *
Eb Thru	1873	4800	0.394	57	1930	4800	0.406	0	1930	4800	0.406	0	1930	4800	0.406
Eb Right	17	0	-	0	17	0	-	0	17	0	-	0	17	0	-
Wb Left	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021	0	33	1600	0.021
Wb Thru	1424	3952	0.360 *	32	1456	3994	0.365	0	1456	3994	0.365	0	1456	3994	0.365
Wb Right	882	2448	0.360	0	882	2406	0.367 *	0	882	2406	0.367 *	0	882	2406	0.367 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.820				0.827				0.827				0.827
LOS			D				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Hoxie Avenue @ Imperial Highway
Peak hr: AM

N-S St: Hoxie Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU80

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	335	1585	0.211 *	0	335	1585	0.211 *	0	335	1585	0.211 *	0	335	1585	0.211 *
Nb Thru	102	536	0.190	0	102	536	0.190	0	102	536	0.190	0	102	536	0.190
Nb Right	476	2503	0.190	0	476	2503	0.190	0	476	2503	0.190	0	476	2503	0.190
Sb Left	42	1551	0.027 *	0	42	1551	0.027 *	0	42	1551	0.027 *	0	42	1551	0.027 *
Sb Thru	36	1477	0.024	0	36	1477	0.024	0	36	1477	0.024	0	36	1477	0.024
Sb Right	49	1600	0.006	0	49	1600	0.006	0	49	1600	0.006	0	49	1600	0.006
Eb Left	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024
Eb Thru	955	4800	0.275 *	7	962	4800	0.277 *	0	962	4800	0.277 *	0	962	4800	0.277 *
Eb Right	367	0	-	0	367	0	-	0	367	0	-	0	367	0	-
Wb Left	251	1600	0.157 *	0	251	1600	0.157 *	0	251	1600	0.157 *	0	251	1600	0.157 *
Wb Thru	1647	4800	0.349	24	1671	4800	0.354	0	1671	4800	0.354	0	1671	4800	0.354
Wb Right	28	0	-	0	28	0	-	0	28	0	-	0	28	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.771				0.772				0.772				0.772
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Hoxie Avenue @ Imperial Highway
Peak hr: PM

N-S St: Hoxie Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU80

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	676	2201	0.307 *	0	676	2201	0.307 *	0	676	2201	0.307 *	0	676	2201	0.307 *
Nb Thru	190	687	0.277	0	190	687	0.277	0	190	687	0.277	0	190	687	0.277
Nb Right	461	1668	0.276	0	461	1668	0.276	0	461	1668	0.276	0	461	1668	0.276
Sb Left	72	1600	0.045 *	0	72	1600	0.045 *	0	72	1600	0.045 *	0	72	1600	0.045 *
Sb Thru	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052	0	83	1600	0.052
Sb Right	253	1600	0.031	0	253	1600	0.031	0	253	1600	0.031	0	253	1600	0.031
Eb Left	204	1600	0.128	0	204	1600	0.128	0	204	1600	0.128	0	204	1600	0.128
Eb Thru	1190	4800	0.354 *	57	1247	4800	0.366 *	0	1247	4800	0.366 *	0	1247	4800	0.366 *
Eb Right	510	0	-	0	510	0	-	0	510	0	-	0	510	0	-
Wb Left	250	1600	0.156 *	0	250	1600	0.156 *	0	250	1600	0.156 *	0	250	1600	0.156 *
Wb Thru	1398	4800	0.322	32	1430	4800	0.329	0	1430	4800	0.329	0	1430	4800	0.329
Wb Right	149	0	-	0	149	0	-	0	149	0	-	0	149	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.969				0.981				0.981				0.981
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Flatbush Avenue-I-605 SB Off-Ramp @ Rosecrans Avenue
Peak hr: AM

N-S St: Flatbush Avenue-I-605 SB Off-Ramp
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU81

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	6	0	0.004	0	6	0	0.004	0	6	0	0.004	0	6	0	0.004
Nb Thru	0	1600	0.010 *	0	0	1600	0.010 *	0	0	1600	0.010 *	0	0	1600	0.010 *
Nb Right	10	0	-	0	10	0	-	0	10	0	-	0	10	0	-
Sb Left	566	2843	0.199 *	0	566	2843	0.199 *	0	566	2843	0.199 *	0	566	2843	0.199 *
Sb Thru	2	11	0.182	0	2	11	0.182	0	2	11	0.182	0	2	11	0.182
Sb Right	292	1630	0.179	0	292	1630	0.179	0	292	1630	0.179	0	292	1630	0.179
Eb Left	43	1600	0.027	0	43	1600	0.027	0	43	1600	0.027	0	43	1600	0.027
Eb Thru	1401	3200	0.439 *	0	1401	3200	0.439 *	0	1401	3200	0.439 *	0	1401	3200	0.439 *
Eb Right	3	0	-	0	3	0	-	0	3	0	-	0	3	0	-
Wb Left	13	1600	0.008 *	0	13	1600	0.008 *	0	13	1600	0.008 *	0	13	1600	0.008 *
Wb Thru	1198	3200	0.374	0	1198	3200	0.374	0	1198	3200	0.374	0	1198	3200	0.374
Wb Right	26	1600	0.016	0	26	1600	0.016	0	26	1600	0.016	0	26	1600	0.016
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.756				0.756				0.756				0.756
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Flatbush Avenue-I-605 SB Off-Ramp @ Rosecrans Avenue
Peak hr: PM

N-S St: Flatbush Avenue-I-605 SB Off-Ramp
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU81

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	7	0	0.004	0	7	0	0.004	0	7	0	0.004	0	7	0	0.004
Nb Thru	2	1600	0.015 *	0	2	1600	0.015 *	0	2	1600	0.015 *	0	2	1600	0.015 *
Nb Right	15	0	-	0	15	0	-	0	15	0	-	0	15	0	-
Sb Left	751	2835	0.265 *	0	751	2835	0.265 *	0	751	2835	0.265 *	0	751	2835	0.265 *
Sb Thru	12	50	0.240	0	12	50	0.240	0	12	50	0.240	0	12	50	0.240
Sb Right	303	1600	0.189	0	303	1600	0.189	0	303	1600	0.189	0	303	1600	0.189
Eb Left	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043
Eb Thru	1564	3200	0.494 *	13	1577	3200	0.498 *	0	1577	3200	0.498 *	0	1577	3200	0.498 *
Eb Right	16	0	-	0	16	0	-	0	16	0	-	0	16	0	-
Wb Left	11	1600	0.007 *	0	11	1600	0.007 *	0	11	1600	0.007 *	0	11	1600	0.007 *
Wb Thru	1003	3200	0.313	0	1003	3200	0.313	0	1003	3200	0.313	0	1003	3200	0.313
Wb Right	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061	0	97	1600	0.061
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.881				0.885				0.885				0.885
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-605 NB Off-Ramp-I-105 WB On-Ramp @ Rosecrans Avenue
Peak hr: AM

N-S St: I-605 NB Off-Ramp-I-105 WB On-Ramp
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU82

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	374	1600	0.234	0	374	1600	0.234	0	374	1600	0.234	0	374	1600	0.234
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	378	1600	0.127 *	0	378	1600	0.125 *	0	378	1600	0.125 *	0	378	1600	0.125 *
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	822	3200	0.257 *	0	822	3200	0.257 *	0	822	3200	0.257 *	0	822	3200	0.257 *
Eb Right	63	1600	0.039	0	63	1600	0.039	0	63	1600	0.039	0	63	1600	0.039
Wb Left	350	2880	0.122 *	6	356	2880	0.124 *	0	356	2880	0.124 *	0	356	2880	0.124 *
Wb Thru	1708	4800	0.356	0	1708	4800	0.356	0	1708	4800	0.356	0	1708	4800	0.356
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.712				0.714				0.714				0.714
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-605 NB Off-Ramp-I-105 WB On-Ramp @ Rosecrans Avenue
Peak hr: PM

N-S St: I-605 NB Off-Ramp-I-105 WB On-Ramp
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU82

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234	0	375	1600	0.234
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	556	1600	0.268 *	0	556	1600	0.265 *	0	556	1600	0.265 *	0	556	1600	0.265 *
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1395	3200	0.436 *	13	1408	3200	0.440 *	0	1408	3200	0.440 *	0	1408	3200	0.440 *
Eb Right	54	1600	0.034	0	54	1600	0.034	0	54	1600	0.034	0	54	1600	0.034
Wb Left	253	2880	0.088 *	11	264	2880	0.092 *	0	264	2880	0.092 *	0	264	2880	0.092 *
Wb Thru	1435	4800	0.299	0	1435	4800	0.299	0	1435	4800	0.299	0	1435	4800	0.299
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.892				0.897				0.897				0.897
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Firestone Boulevard
Peak hr: AM

N-S St: Studebaker Road
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU83

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100	0	160	1600	0.100
Nb Thru	613	3200	0.192 *	0	613	3200	0.192 *	0	613	3200	0.192 *	0	613	3200	0.192 *
Nb Right	60	1600	0.000	0	60	1600	0.000	0	60	1600	0.000	0	60	1600	0.000
Sb Left	113	1600	0.071 *	0	113	1600	0.071 *	0	113	1600	0.071 *	0	113	1600	0.071 *
Sb Thru	335	3200	0.105	0	335	3200	0.105	0	335	3200	0.105	0	335	3200	0.105
Sb Right	280	1600	0.049	7	287	1600	0.053	0	287	1600	0.053	0	287	1600	0.053
Eb Left	202	1600	0.126 *	0	202	1600	0.126 *	0	202	1600	0.126 *	0	202	1600	0.126 *
Eb Thru	604	3200	0.189	16	620	3200	0.194	0	620	3200	0.194	0	620	3200	0.194
Eb Right	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057	0	91	1600	0.057
Wb Left	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039	0	62	1600	0.039
Wb Thru	1025	3200	0.320 *	38	1063	3200	0.332 *	0	1063	3200	0.332 *	0	1063	3200	0.332 *
Wb Right	269	1600	0.168	0	269	1600	0.168	0	269	1600	0.168	0	269	1600	0.168
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.809				0.821				0.821				0.821
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Firestone Boulevard
Peak hr: PM

N-S St: Studebaker Road
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU83

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
Nb Thru	659	3200	0.206 *	0	659	3200	0.206 *	0	659	3200	0.206 *	0	659	3200	0.206 *
Nb Right	42	1600	0.000	0	42	1600	0.000	0	42	1600	0.000	0	42	1600	0.000
Sb Left	143	1600	0.089 *	0	143	1600	0.089 *	0	143	1600	0.089 *	0	143	1600	0.089 *
Sb Thru	470	3200	0.147	0	470	3200	0.147	0	470	3200	0.147	0	470	3200	0.147
Sb Right	258	1600	0.000	11	269	1600	0.000	0	269	1600	0.000	0	269	1600	0.000
Eb Left	320	1600	0.200 *	0	320	1600	0.200 *	0	320	1600	0.200 *	0	320	1600	0.200 *
Eb Thru	763	3200	0.238	70	833	3200	0.260	0	833	3200	0.260	0	833	3200	0.260
Eb Right	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071
Wb Left	58	1600	0.036	0	58	1600	0.036	0	58	1600	0.036	0	58	1600	0.036
Wb Thru	896	3200	0.280 *	53	949	3200	0.297 *	0	949	3200	0.297 *	0	949	3200	0.297 *
Wb Right	206	1600	0.129	0	206	1600	0.129	0	206	1600	0.129	0	206	1600	0.129
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.875				0.892				0.892				0.892
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Imperial Highway
Peak hr: AM

N-S St: Studebaker Road
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU84

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	228	1600	0.143	3	231	1600	0.144	0	231	1600	0.144	0	231	1600	0.144
Nb Thru	871	3200	0.272	0	871	3200	0.272	0	871	3200	0.272	0	871	3200	0.272
Nb Right	778	1600	0.338 *	0	778	1600	0.338 *	0	778	1600	0.338 *	0	778	1600	0.338 *
Sb Left	70	1600	0.044 *	0	70	1600	0.044 *	0	70	1600	0.044 *	0	70	1600	0.044 *
Sb Thru	358	3200	0.112	0	358	3200	0.112	0	358	3200	0.112	0	358	3200	0.112
Sb Right	157	1600	0.046	0	157	1600	0.046	0	157	1600	0.046	0	157	1600	0.046
Eb Left	84	1600	0.053 *	0	84	1600	0.053 *	0	84	1600	0.053 *	0	84	1600	0.053 *
Eb Thru	916	4800	0.191	7	923	4800	0.192	0	923	4800	0.192	0	923	4800	0.192
Eb Right	245	1600	0.153	0	245	1600	0.153	0	245	1600	0.153	0	245	1600	0.153
Wb Left	237	1600	0.148	0	237	1600	0.148	0	237	1600	0.148	0	237	1600	0.148
Wb Thru	1531	4800	0.326 *	20	1551	4800	0.330 *	0	1551	4800	0.330 *	0	1551	4800	0.330 *
Wb Right	35	0 -		0	35	0 -		0	35	0 -		0	35	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.861				0.865				0.865				0.865
LOS		D				D				D				D	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Imperial Highway
Peak hr: PM

N-S St: Studebaker Road
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU84

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	224	1600	0.140	0	224	1600	0.140	0	224	1600	0.140	0	224	1600	0.140
Nb Thru	735	3200	0.230	0	735	3200	0.230	0	735	3200	0.230	0	735	3200	0.230
Nb Right	620	1600	0.249 *	0	620	1600	0.249 *	0	620	1600	0.249 *	0	620	1600	0.249 *
Sb Left	110	1600	0.069 *	0	110	1600	0.069 *	0	110	1600	0.069 *	0	110	1600	0.069 *
Sb Thru	459	3200	0.143	0	459	3200	0.143	0	459	3200	0.143	0	459	3200	0.143
Sb Right	127	1600	0.000	0	127	1600	0.000	0	127	1600	0.000	0	127	1600	0.000
Eb Left	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087	0	139	1600	0.087
Eb Thru	1254	4800	0.261 *	45	1299	4800	0.271 *	0	1299	4800	0.271 *	0	1299	4800	0.271 *
Eb Right	194	1600	0.121	12	206	1600	0.129	0	206	1600	0.129	0	206	1600	0.129
Wb Left	221	1600	0.138 *	0	221	1600	0.138 *	0	221	1600	0.138 *	0	221	1600	0.138 *
Wb Thru	1442	4800	0.312	32	1474	4800	0.319	0	1474	4800	0.319	0	1474	4800	0.319
Wb Right	57	0 -		0	57	0 -		0	57	0 -		0	57	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.818				0.827				0.827				0.827
LOS		D				D				D				D	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ I-105 WB On-Ramp-EB Off-Ramp
Peak hr: AM

N-S St: Studebaker Road
E-W St: I-105 WB On-Ramp-EB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU85

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	312	1600	0.195 *	0	312	1600	0.195 *	0	312	1600	0.195 *	0	312	1600	0.195 *
Nb Thru	620	3200	0.194	3	623	3200	0.195	0	623	3200	0.195	0	623	3200	0.195
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	456	3200	0.228 *	0	456	3200	0.228 *	0	456	3200	0.228 *	0	456	3200	0.228 *
Sb Right	275	0	-	0	275	0	-	0	275	0	-	0	275	0	-
Eb Left	1012	2880	0.351	0	1012	2880	0.351	0	1012	2880	0.351	0	1012	2880	0.351
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	421	1600	0.068	0	421	1600	0.068	0	421	1600	0.068	0	421	1600	0.068
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.875				0.875				0.875				0.875
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ I-105 WB On-Ramp-EB Off-Ramp
Peak hr: PM

N-S St: Studebaker Road
E-W St: I-105 WB On-Ramp-EB Off-Ramp
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU85

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	268	1600	0.168 *	0	268	1600	0.168 *	0	268	1600	0.168 *	0	268	1600	0.168 *
Nb Thru	728	3200	0.228	0	728	3200	0.228	0	728	3200	0.228	0	728	3200	0.228
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	533	3200	0.231 *	12	545	3200	0.235 *	0	545	3200	0.235 *	0	545	3200	0.235 *
Sb Right	206	0	-	0	206	0	-	0	206	0	-	0	206	0	-
Eb Left	966	2880	0.335	0	966	2880	0.335	0	966	2880	0.335	0	966	2880	0.335
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	787	1600	0.324	0	787	1600	0.324	0	787	1600	0.324	0	787	1600	0.324
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.834				0.838				0.838				0.838
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Rosecrans Avenue
Peak hr: AM

N-S St: Studebaker Road
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU86

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	373	1600	0.233 *	0	373	1600	0.233 *	0	373	1600	0.233 *	0	373	1600	0.233 *
Nb Thru	581	3200	0.182	0	581	3200	0.182	0	581	3200	0.182	0	581	3200	0.182
Nb Right	148	1600	0.093	0	148	1600	0.093	0	148	1600	0.093	0	148	1600	0.093
Sb Left	153	1600	0.096	0	153	1600	0.096	0	153	1600	0.096	0	153	1600	0.096
Sb Thru	428	3200	0.134 *	0	428	3200	0.134 *	0	428	3200	0.134 *	0	428	3200	0.134 *
Sb Right	265	1600	0.067	0	265	1600	0.067	0	265	1600	0.067	0	265	1600	0.067
Eb Left	158	1600	0.099 *	0	158	1600	0.099 *	0	158	1600	0.099 *	0	158	1600	0.099 *
Eb Thru	755	3200	0.236	0	755	3200	0.236	0	755	3200	0.236	0	755	3200	0.236
Eb Right	151	1600	0.094	0	151	1600	0.094	0	151	1600	0.094	0	151	1600	0.094
Wb Left	137	1600	0.086	0	137	1600	0.086	0	137	1600	0.086	0	137	1600	0.086
Wb Thru	1193	4800	0.270 *	6	1199	4800	0.272 *	0	1199	4800	0.272 *	0	1199	4800	0.272 *
Wb Right	105	0 -		0	105	0 -		0	105	0 -		0	105	0 -	
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.836				0.837				0.837				0.837
LOS		D				D				D				D	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Studebaker Road @ Rosecrans Avenue
Peak hr: PM

N-S St: Studebaker Road
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU86

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	364	1600	0.228 *	0	364	1600	0.228 *	0	364	1600	0.228 *	0	364	1600	0.228 *
Nb Thru	572	3200	0.179	0	572	3200	0.179	0	572	3200	0.179	0	572	3200	0.179
Nb Right	184	1600	0.115	0	184	1600	0.115	0	184	1600	0.115	0	184	1600	0.115
Sb Left	163	1600	0.102	0	163	1600	0.102	0	163	1600	0.102	0	163	1600	0.102
Sb Thru	650	3200	0.203 *	0	650	3200	0.203 *	0	650	3200	0.203 *	0	650	3200	0.203 *
Sb Right	116	1600	0.000	0	116	1600	0.000	0	116	1600	0.000	0	116	1600	0.000
Eb Left	165	1600	0.103	0	165	1600	0.103	0	165	1600	0.103	0	165	1600	0.103
Eb Thru	1104	3200	0.345 *	13	1117	3200	0.349 *	0	1117	3200	0.349 *	0	1117	3200	0.349 *
Eb Right	275	1600	0.172	0	275	1600	0.172	0	275	1600	0.172	0	275	1600	0.172
Wb Left	146	1600	0.091 *	0	146	1600	0.091 *	0	146	1600	0.091 *	0	146	1600	0.091 *
Wb Thru	1156	4800	0.256	11	1167	4800	0.258	0	1167	4800	0.258	0	1167	4800	0.258
Wb Right	73	0	-	0	73	0	-	0	73	0	-	0	73	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.967				0.971				0.971				0.971
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Firestone Boulevard @ Imperial Highway-Orr and Day Road
Peak hr: AM

N-S St: Firestone Boulevard
E-W St: Imperial Highway-Orr and Day Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU87

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	270	1863	0.145 *	3	273	1875	0.146 *	0	273	1875	0.146 *	0	273	1875	0.146 *
Nb Thru	527	4331	0.130	6	533	4317	0.132	0	533	4317	0.132	0	533	4317	0.132
Nb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Sb Left	410	2702	0.152	10	420	2791	0.150	0	420	2791	0.150	0	420	2791	0.150
Sb Thru	464	3398	0.137 *	5	469	3298	0.142 *	0	469	3298	0.142 *	0	469	3298	0.142 *
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1412	4800	0.356 *	6	1418	4800	0.357 *	0	1418	4800	0.357 *	0	1418	4800	0.357 *
Eb Right	296	0	-	0	296	0	-	0	296	0	-	0	296	0	-
Wb Left	6	1600	0.004 *	0	6	1600	0.004 *	0	6	1600	0.004 *	0	6	1600	0.004 *
Wb Thru	1213	4800	0.253	17	1230	4800	0.256	0	1230	4800	0.256	0	1230	4800	0.256
Wb Right	346	1600	0.080	24	370	1600	0.089	0	370	1600	0.089	0	370	1600	0.089
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.756				0.757				0.757				0.757
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Firestone Boulevard @ Imperial Highway-Orr and Day Road
Peak hr: PM

N-S St: Firestone Boulevard
E-W St: Imperial Highway-Orr and Day Road
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU87

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	388	2195	0.177 *	0	388	2172	0.179 *	0	388	2172	0.179 *	0	388	2172	0.179 *
Nb Thru	624	3961	0.159	16	640	3987	0.162	0	640	3987	0.162	0	640	3987	0.162
Nb Right	6	0	-	0	6	0	-	0	6	0	-	0	6	0	-
Sb Left	470	2672	0.176 *	43	513	2787	0.184	0	513	2787	0.184	0	513	2787	0.184
Sb Thru	543	3431	0.159	14	557	3303	0.169 *	0	557	3303	0.169 *	0	557	3303	0.169 *
Sb Right	1	0	-	0	1	0	-	0	1	0	-	0	1	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1219	4800	0.339 *	34	1253	4800	0.348 *	0	1253	4800	0.348 *	0	1253	4800	0.348 *
Eb Right	407	0	-	12	419	0	-	0	419	0	-	0	419	0	-
Wb Left	11	1600	0.007 *	0	11	1600	0.007 *	0	11	1600	0.007 *	0	11	1600	0.007 *
Wb Thru	1417	4800	0.295	32	1449	4800	0.302	0	1449	4800	0.302	0	1449	4800	0.302
Wb Right	432	1600	0.112	32	464	1600	0.121	0	464	1600	0.121	0	464	1600	0.121
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.798				0.818				0.818				0.818
LOS			C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Pioneer Boulevard @ Imperial Highway
Peak hr: AM

N-S St: Pioneer Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU88

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024
Nb Thru	568	3200	0.178 *	0	568	3200	0.178 *	0	568	3200	0.178 *	0	568	3200	0.178 *
Nb Right	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079	0	126	1600	0.079
Sb Left	625	2880	0.217 *	0	625	2880	0.217 *	0	625	2880	0.217 *	0	625	2880	0.217 *
Sb Thru	519	3200	0.162	0	519	3200	0.162	0	519	3200	0.162	0	519	3200	0.162
Sb Right	441	1600	0.276	0	441	1600	0.276	0	441	1600	0.276	0	441	1600	0.276
Eb Left	356	1600	0.223 *	0	356	1600	0.223 *	0	356	1600	0.223 *	0	356	1600	0.223 *
Eb Thru	1393	4800	0.290	16	1409	4800	0.294	0	1409	4800	0.294	0	1409	4800	0.294
Eb Right	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055
Wb Left	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059	0	95	1600	0.059
Wb Thru	1480	4800	0.308 *	42	1522	4800	0.317 *	0	1522	4800	0.317 *	0	1522	4800	0.317 *
Wb Right	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037	0	59	1600	0.037
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.025				1.034				1.034				1.034
LOS		F				F				F				F	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Pioneer Boulevard @ Imperial Highway
Peak hr: PM

N-S St: Pioneer Boulevard
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU88

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073	0	117	1600	0.073
Nb Thru	591	3200	0.185 *	0	591	3200	0.185 *	0	591	3200	0.185 *	0	591	3200	0.185 *
Nb Right	185	1600	0.116	0	185	1600	0.116	0	185	1600	0.116	0	185	1600	0.116
Sb Left	406	2880	0.141 *	0	406	2880	0.141 *	0	406	2880	0.141 *	0	406	2880	0.141 *
Sb Thru	683	3200	0.213	0	683	3200	0.213	0	683	3200	0.213	0	683	3200	0.213
Sb Right	361	1600	0.226	0	361	1600	0.226	0	361	1600	0.226	0	361	1600	0.226
Eb Left	295	1600	0.184 *	0	295	1600	0.184 *	0	295	1600	0.184 *	0	295	1600	0.184 *
Eb Thru	1494	4800	0.311	76	1570	4800	0.327	0	1570	4800	0.327	0	1570	4800	0.327
Eb Right	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044
Wb Left	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084
Wb Thru	1511	4800	0.315 *	54	1565	4800	0.326 *	0	1565	4800	0.326 *	0	1565	4800	0.326 *
Wb Right	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035	0	56	1600	0.035
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.925				0.936				0.936				0.936
LOS		E				E				E				E	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Somerset Boulevard
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU89

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	137	1600	0.086	0	137	1600	0.086	0	137	1600	0.086	0	137	1600	0.086
Nb Thru	1016	3200	0.398 *	15	1031	3200	0.403 *	0	1031	3200	0.403 *	0	1031	3200	0.403 *
Nb Right	259	0	-	0	259	0	-	0	259	0	-	0	259	0	-
Sb Left	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *
Sb Thru	924	3200	0.342	6	930	3200	0.344	0	930	3200	0.344	0	930	3200	0.344
Sb Right	169	0	-	2	171	0	-	0	171	0	-	0	171	0	-
Eb Left	250	1600	0.156 *	4	254	1600	0.159 *	0	254	1600	0.159 *	0	254	1600	0.159 *
Eb Thru	399	3200	0.164	0	399	3200	0.164	0	399	3200	0.164	0	399	3200	0.164
Eb Right	125	0	-	0	125	0	-	0	125	0	-	0	125	0	-
Wb Left	241	1600	0.151	0	241	1600	0.151	0	241	1600	0.151	0	241	1600	0.151
Wb Thru	441	3200	0.173 *	0	441	3200	0.173 *	0	441	3200	0.173 *	0	441	3200	0.173 *
Wb Right	111	0	-	0	111	0	-	0	111	0	-	0	111	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.903				0.911				0.911				0.911
LOS			E				E				E				E

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Somerset Boulevard
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU89

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
Nb Thru	1065	3200	0.398 *	33	1098	3200	0.409 *	0	1098	3200	0.409 *	0	1098	3200	0.409 *
Nb Right	210	0	-	0	210	0	-	0	210	0	-	0	210	0	-
Sb Left	210	1600	0.131 *	0	210	1600	0.131 *	0	210	1600	0.131 *	0	210	1600	0.131 *
Sb Thru	1034	3200	0.380	42	1076	3200	0.396	0	1076	3200	0.396	0	1076	3200	0.396
Sb Right	182	0	-	8	190	0	-	0	190	0	-	0	190	0	-
Eb Left	200	1600	0.125	11	211	1600	0.132	0	211	1600	0.132	0	211	1600	0.132
Eb Thru	527	3200	0.216 *	0	527	3200	0.216 *	0	527	3200	0.216 *	0	527	3200	0.216 *
Eb Right	164	0	-	0	164	0	-	0	164	0	-	0	164	0	-
Wb Left	151	1600	0.094 *	0	151	1600	0.094 *	0	151	1600	0.094 *	0	151	1600	0.094 *
Wb Thru	286	3200	0.133	0	286	3200	0.133	0	286	3200	0.133	0	286	3200	0.133
Wb Right	139	0	-	0	139	0	-	0	139	0	-	0	139	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.940				0.950				0.950				0.950
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Alondra Boulevard
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU90

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	175	1600	0.109 *	0	175	1600	0.109 *	0	175	1600	0.109 *	0	175	1600	0.109 *
Nb Thru	943	3200	0.295	10	953	3200	0.298	0	953	3200	0.298	0	953	3200	0.298
Nb Right	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085
Sb Left	119	1600	0.074	0	119	1600	0.074	0	119	1600	0.074	0	119	1600	0.074
Sb Thru	878	3200	0.274 *	2	880	3200	0.275 *	0	880	3200	0.275 *	0	880	3200	0.275 *
Sb Right	177	1600	0.111	4	181	1600	0.113	0	181	1600	0.113	0	181	1600	0.113
Eb Left	109	1600	0.068	6	115	1600	0.072	0	115	1600	0.072	0	115	1600	0.072
Eb Thru	378	3200	0.154 *	0	378	3200	0.154 *	0	378	3200	0.154 *	0	378	3200	0.154 *
Eb Right	116	0	-	0	116	0	-	0	116	0	-	0	116	0	-
Wb Left	145	1600	0.091 *	0	145	1600	0.091 *	0	145	1600	0.091 *	0	145	1600	0.091 *
Wb Thru	478	3200	0.149	0	478	3200	0.149	0	478	3200	0.149	0	478	3200	0.149
Wb Right	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.729				0.729				0.729				0.729
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Alondra Boulevard
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU90

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	235	1600	0.147 *	0	235	1600	0.147 *	0	235	1600	0.147 *	0	235	1600	0.147 *
Nb Thru	1071	3200	0.335	21	1092	3200	0.341	0	1092	3200	0.341	0	1092	3200	0.341
Nb Right	194	1600	0.121	0	194	1600	0.121	0	194	1600	0.121	0	194	1600	0.121
Sb Left	211	1600	0.132	0	211	1600	0.132	0	211	1600	0.132	0	211	1600	0.132
Sb Thru	1241	3200	0.388 *	26	1267	3200	0.396 *	0	1267	3200	0.396 *	0	1267	3200	0.396 *
Sb Right	105	1600	0.066	16	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076
Eb Left	138	1600	0.086	12	150	1600	0.094	0	150	1600	0.094	0	150	1600	0.094
Eb Thru	854	3200	0.325 *	0	854	3200	0.325 *	0	854	3200	0.325 *	0	854	3200	0.325 *
Eb Right	185	0	-	0	185	0	-	0	185	0	-	0	185	0	-
Wb Left	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *	0	114	1600	0.071 *
Wb Thru	605	3200	0.189	0	605	3200	0.189	0	605	3200	0.189	0	605	3200	0.189
Wb Right	170	1600	0.106	0	170	1600	0.106	0	170	1600	0.106	0	170	1600	0.106
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.031				1.039				1.039				1.039
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Rosecrans Avenue
Peak hr: AM

N-S St: Downey Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU91

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071	0	113	1600	0.071
Nb Thru	843	1600	0.527 *	0	843	1600	0.527 *	0	843	1600	0.527 *	0	843	1600	0.527 *
Nb Right	157	1600	0.098	0	157	1600	0.098	0	157	1600	0.098	0	157	1600	0.098
Sb Left	212	1600	0.133 *	0	212	1600	0.133 *	0	212	1600	0.133 *	0	212	1600	0.133 *
Sb Thru	559	3200	0.187	0	559	3200	0.187	0	559	3200	0.187	0	559	3200	0.187
Sb Right	38	0	-	0	38	0	-	0	38	0	-	0	38	0	-
Eb Left	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081	0	130	1600	0.081
Eb Thru	359	3200	0.112	9	368	3200	0.115 *	0	368	3200	0.115 *	0	368	3200	0.115 *
Eb Right	181	1600	0.113 *	0	181	1600	0.113	0	181	1600	0.113	0	181	1600	0.113
Wb Left	197	1600	0.123 *	0	197	1600	0.123 *	0	197	1600	0.123 *	0	197	1600	0.123 *
Wb Thru	358	3200	0.112	5	363	3200	0.113	0	363	3200	0.113	0	363	3200	0.113
Wb Right	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089	0	142	1600	0.089
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.996				0.998				0.998				0.998
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Rosecrans Avenue
Peak hr: PM

N-S St: Downey Avenue
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU91

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081
Nb Thru	635	1600	0.397 *	0	635	1600	0.397 *	0	635	1600	0.397 *	0	635	1600	0.397 *
Nb Right	155	1600	0.097	0	155	1600	0.097	0	155	1600	0.097	0	155	1600	0.097
Sb Left	272	1600	0.170 *	0	272	1600	0.170 *	0	272	1600	0.170 *	0	272	1600	0.170 *
Sb Thru	545	3200	0.189	0	545	3200	0.189	0	545	3200	0.189	0	545	3200	0.189
Sb Right	59	0	-	0	59	0	-	0	59	0	-	0	59	0	-
Eb Left	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063	0	101	1600	0.063
Eb Thru	963	3200	0.301 *	16	979	3200	0.306 *	0	979	3200	0.306 *	0	979	3200	0.306 *
Eb Right	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084	0	135	1600	0.084
Wb Left	164	1600	0.103 *	0	164	1600	0.103 *	0	164	1600	0.103 *	0	164	1600	0.103 *
Wb Thru	748	3200	0.234	27	775	3200	0.242	0	775	3200	0.242	0	775	3200	0.242
Wb Right	210	1600	0.131	0	210	1600	0.131	0	210	1600	0.131	0	210	1600	0.131
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.070				1.075				1.075				1.075
LOS			F				F				F				F

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Somerset Boulevard
Peak hr: AM

N-S St: Downey Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU92

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *	0	135	1600	0.084 *
Nb Thru	699	3200	0.250	0	699	3200	0.250	0	699	3200	0.250	0	699	3200	0.250
Nb Right	101	0	-	0	101	0	-	0	101	0	-	0	101	0	-
Sb Left	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033
Sb Thru	545	3200	0.270 *	0	545	3200	0.270 *	0	545	3200	0.270 *	0	545	3200	0.270 *
Sb Right	319	0	-	0	319	0	-	0	319	0	-	0	319	0	-
Eb Left	171	1600	0.107 *	0	171	1600	0.107 *	0	171	1600	0.107 *	0	171	1600	0.107 *
Eb Thru	542	3200	0.192	4	546	3200	0.193	0	546	3200	0.193	0	546	3200	0.193
Eb Right	71	0	-	0	71	0	-	0	71	0	-	0	71	0	-
Wb Left	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031	0	49	1600	0.031
Wb Thru	624	3200	0.222 *	2	626	3200	0.223 *	0	626	3200	0.223 *	0	626	3200	0.223 *
Wb Right	86	0	-	0	86	0	-	0	86	0	-	0	86	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.783				0.784				0.784				0.784
LOS			C				C				C				C

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Somerset Boulevard
Peak hr: PM

N-S St: Downey Avenue
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU92

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	157	1600	0.098	0	157	1600	0.098	0	157	1600	0.098	0	157	1600	0.098
Nb Thru	711	3200	0.246 *	0	711	3200	0.246 *	0	711	3200	0.246 *	0	711	3200	0.246 *
Nb Right	75	0	-	0	75	0	-	0	75	0	-	0	75	0	-
Sb Left	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *	0	126	1600	0.079 *
Sb Thru	558	3200	0.217	0	558	3200	0.217	0	558	3200	0.217	0	558	3200	0.217
Sb Right	135	0	-	0	135	0	-	0	135	0	-	0	135	0	-
Eb Left	306	1600	0.191 *	0	306	1600	0.191 *	0	306	1600	0.191 *	0	306	1600	0.191 *
Eb Thru	653	3200	0.225	11	664	3200	0.229	0	664	3200	0.229	0	664	3200	0.229
Eb Right	68	0	-	0	68	0	-	0	68	0	-	0	68	0	-
Wb Left	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054	0	86	1600	0.054
Wb Thru	495	3200	0.169 *	8	503	3200	0.172 *	0	503	3200	0.172 *	0	503	3200	0.172 *
Wb Right	47	0	-	0	47	0	-	0	47	0	-	0	47	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.785				0.788				0.788				0.788
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Alondra Boulevard
Peak hr: AM

N-S St: Downey Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU93

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	202	1600	0.126	0	202	1600	0.126	0	202	1600	0.126	0	202	1600	0.126
Nb Thru	645	3200	0.241 *	0	645	3200	0.241 *	0	645	3200	0.241 *	0	645	3200	0.241 *
Nb Right	125	0	-	0	125	0	-	0	125	0	-	0	125	0	-
Sb Left	154	1600	0.096 *	0	154	1600	0.096 *	0	154	1600	0.096 *	0	154	1600	0.096 *
Sb Thru	559	3200	0.201	0	559	3200	0.201	0	559	3200	0.201	0	559	3200	0.201
Sb Right	85	0	-	0	85	0	-	0	85	0	-	0	85	0	-
Eb Left	147	1600	0.092 *	0	147	1600	0.092 *	0	147	1600	0.092 *	0	147	1600	0.092 *
Eb Thru	378	3200	0.157	6	384	3200	0.159	0	384	3200	0.159	0	384	3200	0.159
Eb Right	125	0	-	0	125	0	-	0	125	0	-	0	125	0	-
Wb Left	153	1600	0.096	0	153	1600	0.096	0	153	1600	0.096	0	153	1600	0.096
Wb Thru	1017	3200	0.383 *	4	1021	3200	0.385 *	0	1021	3200	0.385 *	0	1021	3200	0.385 *
Wb Right	210	0	-	0	210	0	-	0	210	0	-	0	210	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.912				0.913				0.913				0.913
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Downey Avenue @ Alondra Boulevard
Peak hr: PM

N-S St: Downey Avenue
E-W St: Alondra Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU93

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	132	1600	0.083	0	132	1600	0.083	0	132	1600	0.083	0	132	1600	0.083
Nb Thru	531	3200	0.199 *	0	531	3200	0.199 *	0	531	3200	0.199 *	0	531	3200	0.199 *
Nb Right	106	0	-	0	106	0	-	0	106	0	-	0	106	0	-
Sb Left	120	1600	0.075 *	0	120	1600	0.075 *	0	120	1600	0.075 *	0	120	1600	0.075 *
Sb Thru	527	3200	0.182	0	527	3200	0.182	0	527	3200	0.182	0	527	3200	0.182
Sb Right	55	0	-	0	55	0	-	0	55	0	-	0	55	0	-
Eb Left	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092	0	147	1600	0.092
Eb Thru	893	3200	0.331 *	12	905	3200	0.335 *	0	905	3200	0.335 *	0	905	3200	0.335 *
Eb Right	166	0	-	0	166	0	-	0	166	0	-	0	166	0	-
Wb Left	175	1600	0.109 *	0	175	1600	0.109 *	0	175	1600	0.109 *	0	175	1600	0.109 *
Wb Thru	632	3200	0.237	16	648	3200	0.242	0	648	3200	0.242	0	648	3200	0.242
Wb Right	126	0	-	0	126	0	-	0	126	0	-	0	126	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.814				0.818				0.818				0.818
LOS			D				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Rosecrans Avenue
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU94

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	191	1600	0.119 *	0	191	1600	0.119 *	0	191	1600	0.119 *	0	191	1600	0.119 *
Nb Thru	627	3200	0.268	0	627	3200	0.268	0	627	3200	0.268	0	627	3200	0.268
Nb Right	230	0	-	0	230	0	-	0	230	0	-	0	230	0	-
Sb Left	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065	0	104	1600	0.065
Sb Thru	722	3200	0.309 *	0	722	3200	0.309 *	0	722	3200	0.309 *	0	722	3200	0.309 *
Sb Right	266	0	-	2	268	0	-	0	268	0	-	0	268	0	-
Eb Left	103	1600	0.064 *	0	103	1600	0.064 *	0	103	1600	0.064 *	0	103	1600	0.064 *
Eb Thru	466	3200	0.146	3	469	3200	0.147	0	469	3200	0.147	0	469	3200	0.147
Eb Right	35	1600	0.022	0	35	1600	0.022	0	35	1600	0.022	0	35	1600	0.022
Wb Left	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099	0	158	1600	0.099
Wb Thru	589	3200	0.184 *	0	589	3200	0.184 *	0	589	3200	0.184 *	0	589	3200	0.184 *
Wb Right	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.777				0.777				0.777				0.777
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Rosecrans Avenue
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Rosecrans Avenue
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU94

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088	0	140	1600	0.088
Nb Thru	755	3200	0.294 *	0	755	3200	0.294 *	0	755	3200	0.294 *	0	755	3200	0.294 *
Nb Right	185	0	-	0	185	0	-	0	185	0	-	0	185	0	-
Sb Left	123	1600	0.077 *	0	123	1600	0.077 *	0	123	1600	0.077 *	0	123	1600	0.077 *
Sb Thru	677	3200	0.281	0	677	3200	0.281	0	677	3200	0.281	0	677	3200	0.281
Sb Right	223	0	-	0	223	0	-	0	223	0	-	0	223	0	-
Eb Left	272	1600	0.170	0	272	1600	0.170	0	272	1600	0.170	0	272	1600	0.170
Eb Thru	983	3200	0.307 *	5	988	3200	0.309 *	0	988	3200	0.309 *	0	988	3200	0.309 *
Eb Right	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085
Wb Left	131	1600	0.082 *	0	131	1600	0.082 *	0	131	1600	0.082 *	0	131	1600	0.082 *
Wb Thru	594	3200	0.186	8	602	3200	0.188	0	602	3200	0.188	0	602	3200	0.188
Wb Right	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089	0	143	1600	0.089
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.860				0.861				0.861				0.861
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Boulevard
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU95

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *	0	130	1600	0.081 *
Nb Thru	756	3200	0.251	0	756	3200	0.251	0	756	3200	0.251	0	756	3200	0.251
Nb Right	48	0	-	0	48	0	-	0	48	0	-	0	48	0	-
Sb Left	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069	0	110	1600	0.069
Sb Thru	637	3200	0.255 *	0	637	3200	0.255 *	0	637	3200	0.255 *	0	637	3200	0.255 *
Sb Right	179	0	-	0	179	0	-	0	179	0	-	0	179	0	-
Eb Left	243	1600	0.152 *	0	243	1600	0.152 *	0	243	1600	0.152 *	0	243	1600	0.152 *
Eb Thru	691	3200	0.237	0	691	3200	0.237	0	691	3200	0.237	0	691	3200	0.237
Eb Right	67	0	-	0	67	0	-	0	67	0	-	0	67	0	-
Wb Left	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054
Wb Thru	837	3200	0.300 *	0	837	3200	0.300 *	0	837	3200	0.300 *	0	837	3200	0.300 *
Wb Right	122	0	-	0	122	0	-	0	122	0	-	0	122	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.888				0.888				0.888				0.888
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Boulevard
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Somerset Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU95

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *	0	186	1600	0.116 *
Nb Thru	942	3200	0.317	0	942	3200	0.317	0	942	3200	0.317	0	942	3200	0.317
Nb Right	72	0	-	0	72	0	-	0	72	0	-	0	72	0	-
Sb Left	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053	0	85	1600	0.053
Sb Thru	837	3200	0.296 *	0	837	3200	0.296 *	0	837	3200	0.296 *	0	837	3200	0.296 *
Sb Right	109	0	-	0	109	0	-	0	109	0	-	0	109	0	-
Eb Left	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108
Eb Thru	842	3200	0.323 *	0	842	3200	0.323 *	0	842	3200	0.323 *	0	842	3200	0.323 *
Eb Right	190	0	-	0	190	0	-	0	190	0	-	0	190	0	-
Wb Left	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *	0	122	1600	0.076 *
Wb Thru	571	3200	0.211	0	571	3200	0.211	0	571	3200	0.211	0	571	3200	0.211
Wb Right	103	0	-	0	103	0	-	0	103	0	-	0	103	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.911				0.911				0.911				0.911
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Ranch Road North
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Somerset Ranch Road North
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU96

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	301	2880	0.105 *	0	301	2880	0.105 *	0	301	2880	0.105 *	0	301	2880	0.105 *
Nb Thru	910	3200	0.284	1	911	3200	0.285	0	911	3200	0.285	0	911	3200	0.285
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	880	3200	0.275	2	882	3200	0.276	0	882	3200	0.276	0	882	3200	0.276
Sb Right	609	1600	0.381 *	0	609	1600	0.381 *	0	609	1600	0.381 *	0	609	1600	0.381 *
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	246	1600	0.154	0	246	1600	0.154	0	246	1600	0.154	0	246	1600	0.154
Wb Thru	463	1600	0.289 *	0	463	1600	0.289 *	0	463	1600	0.289 *	0	463	1600	0.289 *
Wb Right	456	1600	0.285	0	456	1600	0.285	0	456	1600	0.285	0	456	1600	0.285
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.875				0.875				0.875				0.875
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Ranch Road North
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Somerset Ranch Road North
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU96

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	235	2880	0.082 *	0	235	2880	0.082 *	0	235	2880	0.082 *	0	235	2880	0.082 *
Nb Thru	1379	3200	0.431	5	1384	3200	0.433	0	1384	3200	0.433	0	1384	3200	0.433
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1079	3200	0.337	5	1084	3200	0.339	0	1084	3200	0.339	0	1084	3200	0.339
Sb Right	672	1600	0.420 *	0	672	1600	0.420 *	0	672	1600	0.420 *	0	672	1600	0.420 *
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	229	1600	0.143	0	229	1600	0.143	0	229	1600	0.143	0	229	1600	0.143
Wb Thru	422	1600	0.264	0	422	1600	0.264	0	422	1600	0.264	0	422	1600	0.264
Wb Right	462	1600	0.289 *	0	462	1600	0.289 *	0	462	1600	0.289 *	0	462	1600	0.289 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.890				0.890				0.890				0.890
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Ranch Road South
Peak hr: AM

N-S St: Paramount Boulevard
E-W St: Somerset Ranch Road South
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU97

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	844	3200	0.264 *	1	845	3200	0.264 *	0	845	3200	0.264 *	0	845	3200	0.264 *
Nb Right	317	1600	0.198	3	320	1600	0.200	0	320	1600	0.200	0	320	1600	0.200
Sb Left	265	2880	0.092 *	0	265	2880	0.092 *	0	265	2880	0.092 *	0	265	2880	0.092 *
Sb Thru	808	3200	0.253	2	810	3200	0.253	0	810	3200	0.253	0	810	3200	0.253
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	374	1600	0.234	0	374	1600	0.234	0	374	1600	0.234	0	374	1600	0.234
Eb Thru	724	3200	0.280 *	0	724	3200	0.280 *	0	724	3200	0.280 *	0	724	3200	0.280 *
Eb Right	172	0	-	0	172	0	-	0	172	0	-	0	172	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.736				0.736				0.736				0.736
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Paramount Boulevard @ Somerset Ranch Road South
Peak hr: PM

N-S St: Paramount Boulevard
E-W St: Somerset Ranch Road South
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU97

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	1097	3200	0.343 *	5	1102	3200	0.344 *	0	1102	3200	0.344 *	0	1102	3200	0.344 *
Nb Right	244	1600	0.153	0	244	1600	0.153	0	244	1600	0.153	0	244	1600	0.153
Sb Left	167	2880	0.058 *	0	167	2880	0.058 *	0	167	2880	0.058 *	0	167	2880	0.058 *
Sb Thru	1123	3200	0.351	5	1128	3200	0.353	0	1128	3200	0.353	0	1128	3200	0.353
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	522	1600	0.326	0	522	1600	0.326	0	522	1600	0.326	0	522	1600	0.326
Eb Thru	686	3200	0.288	0	686	3200	0.288	0	686	3200	0.288	0	686	3200	0.288
Eb Right	237	0	-	0	237	0	-	0	237	0	-	0	237	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.827				0.829				0.829				0.829
LOS			D				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Garfield Avenue @ Firestone Boulevard
Peak hr: AM

N-S St: Garfield Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU98

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	723	2880	0.251 *	0	723	2880	0.251 *	0	723	2880	0.251 *	0	723	2880	0.251 *
Nb Thru	596	3200	0.195	2	598	3200	0.196	0	598	3200	0.196	0	598	3200	0.196
Nb Right	28	0	-	0	28	0	-	0	28	0	-	0	28	0	-
Sb Left	180	2880	0.063	0	180	2880	0.063	0	180	2880	0.063	0	180	2880	0.063
Sb Thru	591	3200	0.185 *	6	597	3200	0.187 *	0	597	3200	0.187 *	0	597	3200	0.187 *
Sb Right	388	1600	0.022	0	388	1600	0.022	0	388	1600	0.022	0	388	1600	0.022
Eb Left	635	2880	0.220 *	0	635	2880	0.220 *	0	635	2880	0.220 *	0	635	2880	0.220 *
Eb Thru	787	4800	0.164	17	804	4800	0.168	0	804	4800	0.168	0	804	4800	0.168
Eb Right	398	1600	0.249	1	399	1600	0.249	0	399	1600	0.249	0	399	1600	0.249
Wb Left	54	2880	0.019	0	54	2880	0.019	0	54	2880	0.019	0	54	2880	0.019
Wb Thru	886	4800	0.185 *	7	893	4800	0.186 *	0	893	4800	0.186 *	0	893	4800	0.186 *
Wb Right	94	1600	0.059	0	94	1600	0.059	0	94	1600	0.059	0	94	1600	0.059
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.941				0.944				0.944				0.944
LOS			E				E				E				E

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Garfield Avenue @ Firestone Boulevard
Peak hr: PM

N-S St: Garfield Avenue
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU98

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	528	2880	0.183 *	0	528	2880	0.183 *	0	528	2880	0.183 *	0	528	2880	0.183 *
Nb Thru	661	3200	0.238	14	675	3200	0.242	0	675	3200	0.242	0	675	3200	0.242
Nb Right	100	0	-	0	100	0	-	0	100	0	-	0	100	0	-
Sb Left	255	2880	0.089	0	255	2880	0.089	0	255	2880	0.089	0	255	2880	0.089
Sb Thru	1353	3200	0.423 *	11	1364	3200	0.426 *	0	1364	3200	0.426 *	0	1364	3200	0.426 *
Sb Right	367	1600	0.000	0	367	1600	0.000	0	367	1600	0.000	0	367	1600	0.000
Eb Left	676	2880	0.235 *	0	676	2880	0.235 *	0	676	2880	0.235 *	0	676	2880	0.235 *
Eb Thru	1496	4800	0.312	22	1518	4800	0.316	0	1518	4800	0.316	0	1518	4800	0.316
Eb Right	472	1600	0.295	0	472	1600	0.295	0	472	1600	0.295	0	472	1600	0.295
Wb Left	200	2880	0.069	0	200	2880	0.069	0	200	2880	0.069	0	200	2880	0.069
Wb Thru	1452	4800	0.303 *	29	1481	4800	0.309 *	0	1481	4800	0.309 *	0	1481	4800	0.309 *
Wb Right	227	1600	0.142	0	227	1600	0.142	0	227	1600	0.142	0	227	1600	0.142
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.243				1.253				1.253				1.253
LOS		F				F				F				F	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Garfield Avenue @ Imperial Highway
Peak hr: AM

N-S St: Garfield Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU99

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	28	1600	0.018	0	28	1600	0.018	0	28	1600	0.018	0	28	1600	0.018
Nb Thru	412	3200	0.168 *	0	412	3200	0.168 *	0	412	3200	0.168 *	0	412	3200	0.168 *
Nb Right	125	0	-	0	125	0	-	0	125	0	-	0	125	0	-
Sb Left	115	2880	0.040 *	0	115	2880	0.040 *	0	115	2880	0.040 *	0	115	2880	0.040 *
Sb Thru	450	3200	0.141	0	450	3200	0.141	0	450	3200	0.141	0	450	3200	0.141
Sb Right	344	1600	0.067	0	344	1600	0.067	0	344	1600	0.067	0	344	1600	0.067
Eb Left	237	1600	0.148 *	0	237	1600	0.148 *	0	237	1600	0.148 *	0	237	1600	0.148 *
Eb Thru	947	4800	0.206	10	957	4800	0.208	0	957	4800	0.208	0	957	4800	0.208
Eb Right	40	0	-	0	40	0	-	0	40	0	-	0	40	0	-
Wb Left	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055	0	88	1600	0.055
Wb Thru	1061	4800	0.232 *	4	1065	4800	0.233 *	0	1065	4800	0.233 *	0	1065	4800	0.233 *
Wb Right	54	0	-	0	54	0	-	0	54	0	-	0	54	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.688				0.689				0.689				0.689
LOS			B				B				B				B

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
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INTERSECTION CAPACITY UTILIZATION

Garfield Avenue @ Imperial Highway
Peak hr: PM

N-S St: Garfield Avenue
E-W St: Imperial Highway
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU99

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	92	1600	0.058	0	92	1600	0.058	0	92	1600	0.058	0	92	1600	0.058
Nb Thru	428	3200	0.185 *	0	428	3200	0.185 *	0	428	3200	0.185 *	0	428	3200	0.185 *
Nb Right	165	0	-	0	165	0	-	0	165	0	-	0	165	0	-
Sb Left	146	2880	0.051 *	0	146	2880	0.051 *	0	146	2880	0.051 *	0	146	2880	0.051 *
Sb Thru	500	3200	0.156	0	500	3200	0.156	0	500	3200	0.156	0	500	3200	0.156
Sb Right	336	1600	0.063	0	336	1600	0.063	0	336	1600	0.063	0	336	1600	0.063
Eb Left	235	1600	0.147 *	0	235	1600	0.147 *	0	235	1600	0.147 *	0	235	1600	0.147 *
Eb Thru	1257	4800	0.273	11	1268	4800	0.275	0	1268	4800	0.275	0	1268	4800	0.275
Eb Right	53	0	-	0	53	0	-	0	53	0	-	0	53	0	-
Wb Left	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108	0	173	1600	0.108
Wb Thru	1063	4800	0.236 *	31	1094	4800	0.242 *	0	1094	4800	0.242 *	0	1094	4800	0.242 *
Wb Right	69	0	-	0	69	0	-	0	69	0	-	0	69	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.719				0.725				0.725				0.725
LOS			C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-710 NB Off-Ramp @ Firestone Boulevard
Peak hr: AM

N-S St: I-710 NB Off-Ramp
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU100

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	605	2880	0.210	0	605	2880	0.210	0	605	2880	0.210	0	605	2880	0.210
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	434	3200	0.136	0	434	3200	0.136	0	434	3200	0.136	0	434	3200	0.136
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	1652	4800	0.344	17	1669	4800	0.348	0	1669	4800	0.348	0	1669	4800	0.348
Eb Right	615	1600	0.384	0	615	1600	0.384	0	615	1600	0.384	0	615	1600	0.384
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	1626	3200	0.508 *	7	1633	3200	0.510 *	0	1633	3200	0.510 *	0	1633	3200	0.510 *
Wb Right	559	1600	0.349	0	559	1600	0.349	0	559	1600	0.349	0	559	1600	0.349
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.818				0.820				0.820				0.820
LOS		D				D				D				D	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-710 NB Off-Ramp @ Firestone Boulevard
Peak hr: PM

N-S St: I-710 NB Off-Ramp
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU100

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	921	2880	0.320	0	921	2880	0.320	0	921	2880	0.320	0	921	2880	0.320
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	589	3200	0.184	0	589	3200	0.184	0	589	3200	0.184	0	589	3200	0.184
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	2433	4800	0.507	22	2455	4800	0.511	0	2455	4800	0.511	0	2455	4800	0.511
Eb Right	407	1600	0.254	0	407	1600	0.254	0	407	1600	0.254	0	407	1600	0.254
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	1854	3200	0.579 *	29	1883	3200	0.588 *	0	1883	3200	0.588 *	0	1883	3200	0.588 *
Wb Right	355	1600	0.222	0	355	1600	0.222	0	355	1600	0.222	0	355	1600	0.222
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.999				1.008				1.008				1.008
LOS		E				F				F				F	

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-710 SB Off-Ramp @ Firestone Boulevard
Peak hr: AM

N-S St: I-710 SB Off-Ramp
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU101

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	413	2880	0.143	0	413	2880	0.143	0	413	2880	0.143	0	413	2880	0.143
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	662	3200	0.207 *	0	662	3200	0.207 *	0	662	3200	0.207 *	0	662	3200	0.207 *
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1739	4800	0.543 *	17	1756	4800	0.547 *	0	1756	4800	0.547 *	0	1756	4800	0.547 *
Eb Right	868	0	-	0	868	0	-	0	868	0	-	0	868	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	1610	3200	0.503	7	1617	3200	0.505	0	1617	3200	0.505	0	1617	3200	0.505
Wb Right	716	1600	0.448	0	716	1600	0.448	0	716	1600	0.448	0	716	1600	0.448
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.850				0.854				0.854				0.854
LOS		D				D				D				D	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-710 SB Off-Ramp @ Firestone Boulevard
Peak hr: PM

N-S St: I-710 SB Off-Ramp
E-W St: Firestone Boulevard
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU101

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	666	2880	0.231	0	666	2880	0.231	0	666	2880	0.231	0	666	2880	0.231
Sb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Right	492	3200	0.154	0	492	3200	0.154	0	492	3200	0.154	0	492	3200	0.154
Eb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Eb Thru	2178	4800	0.581	22	2200	4800	0.586	0	2200	4800	0.586	0	2200	4800	0.586
Eb Right	611	0	-	0	611	0	-	0	611	0	-	0	611	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	2414	3200	0.754 *	29	2443	3200	0.763 *	0	2443	3200	0.763 *	0	2443	3200	0.763 *
Wb Right	370	1600	0.231	0	370	1600	0.231	0	370	1600	0.231	0	370	1600	0.231
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			1.086				1.095				1.095				1.095
LOS			F				F				F				F

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Erickson Avenue @ Imperial Highway WB Ramps
Peak hr: AM

N-S St: Erickson Avenue
E-W St: Imperial Highway WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU102

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT												
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	59	1600	0.037 *	0	59	1600	0.037 *	0	59	1600	0.037 *	0	59	1600	0.037 *
Nb Thru	128	3200	0.040	0	128	3200	0.040	0	128	3200	0.040	0	128	3200	0.040
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	34	3200	0.013 *	0	34	3200	0.013 *	0	34	3200	0.013 *	0	34	3200	0.013 *
Sb Right	6	0	-	0	6	0	-	0	6	0	-	0	6	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158	0	252	1600	0.158
Wb Thru	12	1600	0.049	0	12	1600	0.049	0	12	1600	0.049	0	12	1600	0.049
Wb Right	66	0	-	0	66	0	-	0	66	0	-	0	66	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.307				0.307				0.307				0.307
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Erickson Avenue @ Imperial Highway WB Ramps
Peak hr: PM

N-S St: Erickson Avenue
E-W St: Imperial Highway WB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU102

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	81	2799	0.029 *	0	81	2799	0.029 *	0	81	2799	0.029 *	0	81	2799	0.029 *
Nb Thru	44	1690	0.026	0	44	1690	0.026	0	44	1690	0.026	0	44	1690	0.026
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	154	3200	0.058 *	0	154	3200	0.058 *	0	154	3200	0.058 *	0	154	3200	0.058 *
Sb Right	30	0	-	0	30	0	-	0	30	0	-	0	30	0	-
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054	0	87	1600	0.054
Wb Thru	10	1600	0.014	0	10	1600	0.014	0	10	1600	0.014	0	10	1600	0.014
Wb Right	13	0	-	0	13	0	-	0	13	0	-	0	13	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.241				0.241				0.241				0.241
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Erickson Avenue @ Imperial Highway EB Ramps
Peak hr: AM

N-S St: Erickson Avenue
E-W St: Imperial Highway EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU103

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	152	3200	0.060 *	0	152	3200	0.060 *	0	152	3200	0.060 *	0	152	3200	0.060 *
Nb Right	40	0	-	0	40	0	-	0	40	0	-	0	40	0	-
Sb Left	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *	0	52	1600	0.033 *
Sb Thru	226	3200	0.071	0	226	3200	0.071	0	226	3200	0.071	0	226	3200	0.071
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	22	1600	0.014	0	22	1600	0.014	0	22	1600	0.014	0	22	1600	0.014
Eb Thru	9	1600	0.093 *	0	9	1600	0.093 *	0	9	1600	0.093 *	0	9	1600	0.093 *
Eb Right	139	0	-	0	139	0	-	0	139	0	-	0	139	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.285				0.285				0.285				0.285
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Erickson Avenue @ Imperial Highway EB Ramps
Peak hr: PM

N-S St: Erickson Avenue
E-W St: Imperial Highway EB Ramps
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU103

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Thru	126	3200	0.072 *	0	126	3200	0.072 *	0	126	3200	0.072 *	0	126	3200	0.072 *
Nb Right	103	0	-	0	103	0	-	0	103	0	-	0	103	0	-
Sb Left	85	1600	0.053 *	0	85	1600	0.053 *	0	85	1600	0.053 *	0	85	1600	0.053 *
Sb Thru	169	3200	0.053	0	169	3200	0.053	0	169	3200	0.053	0	169	3200	0.053
Sb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Eb Left	7	1600	0.004	0	7	1600	0.004	0	7	1600	0.004	0	7	1600	0.004
Eb Thru	8	1600	0.031 *	0	8	1600	0.031 *	0	8	1600	0.031 *	0	8	1600	0.031 *
Eb Right	41	0	-	0	41	0	-	0	41	0	-	0	41	0	-
Wb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.255				0.255				0.255				0.255
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Cherokee Drive
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: Cherokee Drive
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU104

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	40	1600	0.025	0	40	1600	0.025	0	40	1600	0.025	0	40	1600	0.025
Nb Thru	1234	3200	0.386 *	28	1262	3200	0.394 *	0	1262	3200	0.394 *	0	1262	3200	0.394 *
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Sb Thru	1028	3200	0.349	63	1091	3200	0.368	0	1091	3200	0.368	0	1091	3200	0.368
Sb Right	88	0	-	0	88	0	-	0	88	0	-	0	88	0	-
Eb Left	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	56	1600	0.010	0	56	1600	0.010	0	56	1600	0.010	0	56	1600	0.010
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.519				0.528				0.528				0.528
LOS		A				A				A				A	

** Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ Cherokee Drive
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: Cherokee Drive
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU104

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	8	1600	0.005 *	0	8	1600	0.005 *	0	8	1600	0.005 *	0	8	1600	0.005 *
Nb Thru	1233	3200	0.385	157	1390	3200	0.434	0	1390	3200	0.434	0	1390	3200	0.434
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Sb Thru	1370	3200	0.463 *	100	1470	3200	0.494 *	0	1470	3200	0.494 *	0	1470	3200	0.494 *
Sb Right	110	0	-	0	110	0	-	0	110	0	-	0	110	0	-
Eb Left	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074	0	118	1600	0.074
Eb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Right	104	1600	0.060	0	104	1600	0.060	0	104	1600	0.060	0	104	1600	0.060
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.641				0.673				0.673				0.673
LOS			B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

LINSCOTT, LAW & GREENSPAN, ENGINEERS
236 N. Chester Avenue, Suite 200, Pasadena CA 91106
(626) 796.2322 Fax (626) 792.0941

INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ 3rd Street-Stonewood Street
Peak hr: AM

N-S St: Lakewood Boulevard
E-W St: 3rd Street-Stonewood Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU105

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021	0	34	1600	0.021
Nb Thru	1194	4800	0.249 *	28	1222	4800	0.255 *	0	1222	4800	0.255 *	0	1222	4800	0.255 *
Nb Right	51	1600	0.032	4	55	1600	0.034	0	55	1600	0.034	0	55	1600	0.034
Sb Left	35	1600	0.022 *	0	35	1600	0.022 *	0	35	1600	0.022 *	0	35	1600	0.022 *
Sb Thru	1034	4800	0.218	63	1097	4800	0.231	0	1097	4800	0.231	0	1097	4800	0.231
Sb Right	10	0	-	0	10	0	-	0	10	0	-	0	10	0	-
Eb Left	9	0	0.006	0	9	0	0.006	0	9	0	0.006	0	9	0	0.006
Eb Thru	0	1600	0.009 *	0	0	1600	0.009 *	0	0	1600	0.009 *	0	0	1600	0.009 *
Eb Right	5	0	-	0	5	0	-	0	5	0	-	0	5	0	-
Wb Left	17	1600	0.011 *	7	24	1600	0.015 *	0	24	1600	0.015 *	0	24	1600	0.015 *
Wb Thru	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
Wb Right	12	1600	0.008	0	12	1600	0.008	0	12	1600	0.008	0	12	1600	0.008
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.390				0.400				0.400				0.400
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

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236 N. Chester Avenue, Suite 200, Pasadena CA 91106
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INTERSECTION CAPACITY UTILIZATION

Lakewood Boulevard @ 3rd Street-Stonewood Street
Peak hr: PM

N-S St: Lakewood Boulevard
E-W St: 3rd Street-Stonewood Street
Project: Tierra Luna Specific Plan Project/1-10-3866-1
File: ICU105

Date: 04/25/2011
Date of Count: 2008
Projection Year: 2020

	2020 FUTURE PRE-PROJECT			2020 FUTURE WITH PROJECT											
	1	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041
Nb Thru	1196	4800	0.249 *	157	1353	4800	0.282 *	0	1353	4800	0.282 *	0	1353	4800	0.282 *
Nb Right	204	1600	0.128	26	230	1600	0.144	0	230	1600	0.144	0	230	1600	0.144
Sb Left	137	1600	0.086 *	0	137	1600	0.086 *	0	137	1600	0.086 *	0	137	1600	0.086 *
Sb Thru	1244	4800	0.260	100	1344	4800	0.281	0	1344	4800	0.281	0	1344	4800	0.281
Sb Right	6	0	-	0	6	0	-	0	6	0	-	0	6	0	-
Eb Left	7	0	0.004	0	7	0	0.004	0	7	0	0.004	0	7	0	0.004
Eb Thru	0	1600	0.009 *	0	0	1600	0.009 *	0	0	1600	0.009 *	0	0	1600	0.009 *
Eb Right	8	0	-	0	8	0	-	0	8	0	-	0	8	0	-
Wb Left	161	1600	0.101 *	21	182	1600	0.114 *	0	182	1600	0.114 *	0	182	1600	0.114 *
Wb Thru	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003	0	4	1600	0.003
Wb Right	100	1600	0.063	0	100	1600	0.063	0	100	1600	0.063	0	100	1600	0.063
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.545				0.591				0.591				0.591
LOS			A				A				A				A

**Key conflicting movement as a part of ICU*
1 Counts provided by: Raju Associates, Inc.
2 Capacity expressed in veh/hour of green

APPENDIX C

SHARED PARKING CALCULATION WORKSHEETS

Appendix Table C-1

SHOPPING CENTER (TYPICAL DAYS)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Shopping Center (Typical Days)				
Size	1,035.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	4.5 /KSF				
Weekday Pkg Rate[3]	4.0 /KSF				
Gross Spaces	3312	4140 Spaces		828	
Adjusted Gross Spaces[4]	*0.68*	2981 Spaces		*0.90*	
	2236 Guest Spc.		745.2 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	1%	14	10%	60	74
7:00 AM	5%	70	15%	89	159
8:00 AM	15%	211	40%	238	449
9:00 AM	35%	493	75%	447	940
10:00 AM	65%	915	85%	507	1422
11:00 AM	85%	1197	95%	566	1763
12:00 PM	95%	1338	100%	596	1934
1:00 PM	100%	1408	100%	596	2004
2:00 PM	95%	1338	100%	596	1934
3:00 PM	90%	1268	100%	596	1864
4:00 PM	90%	1268	100%	596	1864
5:00 PM	95%	1338	95%	566	1904
6:00 PM	95%	1338	95%	566	1904
7:00 PM	95%	1338	95%	566	1904
8:00 PM	80%	1127	90%	537	1664
9:00 PM	50%	704	75%	447	1151
10:00 PM	30%	423	40%	238	661
11:00 PM	10%	141	15%	89	230
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

SHOPPING CENTER (TYPICAL DAYS)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Shopping Center (Typical Days)				
Size	1,035.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	4.5 /KSF				
Weekend Pkg Rate[3]	4.5 /KSF				
Gross Spaces	3726	4658 Spaces		932	
Adjusted Gross Spaces[4]	*0.68*	3354 Spaces		*0.90*	
	2515 Guest Spc.		839 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	1%	16	10%	67	83
7:00 AM	5%	79	15%	101	180
8:00 AM	10%	158	40%	268	426
9:00 AM	30%	475	75%	503	978
10:00 AM	50%	792	85%	570	1362
11:00 AM	65%	1030	95%	637	1667
12:00 PM	80%	1268	100%	671	1939
1:00 PM	90%	1426	100%	671	2097
2:00 PM	100%	1584	100%	671	2255
3:00 PM	100%	1584	100%	671	2255
4:00 PM	95%	1505	100%	671	2176
5:00 PM	90%	1426	95%	637	2063
6:00 PM	80%	1268	85%	570	1838
7:00 PM	75%	1188	80%	537	1725
8:00 PM	65%	1030	75%	503	1533
9:00 PM	50%	792	65%	436	1228
10:00 PM	35%	555	45%	302	857
11:00 PM	15%	238	15%	101	339
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

MULTIPLEX (TYPICAL DAYS)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	**Multiplex (Typical Days)**				
Size[2]	**4,800 Seats**				**Shared Parking Demand**
Peak Pkg Rate[3]	**0.27 /Seat**				
Weekday Pkg Rate[4]	**0.20 /Seat**				
Gross Spaces	**960 Spaces**				
Adjusted Gross	***0.90***	**864 Spaces**			
Spaces[5]	**821 Guest Spc.**		**43 Emp. Spc.**		
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	31	50%	11	42
1:00 PM	45%	70	60%	13	83
2:00 PM	55%	86	60%	13	99
3:00 PM	55%	86	75%	16	102
4:00 PM	55%	86	75%	16	102
5:00 PM	60%	94	100%	22	116
6:00 PM	60%	94	100%	22	116
7:00 PM	80%	125	100%	22	147
8:00 PM	100%	156	100%	22	178
9:00 PM	100%	156	100%	22	178
10:00 PM	80%	125	100%	22	147
11:00 PM	65%	101	70%	15	116
12:00 AM	40%	62	50%	11	73

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

MULTIPLEX (TYPICAL DAYS)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Multiplex (Typical Days)				
Size[2]	4,800 Seats				
Peak Pkg Rate[3]	0.27 /Seat				
Weekend Pkg Rate[4]	0.27 /Seat				
Gross Spaces	1296 Spaces				
Adjusted Gross	*0.90* 1166 Spaces				
Spaces[5]	1123 Guest Spc.		43 Emp. Spc.		Shared
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	Parking Demand
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	130	50%	17	147
1:00 PM	45%	293	60%	21	314
2:00 PM	55%	358	60%	21	379
3:00 PM	55%	358	75%	26	384
4:00 PM	55%	358	75%	26	384
5:00 PM	60%	391	100%	34	425
6:00 PM	60%	391	100%	34	425
7:00 PM	80%	521	100%	34	555
8:00 PM	100%	651	100%	34	685
9:00 PM	100%	651	100%	34	685
10:00 PM	100%	651	100%	34	685
11:00 PM	80%	521	70%	24	545
12:00 AM	50%	326	50%	17	343

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

BUSINESS HOTEL

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekday Pkg Rate[3]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Gross Spaces	150	188 Spaces		38	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	152 Spaces	*0.81*		*1.00*		*1.00*		*1.00*		
	122 Guest Spc.		31 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	Parking Demand
6:00 AM	95%	104	5%	2	0%	0	0%	0	0%	0	106
7:00 AM	90%	98	30%	9	10%	0	0%	0	0%	0	107
8:00 AM	80%	87	90%	28	30%	0	30%	0	50%	0	115
9:00 AM	70%	77	90%	28	10%	0	60%	0	100%	0	105
10:00 AM	60%	66	100%	31	10%	0	60%	0	100%	0	97
11:00 AM	60%	66	100%	31	5%	0	60%	0	100%	0	97
12:00 PM	55%	60	100%	31	100%	0	65%	0	100%	0	91
1:00 PM	55%	60	100%	31	100%	0	65%	0	100%	0	91
2:00 PM	60%	66	100%	31	33%	0	65%	0	100%	0	97
3:00 PM	60%	66	100%	31	10%	0	65%	0	100%	0	97
4:00 PM	65%	71	90%	28	10%	0	65%	0	100%	0	99
5:00 PM	70%	77	70%	22	30%	0	100%	0	100%	0	99
6:00 PM	75%	82	40%	12	55%	0	100%	0	50%	0	94
7:00 PM	75%	82	20%	6	60%	0	100%	0	30%	0	88
8:00 PM	80%	87	20%	6	70%	0	100%	0	30%	0	93
9:00 PM	85%	93	20%	6	67%	0	100%	0	10%	0	99
10:00 PM	95%	104	20%	6	60%	0	50%	0	0%	0	110
11:00 PM	100%	109	10%	3	40%	0	0%	0	0%	0	112
12:00 AM	100%	109	5%	2	30%	0	0%	0	0%	0	111

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

BUSINESS HOTEL

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekend Pkg Rate[3]	1.08 /Room				10.0 /KSF		30.0 /KSF		10.0 /KSF		
Gross Spaces	135	162 Spaces		27	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	131 Spaces		*0.81*	*1.00*		*1.00*		*1.00*		
	109 Guest Spc.		22 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared Parking Demand
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	95%	93	5%	1	0%	0	0%	0	0%	0	94
7:00 AM	90%	89	30%	7	10%	0	0%	0	0%	0	96
8:00 AM	80%	79	90%	20	30%	0	30%	0	50%	0	99
9:00 AM	70%	69	90%	20	10%	0	60%	0	100%	0	89
10:00 AM	60%	59	100%	22	10%	0	60%	0	100%	0	81
11:00 AM	60%	59	100%	22	5%	0	60%	0	100%	0	81
12:00 PM	55%	54	100%	22	100%	0	65%	0	100%	0	76
1:00 PM	55%	54	100%	22	100%	0	65%	0	100%	0	76
2:00 PM	60%	59	100%	22	33%	0	65%	0	100%	0	81
3:00 PM	60%	59	100%	22	10%	0	65%	0	100%	0	81
4:00 PM	65%	64	90%	20	10%	0	65%	0	100%	0	84
5:00 PM	70%	69	75%	16	30%	0	100%	0	100%	0	85
6:00 PM	75%	74	60%	13	55%	0	100%	0	50%	0	87
7:00 PM	75%	74	55%	12	60%	0	100%	0	30%	0	86
8:00 PM	80%	79	55%	12	70%	0	100%	0	30%	0	91
9:00 PM	85%	84	55%	12	67%	0	100%	0	10%	0	96
10:00 PM	95%	93	45%	10	60%	0	50%	0	0%	0	103
11:00 PM	100%	98	45%	10	40%	0	0%	0	0%	0	108
12:00 AM	100%	98	30%	7	30%	0	0%	0	0%	0	105

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-1

OFFICE

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekday Pkg Rate[3]	3.1 /KSF				
Gross Spaces	927 Spaces				
Adjusted Gross Spaces	*1.00* 927 Spaces				
	66 Visitor Spc.		861 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	3%	26	26
7:00 AM	1%	1	30%	258	259
8:00 AM	20%	13	75%	646	659
9:00 AM	60%	40	95%	818	858
10:00 AM	100%	66	100%	861	927
11:00 AM	45%	30	100%	861	891
12:00 PM	15%	10	90%	775	785
1:00 PM	45%	30	90%	775	805
2:00 PM	100%	66	100%	861	927
3:00 PM	45%	30	100%	861	891
4:00 PM	15%	10	90%	775	785
5:00 PM	10%	7	50%	431	438
6:00 PM	5%	3	25%	215	218
7:00 PM	2%	1	10%	86	87
8:00 PM	1%	1	7%	60	61
9:00 PM	0%	0	3%	26	26
10:00 PM	0%	0	1%	9	9
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table C-1

OFFICE

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Apr

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekend Pkg Rate[3]	0.31 /KSF				
Gross Spaces	93 Spaces				
Adjusted Gross Spaces	*1.00* 93 Spaces				
	6 Visitor Spc.		87 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	20%	1	20%	17	18
8:00 AM	60%	4	60%	52	56
9:00 AM	80%	5	80%	70	75
10:00 AM	90%	5	90%	78	83
11:00 AM	100%	6	100%	87	93
12:00 PM	90%	5	90%	78	83
1:00 PM	80%	5	80%	70	75
2:00 PM	60%	4	60%	52	56
3:00 PM	40%	2	40%	35	37
4:00 PM	20%	1	20%	17	18
5:00 PM	10%	1	10%	9	10
6:00 PM	5%	0	5%	4	4
7:00 PM	0%	0	0%	0	0
8:00 PM	0%	0	0%	0	0
9:00 PM	0%	0	0%	0	0
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table C-2

SHOPPING CENTER (TYPICAL DAYS)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	**Shopping Center (Typical Days)**				
Size	**1,035.0 KSF**				
Peak Pkg Rate[2]	**4.5 /KSF**				
Weekday Pkg Rate[3]	**4.0 /KSF**				
Gross Spaces	**3312**	**4140 Spaces**		**828**	
Adjusted Gross	***0.68***	**2981 Spaces**		***0.90***	
Spaces[4]	**2236 Guest Spc.**		**745.2 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	1%	14	10%	60	74
7:00 AM	5%	72	15%	89	161
8:00 AM	15%	215	40%	238	453
9:00 AM	35%	501	75%	447	948
10:00 AM	65%	930	85%	507	1437
11:00 AM	85%	1216	95%	566	1782
12:00 PM	95%	1359	100%	596	1955
1:00 PM	100%	1431	100%	596	2027
2:00 PM	95%	1359	100%	596	1955
3:00 PM	90%	1288	100%	596	1884
4:00 PM	90%	1288	100%	596	1884
5:00 PM	95%	1359	95%	566	1925
6:00 PM	95%	1359	95%	566	1925
7:00 PM	95%	1359	95%	566	1925
8:00 PM	80%	1145	90%	537	1682
9:00 PM	50%	715	75%	447	1162
10:00 PM	30%	429	40%	238	667
11:00 PM	10%	143	15%	89	232
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

SHOPPING CENTER (TYPICAL DAYS)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	**Shopping Center (Typical Days)**				
Size	**1,035.0 KSF**				
Peak Pkg Rate[2]	**4.5 /KSF**				
Weekend Pkg Rate[3]	**4.5 /KSF**				
Gross Spaces	**3726**	**4658 Spaces**		**932**	
Adjusted Gross	***0.68***	**3354 Spaces**		***0.90***	
Spaces[4]	**2515 Guest Spc.**		**839 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	1%	16	10%	67	83
7:00 AM	5%	80	15%	101	181
8:00 AM	10%	161	40%	268	429
9:00 AM	30%	483	75%	503	986
10:00 AM	50%	805	85%	570	1375
11:00 AM	65%	1046	95%	637	1683
12:00 PM	80%	1288	100%	671	1959
1:00 PM	90%	1449	100%	671	2120
2:00 PM	100%	1610	100%	671	2281
3:00 PM	100%	1610	100%	671	2281
4:00 PM	95%	1529	100%	671	2200
5:00 PM	90%	1449	95%	637	2086
6:00 PM	80%	1288	85%	570	1858
7:00 PM	75%	1207	80%	537	1744
8:00 PM	65%	1046	75%	503	1549
9:00 PM	50%	805	65%	436	1241
10:00 PM	35%	563	45%	302	865
11:00 PM	15%	241	15%	101	342
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

MULTIPLEX (TYPICAL DAYS)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	**Multiplex (Typical Days)**				
Size[2]	**4,800 Seats**				
Peak Pkg Rate[3]	**0.27 /Seat**				
Weekday Pkg Rate[4]	**0.20 /Seat**				
Gross Spaces	**960 Spaces**				
Adjusted Gross	***0.90***	**864 Spaces**			
Spaces[5]	**821 Guest Spc.**		**43 Emp. Spc.**		**Shared**
Time of Day	**% Of Peak**	**# Of Spaces**	**% Of Peak**	**# Of Spaces**	**Parking Demand**
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	90	50%	16	106
1:00 PM	45%	203	60%	19	222
2:00 PM	55%	248	60%	19	267
3:00 PM	55%	248	75%	24	272
4:00 PM	55%	248	75%	24	272
5:00 PM	60%	271	100%	32	303
6:00 PM	60%	271	100%	32	303
7:00 PM	80%	361	100%	32	393
8:00 PM	100%	452	100%	32	484
9:00 PM	100%	452	100%	32	484
10:00 PM	80%	361	100%	32	393
11:00 PM	65%	294	70%	23	317
12:00 AM	40%	181	50%	16	197

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

MULTIPLEX (TYPICAL DAYS)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	Multiplex (Typical Days)				
Size[2]	4,800 Seats				Shared Parking Demand
Peak Pkg Rate[3]	0.27 /Seat				
Weekend Pkg Rate[4]	0.27 /Seat				
Gross Spaces	1296 Spaces				
Adjusted Gross	*0.90* 1166 Spaces				
Spaces[5]	1123 Guest Spc.		43 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	207	50%	22	229
1:00 PM	45%	465	60%	26	491
2:00 PM	55%	568	60%	26	594
3:00 PM	55%	568	75%	32	600
4:00 PM	55%	568	75%	32	600
5:00 PM	60%	620	100%	43	663
6:00 PM	60%	620	100%	43	663
7:00 PM	80%	827	100%	43	870
8:00 PM	100%	1033	100%	43	1076
9:00 PM	100%	1033	100%	43	1076
10:00 PM	100%	1033	100%	43	1076
11:00 PM	80%	827	70%	30	857
12:00 AM	50%	517	50%	22	539

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

BUSINESS HOTEL

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekday Pkg Rate[3]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Gross Spaces	150	188 Spaces		38	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	152 Spaces	*0.81*		*1.00*		*1.00*		*1.00*		
	122 Guest Spc.		31 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared Parking Demand
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	95%	113	5%	2	0%	0	0%	0	0%	0	115
7:00 AM	90%	107	30%	9	10%	0	0%	0	0%	0	116
8:00 AM	80%	95	90%	28	30%	0	30%	0	50%	0	123
9:00 AM	70%	83	90%	28	10%	0	60%	0	100%	0	111
10:00 AM	60%	71	100%	31	10%	0	60%	0	100%	0	102
11:00 AM	60%	71	100%	31	5%	0	60%	0	100%	0	102
12:00 PM	55%	65	100%	31	100%	0	65%	0	100%	0	96
1:00 PM	55%	65	100%	31	100%	0	65%	0	100%	0	96
2:00 PM	60%	71	100%	31	33%	0	65%	0	100%	0	102
3:00 PM	60%	71	100%	31	10%	0	65%	0	100%	0	102
4:00 PM	65%	77	90%	28	10%	0	65%	0	100%	0	105
5:00 PM	70%	83	70%	22	30%	0	100%	0	100%	0	105
6:00 PM	75%	89	40%	12	55%	0	100%	0	50%	0	101
7:00 PM	75%	89	20%	6	60%	0	100%	0	30%	0	95
8:00 PM	80%	95	20%	6	70%	0	100%	0	30%	0	101
9:00 PM	85%	101	20%	6	67%	0	100%	0	10%	0	107
10:00 PM	95%	113	20%	6	60%	0	50%	0	0%	0	119
11:00 PM	100%	119	10%	3	40%	0	0%	0	0%	0	122
12:00 AM	100%	119	5%	2	30%	0	0%	0	0%	0	121

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

BUSINESS HOTEL

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekend Pkg Rate[3]	1.08 /Room				10.0 /KSF		30.0 /KSF		10.0 /KSF		
Gross Spaces	135	162 Spaces		27	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	131 Spaces		*0.81*	*1.00*		*1.00*		*1.00*		
	109 Guest Spc.		22 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared Parking Demand
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	95%	102	5%	1	0%	0	0%	0	0%	0	103
7:00 AM	90%	96	30%	7	10%	0	0%	0	0%	0	103
8:00 AM	80%	86	90%	20	30%	0	30%	0	50%	0	106
9:00 AM	70%	75	90%	20	10%	0	60%	0	100%	0	95
10:00 AM	60%	64	100%	22	10%	0	60%	0	100%	0	86
11:00 AM	60%	64	100%	22	5%	0	60%	0	100%	0	86
12:00 PM	55%	59	100%	22	100%	0	65%	0	100%	0	81
1:00 PM	55%	59	100%	22	100%	0	65%	0	100%	0	81
2:00 PM	60%	64	100%	22	33%	0	65%	0	100%	0	86
3:00 PM	60%	64	100%	22	10%	0	65%	0	100%	0	86
4:00 PM	65%	70	90%	20	10%	0	65%	0	100%	0	90
5:00 PM	70%	75	75%	16	30%	0	100%	0	100%	0	91
6:00 PM	75%	80	60%	13	55%	0	100%	0	50%	0	93
7:00 PM	75%	80	55%	12	60%	0	100%	0	30%	0	92
8:00 PM	80%	86	55%	12	70%	0	100%	0	30%	0	98
9:00 PM	85%	91	55%	12	67%	0	100%	0	10%	0	103
10:00 PM	95%	102	45%	10	60%	0	50%	0	0%	0	112
11:00 PM	100%	107	45%	10	40%	0	0%	0	0%	0	117
12:00 AM	100%	107	30%	7	30%	0	0%	0	0%	0	114

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-2

OFFICE

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekday Pkg Rate[3]	3.1 /KSF				
Gross Spaces	927 Spaces				
Adjusted Gross Spaces	*1.00* 927 Spaces				
	66 Visitor Spc.		861 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	3%	25	25
7:00 AM	1%	1	30%	245	246
8:00 AM	20%	13	75%	613	626
9:00 AM	60%	38	95%	777	815
10:00 AM	100%	63	100%	818	881
11:00 AM	45%	28	100%	818	846
12:00 PM	15%	9	90%	736	745
1:00 PM	45%	28	90%	736	764
2:00 PM	100%	63	100%	818	881
3:00 PM	45%	28	100%	818	846
4:00 PM	15%	9	90%	736	745
5:00 PM	10%	6	50%	409	415
6:00 PM	5%	3	25%	204	207
7:00 PM	2%	1	10%	82	83
8:00 PM	1%	1	7%	57	58
9:00 PM	0%	0	3%	25	25
10:00 PM	0%	0	1%	8	8
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table C-2

OFFICE

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Jul

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekend Pkg Rate[3]	0.31 /KSF				
Gross Spaces	93 Spaces				
Adjusted Gross Spaces	*1.00* 93 Spaces				
	6 Visitor Spc.		87 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	20%	1	20%	17	18
8:00 AM	60%	3	60%	50	53
9:00 AM	80%	5	80%	66	71
10:00 AM	90%	5	90%	74	79
11:00 AM	100%	6	100%	83	89
12:00 PM	90%	5	90%	74	79
1:00 PM	80%	5	80%	66	71
2:00 PM	60%	3	60%	50	53
3:00 PM	40%	2	40%	33	35
4:00 PM	20%	1	20%	17	18
5:00 PM	10%	1	10%	8	9
6:00 PM	5%	0	5%	4	4
7:00 PM	0%	0	0%	0	0
8:00 PM	0%	0	0%	0	0
9:00 PM	0%	0	0%	0	0
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table C-3

SHOPPING CENTER (PEAK DECEMBER)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Shopping Center (Peak December)				
Size	1,035.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	4.5 /KSF				
Weekday Pkg Rate[3]	4.0 /KSF				
Gross Spaces	3312	4140 Spaces		828	
Adjusted Gross Spaces[4]	*0.68*	2981 Spaces		*0.90*	
	2236 Guest Spc.		745.2 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	1%	22	10%	75	97
7:00 AM	5%	112	15%	112	224
8:00 AM	15%	335	40%	298	633
9:00 AM	30%	671	75%	559	1230
10:00 AM	55%	1230	85%	633	1863
11:00 AM	75%	1677	95%	708	2385
12:00 PM	90%	2012	100%	745	2757
1:00 PM	100%	2236	100%	745	2981
2:00 PM	100%	2236	100%	745	2981
3:00 PM	100%	2236	100%	745	2981
4:00 PM	95%	2124	100%	745	2869
5:00 PM	85%	1900	95%	708	2608
6:00 PM	80%	1788	95%	708	2496
7:00 PM	75%	1677	95%	708	2385
8:00 PM	65%	1453	90%	671	2124
9:00 PM	50%	1118	75%	559	1677
10:00 PM	30%	671	40%	298	969
11:00 PM	10%	224	15%	112	336
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

SHOPPING CENTER (PEAK DECEMBER)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Shopping Center (Peak December)				
Size	1,035.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	4.5 /KSF				
Weekend Pkg Rate[3]	4.5 /KSF				
Gross Spaces	3726	4658 Spaces		932	
Adjusted Gross Spaces[4]	*0.68*	3354 Spaces		*0.90*	
	2515 Guest Spc.		839 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	1%	22	10%	84	106
7:00 AM	5%	126	15%	126	252
8:00 AM	10%	252	40%	336	588
9:00 AM	35%	880	75%	629	1509
10:00 AM	60%	1509	85%	713	2222
11:00 AM	70%	1761	95%	797	2558
12:00 PM	85%	2138	100%	839	2977
1:00 PM	95%	2389	100%	839	3228
2:00 PM	100%	2515	100%	839	3354
3:00 PM	100%	2515	100%	839	3354
4:00 PM	95%	2389	100%	839	3228
5:00 PM	90%	2264	95%	797	3061
6:00 PM	80%	2012	85%	713	2725
7:00 PM	75%	1886	80%	671	2557
8:00 PM	65%	1635	75%	629	2264
9:00 PM	50%	1258	65%	545	1803
10:00 PM	35%	880	45%	377	1257
11:00 PM	15%	377	15%	126	503
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

MULTIPLEX (TYPICAL DAYS)

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Multiplex (Typical Days)				
Size[2]	4,800 Seats				Shared Parking Demand
Peak Pkg Rate[3]	0.27 /Seat				
Weekday Pkg Rate[4]	0.20 /Seat				
Gross Spaces	960 Spaces				
Adjusted Gross Spaces[5]	*0.90* 864 Spaces				
	821 Guest Spc.		43 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	38	50%	11	49
1:00 PM	45%	85	60%	13	98
2:00 PM	55%	104	60%	13	117
3:00 PM	55%	104	75%	16	120
4:00 PM	55%	104	75%	16	120
5:00 PM	60%	113	100%	22	135
6:00 PM	60%	113	100%	22	135
7:00 PM	80%	151	100%	22	173
8:00 PM	100%	189	100%	22	211
9:00 PM	100%	189	100%	22	211
10:00 PM	80%	151	100%	22	173
11:00 PM	65%	123	70%	15	138
12:00 AM	40%	76	50%	11	87

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

MULTIPLEX (TYPICAL DAYS)

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Multiplex (Typical Days)				
Size[2]	4,800 Seats				Shared Parking Demand
Peak Pkg Rate[3]	0.27 /Seat				
Weekend Pkg Rate[4]	0.27 /Seat				
Gross Spaces	1296 Spaces				
Adjusted Gross Spaces[5]	*0.90* 1166 Spaces				
	1123 Guest Spc.		43 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	0%	0	0%	0	0
8:00 AM	0%	0	0%	0	0
9:00 AM	0%	0	0%	0	0
10:00 AM	0%	0	0%	0	0
11:00 AM	0%	0	0%	0	0
12:00 PM	20%	150	50%	17	167
1:00 PM	45%	339	60%	21	360
2:00 PM	55%	414	60%	21	435
3:00 PM	55%	414	75%	26	440
4:00 PM	55%	414	75%	26	440
5:00 PM	60%	451	100%	34	485
6:00 PM	60%	451	100%	34	485
7:00 PM	80%	602	100%	34	636
8:00 PM	100%	752	100%	34	786
9:00 PM	100%	752	100%	34	786
10:00 PM	100%	752	100%	34	786
11:00 PM	80%	602	70%	24	626
12:00 AM	50%	376	50%	17	393

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Assumed 300 seats are accommodated for each of the 16 screens.

[3] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[4] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[5] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

BUSINESS HOTEL

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekday Pkg Rate[3]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Gross Spaces	150	188 Spaces		38	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	152 Spaces	*0.81*		*1.00*		*1.00*		*1.00*		
	122 Guest Spc.		31 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	Parking Demand
6:00 AM	95%	77	5%	2	0%	0	0%	0	0%	0	79
7:00 AM	90%	73	30%	9	10%	0	0%	0	0%	0	82
8:00 AM	80%	65	90%	28	30%	0	30%	0	50%	0	93
9:00 AM	70%	57	90%	28	10%	0	60%	0	100%	0	85
10:00 AM	60%	49	100%	31	10%	0	60%	0	100%	0	80
11:00 AM	60%	49	100%	31	5%	0	60%	0	100%	0	80
12:00 PM	55%	45	100%	31	100%	0	65%	0	100%	0	76
1:00 PM	55%	45	100%	31	100%	0	65%	0	100%	0	76
2:00 PM	60%	49	100%	31	33%	0	65%	0	100%	0	80
3:00 PM	60%	49	100%	31	10%	0	65%	0	100%	0	80
4:00 PM	65%	53	90%	28	10%	0	65%	0	100%	0	81
5:00 PM	70%	57	70%	22	30%	0	100%	0	100%	0	79
6:00 PM	75%	61	40%	12	55%	0	100%	0	50%	0	73
7:00 PM	75%	61	20%	6	60%	0	100%	0	30%	0	67
8:00 PM	80%	65	20%	6	70%	0	100%	0	30%	0	71
9:00 PM	85%	69	20%	6	67%	0	100%	0	10%	0	75
10:00 PM	95%	77	20%	6	60%	0	50%	0	0%	0	83
11:00 PM	100%	81	10%	3	40%	0	0%	0	0%	0	84
12:00 AM	100%	81	5%	2	30%	0	0%	0	0%	0	83

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

BUSINESS HOTEL

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Business Hotel				Restaurant/Lounge		Conference Center/Banquet		Convention Center		
Size	150 Rooms				0.0 KSF		0.0 KSF		0.0 KSF		
Peak Pkg Rate[2]	1.25 /Room				10.0 /KSF		30.0 /KSF		20.0 /KSF		
Weekend Pkg Rate[3]	1.08 /Room				10.0 /KSF		30.0 /KSF		10.0 /KSF		
Gross Spaces	135	162 Spaces		27	0 Spaces		0 Spaces		0 Spaces		
Adjusted Gross Spaces[4]	*0.81*	131 Spaces	*0.81*		*1.00*		*1.00*		*1.00*		
	109 Guest Spc.		22 Emp. Spc.		0 Spc.		0 Spc.		0 Spc.		Shared Parking Demand
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	95%	70	5%	1	0%	0	0%	0	0%	0	71
7:00 AM	90%	66	30%	7	10%	0	0%	0	0%	0	73
8:00 AM	80%	59	90%	20	30%	0	30%	0	50%	0	79
9:00 AM	70%	51	90%	20	10%	0	60%	0	100%	0	71
10:00 AM	60%	44	100%	22	10%	0	60%	0	100%	0	66
11:00 AM	60%	44	100%	22	5%	0	60%	0	100%	0	66
12:00 PM	55%	40	100%	22	100%	0	65%	0	100%	0	62
1:00 PM	55%	40	100%	22	100%	0	65%	0	100%	0	62
2:00 PM	60%	44	100%	22	33%	0	65%	0	100%	0	66
3:00 PM	60%	44	100%	22	10%	0	65%	0	100%	0	66
4:00 PM	65%	48	90%	20	10%	0	65%	0	100%	0	68
5:00 PM	70%	51	75%	16	30%	0	100%	0	100%	0	67
6:00 PM	75%	55	60%	13	55%	0	100%	0	50%	0	68
7:00 PM	75%	55	55%	12	60%	0	100%	0	30%	0	67
8:00 PM	80%	59	55%	12	70%	0	100%	0	30%	0	71
9:00 PM	85%	62	55%	12	67%	0	100%	0	10%	0	74
10:00 PM	95%	70	45%	10	60%	0	50%	0	0%	0	80
11:00 PM	100%	73	45%	10	40%	0	0%	0	0%	0	83
12:00 AM	100%	73	30%	7	30%	0	0%	0	0%	0	80

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

[4] Gross spaces adjusted to reflect parking demand reduction due to captive market, internal capture, transit, and/or walk-in reduction.

Appendix Table C-3

OFFICE

WEEKDAY SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekday Pkg Rate[3]	3.1 /KSF				
Gross Spaces	927 Spaces				
Adjusted Gross Spaces	*1.00* 927 Spaces				
	66 Visitor Spc.		861 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	3%	26	26
7:00 AM	1%	1	30%	258	259
8:00 AM	20%	13	75%	646	659
9:00 AM	60%	40	95%	818	858
10:00 AM	100%	66	100%	861	927
11:00 AM	45%	30	100%	861	891
12:00 PM	15%	10	90%	775	785
1:00 PM	45%	30	90%	775	805
2:00 PM	100%	66	100%	861	927
3:00 PM	45%	30	100%	861	891
4:00 PM	15%	10	90%	775	785
5:00 PM	10%	7	50%	431	438
6:00 PM	5%	3	25%	215	218
7:00 PM	2%	1	10%	86	87
8:00 PM	1%	1	7%	60	61
9:00 PM	0%	0	3%	26	26
10:00 PM	0%	0	1%	9	9
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekday parking rates based on the weekday parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix Table C-3

OFFICE

WEEKEND SHARED PARKING DEMAND ANALYSIS [1]

Manarino Alternative

Month: Dec

Land Use	Office				
Size	300.0 KSF				Shared Parking Demand
Peak Pkg Rate[2]	3.1 /KSF				
Weekend Pkg Rate[3]	0.31 /KSF				
Gross Spaces	93 Spaces				
Adjusted Gross Spaces	*1.00* 93 Spaces				
	6 Visitor Spc.		87 Emp. Spc.		
Time of Day	% Of Peak	# Of Spaces	% Of Peak	# Of Spaces	
6:00 AM	0%	0	0%	0	0
7:00 AM	20%	1	20%	17	18
8:00 AM	60%	4	60%	52	56
9:00 AM	80%	5	80%	70	75
10:00 AM	90%	5	90%	78	83
11:00 AM	100%	6	100%	87	93
12:00 PM	90%	5	90%	78	83
1:00 PM	80%	5	80%	70	75
2:00 PM	60%	4	60%	52	56
3:00 PM	40%	2	40%	35	37
4:00 PM	20%	1	20%	17	18
5:00 PM	10%	1	10%	9	10
6:00 PM	5%	0	5%	4	4
7:00 PM	0%	0	0%	0	0
8:00 PM	0%	0	0%	0	0
9:00 PM	0%	0	0%	0	0
10:00 PM	0%	0	0%	0	0
11:00 PM	0%	0	0%	0	0
12:00 AM	0%	0	0%	0	0

Notes:

[1] Source: ULI - Urban Land Institute "Shared Parking," Second Edition, 2005.

[2] Peak parking rates for all land uses based on the recommended base parking ratios as contained in Table 2-2 of the "Shared Parking" manual.

[3] Weekend parking rates based on the weekend parking demand ratios as summarized in Table 2-2 of the "Shared Parking" manual.

Appendix D

Boeing Company's Radiation Survey of the Downey Facility
June 20, 2001

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
2101 NASA Road 1
Houston, Texas 77058-3696

RECEIVED
JUN 25 2001
CITY MANAGER'S OFC.

Darrell

Reply to Attn of: JA131-2001-074

JUN 20 2001

Mr. Gerald M. Caton, City Manager
City of Downey
11111 Brookshire Avenue
Downey, CA 90241

SUBJECT: Transmittal of the Boeing Company's report, "Radiation Survey of the Downey Facility"

At your request, NASA Johnson Space Center has obtained a copy of the Boeing Company's (Boeing) final report, "Radiation Survey of the Downey Facility" for the City of Downey.

The report contains information and analytical data from a Boeing survey conducted on Parcel 1 of the NASA Industrial Plant, Downey, California, during the fall of calendar year 2000.

Should you have questions regarding this report, please contact Mr. David Hickens of my staff at 281-483-3120.

Joel Walker

Joel Walker, Acting Director
Center Operations Directorate

Enclosure

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BOEING

Engineering Product Document

GO Number	S/A Number	Page 1 of	Total Pages	Rev. Ltr/Chg. No. See Summary of Chg.	Number
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Radiation Safety

Document Title
Radiation Survey of the Downey Facility

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Engineering Product Document

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		Date
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IR&D Program? Yes ☐ No ☒
If Yes, Enter Authorization No.

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*	Rad Safety Files (5)	T057
*	Engineering Data Mgmt	AB18
*	Facility Release Files	T057
*		
*		
*		

Abstract

This document describes a radiation survey of a portion of the Downey Facility. This survey is designed to verify that the Downey Facility has not been impacted by radiological operations associated with the Water Boiler Neutron Source (WBNS) reactor. Measurements taken demonstrated that clean-up standards promulgated by the Department of Energy, Nuclear Regulatory Commission, and Department of Health Services were met, and that there was no indication of any residual contamination in the facility. Accordingly, the area is suitable for release for unrestricted use.

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EXECUTIVE SUMMARY

A radiation survey was performed of the northeastern portion of Building 001of the Downey facility that once housed a 4-watt nuclear reactor. The areas surveyed comprised all the rooms, offices, and laboratories used by the Atomic Energy Research Department of North American Aviation during 1948 to 1955. Industry accepted protocols and approved cleanup criteria were used in the design and implementation of the survey.

The survey included 464 total alpha and beta surface contamination instrument measurements, and 460 removable alpha and beta surface contamination wipe samples. All measurements and wipe samples demonstrated compliance with appropriate regulatory cleanup standards (DCGLs). Appendices provide the detailed field measurements and analyses for each location where surface contamination measurements were taken. Not only do none of the net values exceed DCGLs, but the majority also do not even exceed the minimum detectable activity (MDA) of the instrument or counter. Not only do none of the net (background subtracted) values exceed DCGLs, but none of the gross values exceed the DCGLs also.

The survey also included 464 surface gamma exposure rate measurements, all of which are shown to be within the measured background range.

The survey also included gamma spectrometry of soil, paint, concrete and water samples that were taken. No evidence of man-made contamination was found in any sample.

Detailed analyses and/or computer printouts from laboratory counters (gamma spectroscopy and alpha/beta Tennelec) are given in the report for every sample and wipe taken.

No evidence of radioactive contamination was found in the facility and regulatory clean-up standards promulgated by the DOE, NRC, and California DHS were met. The area is therefore suitable for release for "unrestricted use" with no radiological restrictions.

1.0 INTRODUCTION

During the last 25 years, Boeing has successfully decommissioned, decontaminated, and surveyed 25 facilities at the Santa Susana Field Laboratory. These facilities have undergone independent verification surveys by Oak Ridge Associated Universities (ORAU), Oak Ridge Institute of Science and Education (ORISE), the Nuclear Regulatory Commission (NRC) and/or the State of California Department of Health Services (DHS) Radiological Health Branch (RHB). Of these, 20 have been released for unrestricted use by the appropriate agencies and five are pending DOE and DHS release, all Boeing responsibilities having been completed. The majority of these facility releases (13) have been accomplished within the last six years.

In September 2000, the Safety, Health and Environmental Affairs (SHEA) Department of Boeing Huntington Beach contacted Rocketdyne, requesting information on the nuclear research activities conducted at the Downey facility in the 1950s. This work had been conducted for the Atomic Energy Commission (AEC) by the Atomic Energy Research Department (AERD) of North American Aviation (NAA) from 1948 to 1955. In December 1955 all work was moved to Canoga Park and a new Division of NAA was formed, named Atomics International (AI). AI later merged in 1984 with Rocketdyne.

As available records of these early activities were sketchy, it was agreed that a radiological survey be conducted of those portions of the Downey facility occupied by AERD. The Downey facility is now owned by the National Aeronautics and Space Administration (NASA).

Radiological surveys are typically performed by the Rocketdyne Radiation Safety Department under established protocols to demonstrate that residual radioactivity does not exceed the Department of Energy (DOE), Nuclear Regulatory Commission (NRC), or State of California (DHS) regulatory cleanup standards (see Reference 1, 2, and 3).

The Downey facility radiation survey was designed to demonstrate compliance with the above mentioned regulatory release criteria. The scope of the radiation survey included investigation of areas for potential, residual radioactivity from radiological operations conducted at the facility from 1948 to 1955.

Section 2 provides a historical background of the facility. Section 3 describes the survey design and survey protocols. Section 4 summarizes and interprets the results and compares the results to regulatory cleanup standards. Appendix A gives detailed results of every field instrument measurement taken. Appendix B gives detailed results of every wipe test taken. Appendix C gives maps of each survey unit and the locations of every instrument measurement, wipe and sample taken. Finally, Appendix D provides gamma spectroscopic analysis of all soil and building debris samples taken.

2.0 BACKGROUND

2.1 Location and Structure

The Downey facility is located on Lakewood Blvd. in the City of Downey, California, and is shown in Figure 1 below.

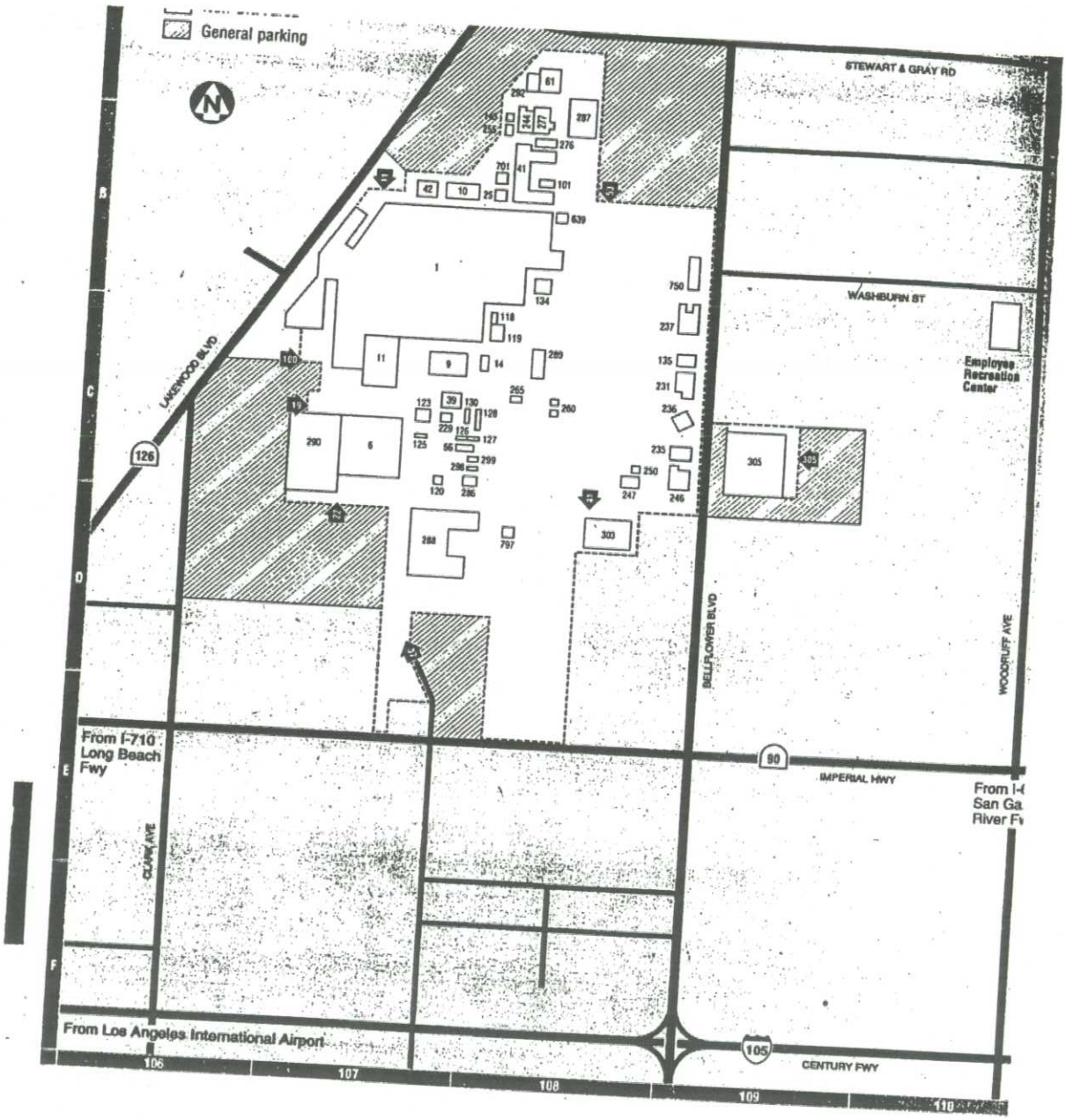


FIGURE 1: LOCATION OF THE DOWNEY FACILITY

The AERD occupied the northwest portion of Building 001 including the "finger" building and Building 108. This portion of Building 001 was subdivided into individual survey areas as shown in Figure 2, based on historical usage and potential for residual contamination (see section 3.1 for further details).

Building 001 and the loading dock are made of corrugated, galvanized steel panels. The buildings are positioned on a concrete foundation. The vault (Building 108) is made of concrete walls with a cinder block exterior, and the basement has concrete walls, floor, and ceiling.

2.2 Operating History (1948 - 1955)

The following account of the early years of atomic energy development at Downey is extracted from " Thirty-five Years in Power for America " (Reference 4).

"Some 35 years ago in a secluded area in the Downey plant of North American Aviation, Inc. (NAA), a group of engineers and scientists was exploring a new technology that was a result of the discovery of nuclear fission in 1939. This epochal event opened up the prospect of an entirely new source of energy that had first been manifested in the bombs used near the end of World War II. In the early 1950s, the Atomic Energy Research Department of NAA was engaged in research and development for controlled release of energy from the atom for the production of electric power. This research and development was then sponsored by the Atomic Energy Commission (AEC), which was formed in 1946 to continue the development of nuclear power for both military and civilian applications. These were initiated in the Manhattan Project by the urgency of the war effort. Among new interests was a desire to investigate the feasibility of nuclear technology in propulsion scenarios.

"One of the projects that resulted was the design, construction and operation of the first nuclear reactor in California. A source of neutrons was needed for one of the reactor physics projects, so a small aqueous, homogeneous reactor called the Water Boiler Neutron Source (WBNS) was built and put into operation on April 21, 1952. The reactor was operated at power levels up to 4 watts and served as an excellent neutron source for a number of reactor physics programs. It didn't really boil water, as one might guess from the 4-watt power level, but a small amount of hydrogen and oxygen from decomposition of the water was released from the solution into a tank during operation - hence the designation "water boiler."

"The WBNS was operated at Downey until December 1955. In 1956 it was dismantled and moved to a facility at the Santa Susana Field Laboratory (SSFL). A number of design changes were made to increase the power level to 3 kilowatts to provide a significant increase in the available neutrons and offer greater flexibility in the use of the reactor.

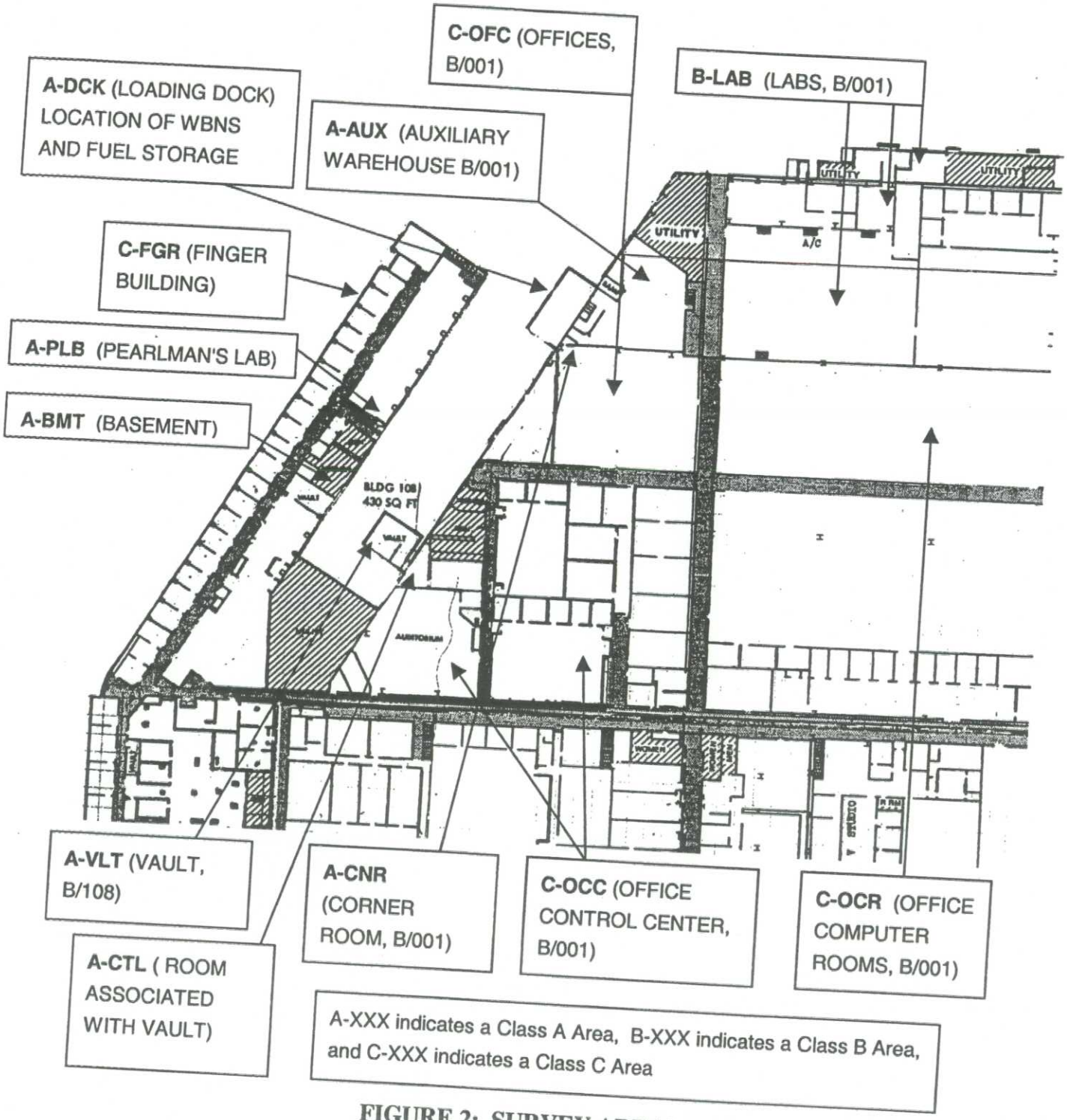


FIGURE 2: SURVEY AREAS

Operation of the reactor continued until February 29, 1980, when it was no longer cost-effective to continue its operation. It has since been completely dismantled and decontaminated, and the facility was released for unrestricted use."

The WBNS reactor and its associated exponential pile were located at what is now the loading dock adjacent to building 001 (see Figure 2, 3 and 4). The WBNS was 93% enriched uranyl sulfate solution. Normal and depleted uranium metal, graphite and heavy water was used for exponential pile experiments using the WBNS as a thermal neutron source as shown in Figure 4.

Information on specific operations is sketchy, anecdotal and/or non-existent. The major quantity of radioactive material utilized at Downey was canned normal and depleted uranium metal used in the exponential pile. The exponential pile was a system designed to model different fuel/moderator lattice configurations. The behavior of neutron flux in these lattices was measured. The 4-watt WBNS was used as a neutron source for the exponential pile. The radioactive material was obtained from a variety of AEC and government contractors. After use, it was returned to the source and/or transferred to the Santa Susana Field Laboratory (SSFL). The WBNS itself was also transferred to the SSFL in early 1956.

The most probable storage locations for radioactive materials were established by interviews and tours with retirees assigned to the buildings (Reference 7). Boeing accompanied these individuals to the site, and had them do a walk-through of the facility and identify various locations and describe the activities that occurred in them. According to these individuals, the fuel was stored in the Loading Dock area (where the WBNS reactor was located). These individuals have also stated that fuel was *not* stored in the vault (Building 008). It is suspected that this vault may have actually been a records storage vault. Boeing has concluded, therefore, that the loading dock was the only place where the fuel was stored. Notwithstanding this belief, the vault was also classified as a Class A area, and subjected to the same level of survey as the loading dock and other Class A areas (see Section 3. Survey Design).

It was also established through interviews and tours with retirees that smaller quantities of radioactive materials were used and/or stored in the Pearlman's laboratory and in the basement in the "finger building" (See Figure 2). These locations were also classified as Class A areas (See Section 3. Survey Design).

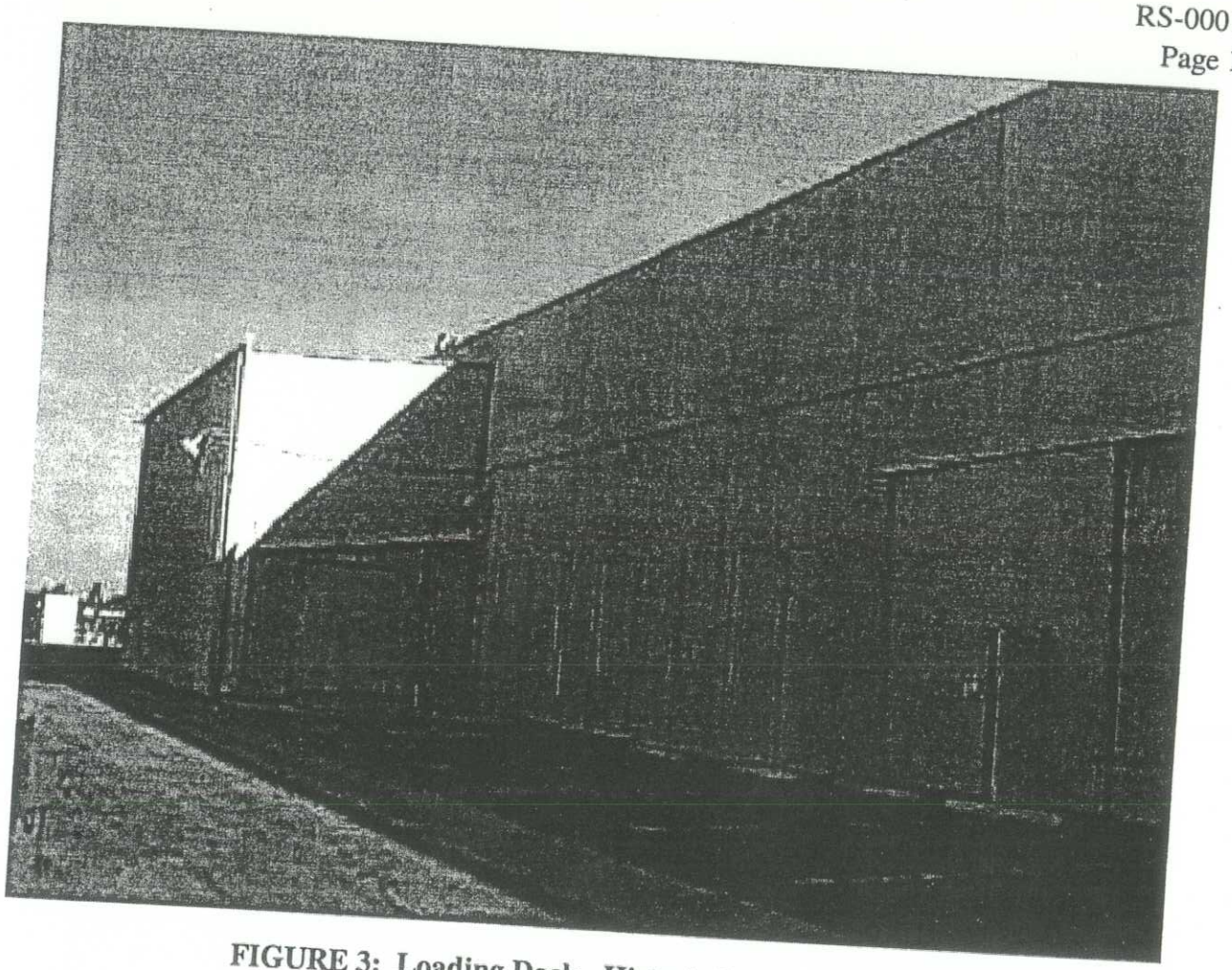


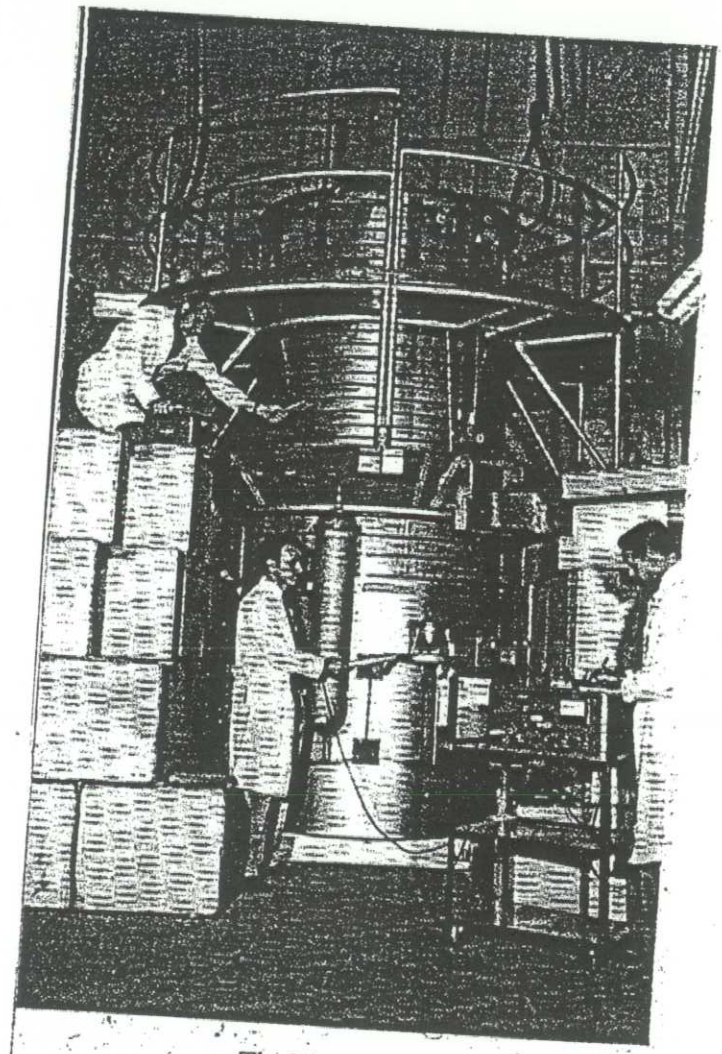
FIGURE 3: Loading Dock. Historic Location of WBNS

Although it is likely that spills occurred during the 1948-1955 time period when AERD occupied portions of the Downey facility, no incident records can be located. The fact that no detectable contamination has been detected in the current survey indicates that any spills that may have occurred were appropriately decontaminated at the time.

2.3 Operating History (1956 - 2000)

Specific information on operations performed in the subject northwest portion of Building 001, after AERD moved out in 1956 is unknown.

It is known that since the mid-1970s to the current date, the subject areas were used as administrative offices, housing the NASA, DCM, HR, and some executives. The main corrugated portion of the building was used as a small machine shop for R&D activities, for example, building an Ultralight wing. Later it was used as a storage area (Reference 5).



The Water Boiler Neutron Source (WBNS) in operation in early 1950s.

FIGURE 4: Water Boiler Neutron Source

All isotopes, subsequently used at Downey by NAA, and later Rockwell, were used for industrial radiography, and were located at building 004, on Clark Avenue. All isotopes were disposed of in the early 1990s (Reference 5).

Non-nuclear government contracts performed at the Downey site since 1955 are described below (Reference 6).

North American Aviation initiated its divisional buildup in 1955, the space elements of the company and the Automatics division remained in Downey. The Rocketdyne and Atomics International divisions moved to Canoga Park, in the San Fernando Valley area of Los Angeles. By 1957, the Downey facility (USAF Plant #16) had grown to 1,453,137 square feet. In 1957, there was a temporary down period for North American and it's defense contract posture. The

Navaho missile program was canceled in July 1957 but some elements of the program continued through the end of the year.

While there was an immediate cut-back in personnel because of the Navaho cancellation, North American received a contractual award from the USAF for another missile program - the Hound Dog. As everyone knows, in October of 1957, the Russians launched their Sputnik satellite. North American Aviation had developed the propulsion systems, guidance systems and aerodynamic structures over the past twelve years at Downey and had the capability of placing a satellite. The Mercury Program was on the Downey drawing boards in 1958 when the Space Act of 1958 was passed which created the National Space Council and the National Aeronautics and Space Administration.

North American received contracts to develop the Little Joe booster at the Downey facility which would be used to test the Mercury capsule, and the division also received contracts to develop hardware for the Saturn I launch vehicle. In 1961, the division received contracts to build the 2nd stage of the Saturn V launch vehicle and the Apollo Command and Service modules.

Increasing personnel requirements on both the Saturn and Apollo program required expansion of facilities at the Downey plant. Some 250,000 square feet of manufacturing and test facilities were added in 1962, and more than 500,000 square feet of office and laboratory areas was added in 1963.

In 1964, the USAF Plant #16 was transferred to the NASA as NASA Plant #1 and North American Aviation received a facility contract from the NASA to maintain the facility. In the early 1970s the government facilities encompassed some 1.7 million square feet of enclosed area while the North American Rockwell (NAA merged with Rockwell Standard in 1967) property housed 450,000 square feet. Overall acreage of the Downey facility was in excess of 200 acres which remained essentially the same to 1998.

In 1972, the Downey Space Division was awarded a NASA contact to design, develop, test and evaluate the Space Transportation Systems program, more commonly called the Space Shuttle. Rockwell constructed five Shuttle spacecraft. The fist spacecraft was used in approach and landing tests only and was not designed to fly in space. This program and associated R&D continued to plant closure. The Downey plant secured DOD contracts in pursuance of the Space Defense Initiatives and also worked on the National Space plane and advanced launch systems.

Employment of the Downey facility in 1957 (the Navaho program) was around 10,000 employees. Peak employment was reached in 1965 (the Apollo Program) when headcount was slightly in excess of 24,000. To cope with the steadily increasing engineering population required on both the Apollo and Saturn programs, the company leased many buildings in the Downey area and during 1972-73, dozens of large trailers were located at the Downey facility housing offices for approximately 1000 engineers.

The history of this industrial plant and a number of its extant buildings and structures precedes the NASA ownership. Originally constructed on privately owned farmland the earliest buildings were constructed in 1929 to support the emerging aircraft industry. Since that time the plant has

expanded physically several times, modernized to accommodate the changing needs of developing aircraft and aerospace programs, and expanded and contracted its workforce as a result of defense-related research and development and various military conflicts. Although the plant experienced periods of very little activity, it never completely closed its doors since 1929.

In 1992, NASA's Program Operational Plan contained budget directives to reduce real estate holdings, and as a result, in 1993, the Downey Industrial Plant (through a baseline facility review) was declared excess to NASA's needs. At that time the plant encompassed 166.1 acres. For ease of transfer, the site was divided into six parcels, with Parcels III, IV, V and VI (68.4 acres) being offered for immediate excess. Authority for excess of these four parcels was confirmed by the 104th Congress through the passage of legislation (Public Law 104-204) in September 1996, (the same year the Rockwell Aerospace merged with the Boeing Company) and these parcels were legally transferred to the City of Downey.

Initially Parcels I and II (97.7 acres) were retained for continued use by Boeing for the Space Shuttle program. However, as a result of restructuring of the Boeing Company in 1998, which led to a redistribution and consolidation of their holdings, the Downey Industrial Plant was no longer needed for Shuttle operations. As a result, the NASA declared Parcels I and II excess to their needs as well and the property was completed vacated in April 2001.

2.4 Radiological Assessment

Historical records of the 1952 through 1955 era indicate that routine, radiological surveys were performed of the areas occupied by the AERD and indicated that no residual contamination remained. However, these records are qualitative and anecdotal at best. Therefore, the current survey was planned and implemented to verify that the facility was indeed free of radioactive contamination.

During the period 1956 to 2000, these areas were no longer posted as radiologically controlled areas and therefore did not require any form of access control.

All available information from the 1950s indicated that the facility was not left in a contaminated condition. This was confirmed by the 2000 survey. No D&D or remediation was required and no evidence of any residual contamination was observed. All health physics technicians performing the 2000 survey were ANSI/ANS 3.1-1993 qualified and were fully trained radiation workers with training records on file at Rocketdyne.

3.0 SURVEY DESIGN

Guidance on radiological survey protocols and radiological release criteria are provided in numerous Federal and State documents. Some of the more pertinent are listed in Section 6 and include References 1 through 3, 8 through 24 and 27 through 28.

One of the most recent guidance documents on radiation surveys is the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (Reference 8). Many of the key requirements of MARSSIM were implemented in this survey, including site investigation, data quality objectives, and data quality assessment. Some of these key requirements are outlined below with reference to the relevant section in this report that addresses the requirement.

- The **site investigation process** involved,
  - Review of available historical records on the Downey AERD operations including health physics surveys (Referenced in sections 2.2 and 2.4)
  - Contact and discussions with four retired personnel who worked for AERD in the early 1950s (Referenced in Sections 2.2 and 3.1).
  - A site tour of the facility with three of these retired personnel to identify the locations of various rooms and areas used by AERD (Referenced in Sections 2.2 and 3.1)
- **Characterization survey.** Historical survey information from the early 1950s was used to provide "qualitative" knowledge of the likely radiological status of the facility (Section 2.4).
- **Data Quality Objectives.** The principal DQOs were met in the survey design. These were,
  - **Survey areas were classified** according to their potential for contamination. (Discussed in Section 3.1)
  - All areas used by AERD were surveyed and sampled to ensure **completeness** (Discussed in Section 3.2).
  - **Contaminants of concern** were identified as alpha emitting uranium fuel isotopes (U-238, U-235, and U-234) and fission products (beta-gamma emitting Cs-137 and beta emitting Sr-90).
- Diverse and complimentary **measurement techniques** were used in the survey. These included total alpha and beta surface contamination, removable alpha and beta surface contamination (including sink traps), and gamma exposure levels, plus gamma spectroscopic analysis of a variety of media including original ceiling paint,

sub-building soil, floor and wall material. This ensured **completeness** and **representativeness** of data (Discussed in sections 3.2, 3.3 and Table 1).

- Measurement techniques with **minimum detectable activities (MDAs)** much less than 10% of the regulatory limit were used (demonstrated in Tables 4 and 5).
- **Calibrated instruments** were used to ensure **accuracy** (discussed in section 3.4).
- Participation in the DOE **Quality Assurance Program** (DOE QAP) ensures accuracy of sample analysis (Reference 25).
- Calibrated standards for laboratory gamma spectroscopic counters were used to ensure **accuracy** and **precision.**
- Performance of daily **instrument performance** checks ensures **precision** (Discussed in section 3.4)
- Appropriate **background** data sets were utilized (Discussed in section 3.4 and Table 2).
- **Regulatory limits or "derived concentration guidelines limits (DCGL)"** were specified. (Discussed in Section 3.5, Table 3 and referenced).

- **Data Quality Assessment** (See Section 4)
  - **Data was compared to Regulatory Limits or DCGLs.** All measured data not only met the DCGLs using net (background subtracted) data (see Table 4) but also met DCGLs when gross (non-background subtracted) data was used. (See Appendices A and B tables).
  - **Comparison with MDAs.** All surface removable measurements taken were below the laboratory counter statistical MDA (See Table 4). The majority of instrument measurements for total surface contamination were below the field instruments' MDAs (See Table 4 and Appendix A).
  - **Data validation.** All field data (100%) was checked and signed off by an independent reviewer (See Appendix B) and the final report data was reviewed in detail and signed off by management and Quality Assurance.

3.1 Identifying Survey Units

MARSSIM protocol requires survey areas for final status surveys to be classified according to their "a priori", pre-remedial level of contamination, as determined by "characterization surveys" and "remedial action support surveys". MARSSIM classifies areas as,

- Class I - Areas that have, or had prior to remediation, potential or known contamination, **in excess of the DCGLs**.

- Class II - Areas that have, or had prior to remediation, potential or known contamination, **not expected to exceed the DCGLs**.

- Class III - Areas that are not expected to contain any residual radioactivity, or expected to contain levels of residual radioactivity **at a small fraction of the DCGLs**.

The statistical framework of MARSSIM applies principally to Class I areas. There was no available historical evidence of any contamination exceeding even a small fraction of DCGLs, therefore Downey was considered a MARSSIM Class III area. This provided some flexibility in the choice of scanning percentages and fixed measurement densities (as permitted by MARSSIM)..

The Downey survey design further classified areas into Class A, B, and C categories to indicate the types of operations performed [and therefore potential for contamination]. They should not be confused with the MARSSIM Class I, II and III definitions). The use of Class A, B and C areas, enabled a graded approach to sample densities to be implemented, using a qualitative potential for contamination.

Although the interior of Building 001 has been refurbished several times over the last 50 years, walk-through tours by several Rockwell and NAA retirees were used to identify those areas of the facility that had been utilized by AERD (Reference 7). In particular, the location of the WBNS and fuel storage was identified as the loading dock (see Figure 2). The basement was identified as the location of film dosimetry processing and calibration source storage. The first floor of the finger building was identified as the location of a radiochemistry lab (Pearlman's lab). Areas utilized by AERD were divided into three classifications based on their relative potential for contamination,

- Class A: These were areas having the highest potential for residual contamination. For example, the location of the WBNS and its control room, the location of fuel storage, and laboratories and basement where radioactive material was known to have been stored and/or used.

- Class B: These were areas having a medium potential for residual contamination, For example, other laboratory and workshop areas.

- Class C: These were areas having the lowest potential for residual contamination. For example, office areas.

Classification of these areas is shown in Figure 2, Table 1, and the area maps in Appendix C. Area classification is also indicated by the location code, e.g. the loading dock is designated A-DCK were A refers to Area A, and DCK refers to "dock."

TABLE 1: TYPE AND NUMBER OF MEASUREMENTS TAKEN IN EACH AREA*

AREA CLASS	LOCATION	LOCATION CODE	ALPHA/BETA QUALITATIVE SCAN	TOTAL ALPHA/BETA SURFACE CONTAMINATION (1 MINUTE COUNTS)	REMOVABLE ALPHA/BETA SURFACE CONTAMINATION (WIPES)	GAMMA SURFACE EXPOSURE RATE (1 MINUTE COUNTS)
A	BASEMENT	A-BMT	5%	30	30	30
	VAULT	A-VLT	5%	30	30	30
	AUXILIARY WAREHOUSE	A-AUX	5%	30	30	30
	LOADING DOCK	A-DCK	5%	30	30	30
	PEARLMAN'S LAB	A-PLB	5%	20	20	20
	CORNER ROOM	A-CNR	5%	20	20	20
	CONTROL ROOM	A-CTL	5%	12	10	12
B	FORMER LABS	B-LAB	5%	20	20	20
C	OFFICE AREA	C-OFC	5%	10	10	10
	OFFICE COMPUTER ROOMS	C-OCR	5%	10	10	10
	OFFICE CONTROL CENTER	C-OCC	5%	10	10	10
	FINGER BUILDING	C-FGR	5%	10	10	10

* Location of measurements is shown in the area maps in Appendix C.

3.2 Sampling Locations

For all areas, a direct, qualitative alpha and beta-gamma scan of the floors and walls (5 % of all surfaces) was conducted.

Random sampling points were identified in each area (refer to Appendix C). Direct, quantitative counts were conducted for alpha and beta-gamma contamination using stationary, cumulative 1-minute counts.

Removable alpha and beta wipe surveys were taken at the same locations.

The type and number of surveys conducted for each area is shown in Table 1. In general more measurement locations were chosen for Class A areas than for Class B areas. More measurement locations were chosen for Class B areas than for Class C areas. Thus, a higher measurment/sample density was used for areas with the higher potential for contamination.

Following completion of a majority of the survey, one retiree definitively identified areas labeled B-LAB and C-OCR as having belonged to the airplane manufacturing operations of NAA and not part of AERD. We have nevertheless included the survey results for these areas to confirm that residual contamination had not been inadvertently spread from AERD to non-AERD operations.

In addition to locations of total and removable surface contamination measurements, selected samples were taken of soil, wall & floor material, water and ceiling paint and counted with a laboratory Canberra gamma spectrometer. The locations of these samples are also indicated in the area maps in Appendix C.

3.2.1 Basement Sub-Floor Samples

Floor concrete had been removed from some locations in the basement floor by Huntington Beach SHEA personnel to perform chemical soil sampling. The current survey utilized the same locations and did not perform any additional through-floor sampling.

There was no indication that the floor had been shielded. The basement housed only calibration sources. Penetration of the floor or soil with gamma radiation would not result in any activation or residual activity. No neutron fields were present in the basement, thus neutron activation of concrete and sub-foundation soil was not of concern.

The soil, concrete and water samples (ENV00129 to ENV00134, and ENV00144) were taken at locations where the concrete had been removed. The basement (A-BMT) was one of the most extensively surveyed areas in the survey, and no indication of contamination was found in wipe, soil, debris sweeps, or water samples (See Figure C-1, and Appendix C). If soil under the slab had been contaminated by spills or leakage, it would have been indicated by the presence of

contamination on the concrete surface and/or in the soil. This was not found, thus additional soil sampling under the intact concrete was determined to be unnecessary.

This same line of reasoning would apply to the rooms, also. The same principles would apply to rooms that did not house the WBNS reactor, i.e. a neutron source.

The potential for neutron activation in the loading dock was addressed. High power reactors produce enough neutron activation of surrounding concrete and sub-foundation soil to create detectable levels of radioactivity in the concrete and soil. However, the low power of the WBNS reactor system (4 watts), did not generate sufficient neutron flux outside the reactor shield to create activation products in any significant quantity. Figure 4 shows the presence of reactor operators next the reactor during its operation, confirming that neutron flux was extremely low. No elevated exposure levels or surface radioactivity was found in the loading dock area, which provided further support for this position. Sub-floor sampling of the loading dock was therefore not performed.

3.2.2 Auxiliary Warehouse Ceiling Paint Chips

According to facility history, established from a limited number of documents and the recall of workers, drop ceilings had been replaced several times after the end of the radiological activities. The original ceilings were approximately 30-40 feet above the floor. Appendix D contains results from gamma spectroscopy of lead paint chips (ENV00125). The location of this sample in the auxiliary warehouse (A-AUX) was proximate to the WBNS reactor and is shown in Figure C-7. The lead paint chips represented a composite of lead paint that had peeled off from the original ceilings in the building. It was clear that this was original paint, as the surfaces under the paint were observed to be bare metal. The fact that these paint chips were found to be free of contamination demonstrates that ceiling contamination is not present.

3.2.3 Corner Room Floor and Wall Material

Wall and floor material (ENV00136) was taken from the corner room (A-CNR), proximate to the WBNS reactor (See Figure 2 and Figure C-4).

3.3 Survey Instrumentation and Techniques

Measurements of the total alpha surface activities were made with a Ludlum 43-1 (ZnS) alpha scintillation detector. Measurements of the total beta surface activities were made with a Ludlum 44-9 thin-window pancake Geiger-Mueller tube.

A Ludlum 2221 count rate meter with an audible indication was used for qualitative scans. For scanning, the detector was moved slowly, at a scan rate of less than 5 cm/sec, over the surface being surveyed. The face of the detector was located near the surface and not more than ½-inch distance away.

One minute, cumulative, stationary counts for both alpha and beta total surface activities were performed in various locations within each survey area. Table 1 gives the number of stationary, quantitative counts made in each area.

Standard 1.75 inch disks (1 3/4 Nuclear Power Operators, Inc., cloth) were used to obtain samples of removable surface alpha and beta activity by wiping approximately 100 cm^2 of the surface area. The activity was measured on the disks using a low background, gas-flow, Tennelec proportional counter calibrated using Th-230 and Tc-99 standard sources. Table 1 gives the number of wipe samples taken in each survey area. As well as wipes of wall and floor surfaces, wipes were also taken at locations such as sink traps and other locations of sediment build-up.

The ambient exposure rates were measured on surfaces using a Ludlum 44-2 1"x1", NaI scintillation detector, a Ludlum 2221 scalar detector and a count time of one minute. A standard conversion factor of 215 cpm per μR/hr was used for conversion of counts per minute to μR/hr. Table 1 gives the number of surface exposure rate measurements in each survey area.

All survey data was recorded on Radiation Survey Data Sheets (Form 732-A).

3.4 Instrument Calibrations, Performance Checks and Background

Measurements of total alpha surface activity were made using an alpha scintillation detector, sensitive only to alpha particles with energies exceeding about 1.5 MeV. The detector was calibrated with a Th-230 alpha source standard traceable to the National Institute of Standards and Technology (NIST). Measurements of the average beta surface activities were made with a thin-window pancake Geiger-Mueller (G-M) tube. The G-M detector was calibrated with a Tc-99 beta source standard, traceable to NIST.

All portable survey instruments were serviced and calibrated with NIST traceable standards on a quarterly basis. In addition, daily source, background, and performance checks were done on all instrumentation, when in use, to determine acceptable performance and establish a background value for the instrument on that day. Calibration records for the survey instruments used are maintained in the Radiation Safety Department files.

The gas-flow proportional counters, used to measure removable contamination, were calibrated using Th-230 and Tc-99 standard sources, traceable to NIST.

The ambient exposure rates at contact from surfaces were measured using a one-inch by one-inch NaI scintillation detector. Daily performance checks were made using a Cs-137 source.

Daily checks and calibrations were performed on all instrumentation to determine acceptable performance. Daily checks and calibration data were entered on the appropriate Instrument Qualification Sheet (IQS).

Daily background measurements were taken for each instrument in Building 010 and used for data analysis, are shown in Table 2 below. Building 010 is a corrugated, steel walled structure with a concrete base, physically separated from Building 001 but with a similar construction. Background gamma measurements were also obtained in Building 125 (bunker storage area) of similar construction to the basement's concrete walls and Building 108's (vault) cinder block exterior. This was done for gamma measurement comparison, and to verify different background levels for different structures.

TABLE 2: DAILY BACKGROUND RANGE

	GROSS SURFACE ACTIVITY LEVEL		EXPOSURE RATE
RADIATION TYPE	**ALPHA** dpm/100cm^2	**BETA** dpm/100cm^2	**GAMMA** µR/hr
Building 010 Range	2 to 6	1229 to 1772	8 to 9
Building 125 Range	Not Taken	Not Taken	14 to 17

3.5 Regulatory Release Limits

Regulatory limits for total and removable surface contamination are provided in References 1, 2, 3 and 26. Demonstration that these limits have been met is required before a regulatory agency will release a facility for unrestricted use. These limits are summarized in Table 3. MARSSIM refers to these release limits as "derived concentration guideline limits" (DCGL).

Surface contamination criteria for equipment and structures were originally established by the AEC in Regulatory Guide 1.86, dated June 1974 (Reference 3). All subsequent NRC, DOE and State of California guidelines for surface contamination are identical to these original limits.

- **DOE.** The most recent revision of DOE Order 5400.5 is January 7, 1993 (Reference 1). A 2000 draft revision of DOE 5400.5 (Reference 10) keeps the original surface contamination criteria for structures to be released for unrestricted use, though seeks to introduce lower limits for recycled metal from DOE facilities. The draft version of 10CFR834 (the codified version of DOE Order 5400.5 - Reference 9) also still promulgates the same original surface contamination criteria.

TABLE 3: SURFACE CONTAMINATION GUIDELINES (dpm/100cm^2)

Radionuclides	Average	Maximum	Removable
Separated or enriched Sr-90, Th-natural, Th-232	<1,000	<3,000	<200
U-natural, U-235, U-238, and associated decay products	<5,000α	<15,000α	<1,000α
Beta-gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission), including Sr-90 intrinsic to the mixture. [This category of radionuclides includes mixed fission products, including Cs-137 and Sr-90. It does not apply to Sr-90, which has been separated from the other fission products or mixtures where the Sr-90 has been enriched.]	<5,000β-γ	<15,000β-γ	<1,000β-γ

Note: Where surface contamination by both alpha- and beta-gamma-emitting radionuclides exists, the limits established for alpha- and beta-gamma-emitting radionuclides apply independently. Measurements of average contamination should not be averaged over an area of more than one square meter. For objects of less surface area, averages should be derived for each such object. The maximum and removable contamination level applies to an area of not more than 100 cm^2.

- **NRC.** 10CFR20 Subpart E, "Radiological Criteria for License Termination", Article 20.1402 (Reference 11), and NUREG 1727, "NMSS Standard review Plan", Chapter 14.1 (Reference 12) state, "A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year." ANSI/HPS N13.12-1999, "Surface and Volume Radioactivity Standards for Clearance" (Reference 13), effectively demonstrates that, for all isotopes, the original Regulatory Guide 1.86 surface contamination limits are equivalent to an annual dose of less than 1 mrem/year.

- **California DHS.** There is a recent internal DHS Policy Memorandum relating to license termination. This is RML-00-02, "Radiological Release Criteria for Facilities Undergoing Large-Scale Decommissioning," dated May 1, 2000 (Reference 14). This memorandum references internal Policy Memorandum IPM-88-2, "Clearance Inspection and Survey," dated December 1997 (Reference 15), which, in turn, implements the surface contamination criteria of DECON-1, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use," dated June 1977

(Reference 2). RML-00-02 states that these surface contamination criteria are identical to the NRC's "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source or Special Nuclear Material," dated August 1987 (Reference 16), which in turn implements the surface contamination criteria of Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors," dated June 1974 (Reference 3). California is an agreement state and implements 10CFR20, by reference, in California Code of Regulations Title 17, section 30256 (Reference 17).

Thus all major players in the radiological decommissioning arena, still, to this day, utilize the original 1974 Regulatory Guide 1.86 surface contamination criteria for release for unrestricted use of equipment and facilities.

In order to establish cleanup standards for volumetric contamination of soil, both DOE, NRC and DHS require the use of a pathways dose analysis software, for example RESRAD (Reference 27). Isotope specific cleanup standards can be established corresponding the NRC's 25 mrem/year TEDE from all pathways plus ALARA. Rocketdyne has established soil cleanup standards based on a lower dose of 15 mrem/y TEDE. These have been approved by the DOE and DHS for use at the Santa Susana Field Laboratory (Reference 26). These soil cleanup standards are based on exposure pathways including direct radiation exposure, radon, inhaled dust, ingested dirt, ingestion of fruit and vegetables irrigated with contaminated groundwater, and the use of groundwater as drinking water. A residential scenario is assumed.

4.0 RESULTS

Site investigation and planning for the Downey survey occurred during November 2000. The field measurement and sampling activities for the Downey survey occurred during the period from December 2, 2000 through December 7, 2000.

4.1 Qualitative Scan

No detectable activity was observed during the qualitative alpha and beta instrument scan.

4.2 Total Surface Contamination

All quantitative total surface activity alpha and beta measurements are provided in Appendix A. Gross 1-minute counts are provided, together with background counts, instrument efficiencies and probe area factors. Using this measured input data, gross and net surface contamination (in disintegrations per minute per 100 cm^2 (dpm/100cm^2)) are calculated for both alpha and beta radiation. Net values should be compared with the DCGLs of Table 3.

For each of the Class A, B and C areas, the range of net alpha and beta total surface contamination is summarized and compared with the appropriate regulatory limit (DCGL) in Table 4. Table 4 also allows comparison of the measured values with the minimum detectable activity (MDA).

The highest net total alpha activity observed was 32 dpm/100 cm^2 compared with a DCGL for Uranium isotopes of 15,000 dpm/100 cm^2 (for a 100 cm^2 area) and an MDA of 27 dpm/100 cm^2. No total alpha measurements exceeded the DCGL.

The highest net total beta activity observed was 1,386 dpm/100 cm^2 compared with a DCGL for cesium-137 or mixed fission products of 15,000 dpm/100 cm^2 (for a 100 cm^2 area) and an MDA of 832 dpm/100 cm^2. No total beta measurements exceeded the DCGL. Approximately 10% of beta measurements exceeded the MDA, slightly more than the expected 5% (based on the 95% basis for the MDA). However, the MDA is based solely on counting statistics of the instrument and does not include spatial or material variability in surfaces of different materials, e.g. concrete, drywall, press-board, or corrugated steel.

4.3 Removable Surface Contamination

All quantitative removable surface activity alpha and beta measurements are provided in Appendix B. Net 1-minute counts are provided, together with background counts and counter efficiencies. Using this measured input data, net removable surface contamination (in disintegrations per minute per 100 cm^2 (dpm/100cm^2)) are calculated for both alpha and beta radiation. Net values should be compared with the DCGLs of Table 3.

For each of the Class A, B and C areas the range of net removable alpha and beta surface contamination is summarized and compared with the appropriate regulatory limit (DCGL) in

Table 4. Table 4 also allows comparison of the measured values with the minimum detectable activity (MDA).

TABLE 4: SURVEY RESULTS

Category	Net Total (dpm/100 cm^2)		Net Removable (dpm/100 cm^2)		Gross Surface Gamma
	Alpha	Beta	Alpha	Beta	Exposure Rate (μR/h)
Class "A" Area Range	-6 to 32	-732 to 1386	-0.6 to 3	-5 to 19	4 to 16
Class "B" Area Range	-5 to 2	-157 to 1008	-0.3 to 3	-5 to 14	5 to 9
Class "C" Area Range	-16 to 27	-6 to 1354	-0.6 to 3	-2 to 17	6 to 13
Minimum Detectable Activity*	27	832	11 to 14	17 to 22	1
Regulatory Limit	15,000	15,000	1,000	1,000	N/A

* MDAs are calculated based on counting statistics only and do not include inherent variability of surfaces of different materials (e.g. concrete, drywall, press-board, corrugated steel, etc.)

The highest net removable alpha activity observed was 3 dpm/100 cm^2 compared with a DCGL for Uranium isotopes of 1,000 dpm/100 cm^2 (for a 100 cm^2 area) and an MDA of 11 to 14 dpm/100 cm^2. No removable alpha contamination measurements exceeded the DCGL or the MDA.

The highest net removable beta activity observed was 19 dpm/100 cm^2 compared with a DCGL for cesium-137 or mixed fission products of 1,000 dpm/100 cm^2 (for a 100 cm^2 area) and an MDA of 17 to 32 dpm/100 cm^2. No removable beta measurements exceeded the DCGL or MDA.

4.4 Gamma Exposure Measurements

Appendix A provides the gross gamma counts in a 1-minute period together with daily background count and instrument efficiency. Both gross and net gamma exposures (in microRoentgens per hour (μR/hr)) are calculated.

Since the Downey facilities are to be demolished, there is no relevant release limit (DCGL) for gamma exposure levels. Also MARSSIM does not require gamma exposure rate measurements for facilities.

The gross gamma exposure rates observed in the facility surveys ranged from 4 to 16 μR/hr. Typically, the higher exposures were observed in concrete structures such as the basement, vault and enclosed spaces. This is due the proximity of material with naturally occurring radionuclides. Typically lower exposures are observed in wooden or corrugated steel buildings. This difference is also demonstrated in Table 2 where higher background exposures are observed in Building 125 (concrete bunker) than in Building 010 (corrugated steel walled building). The range of sampled area, gross gamma exposure rates (4 - 16 μR/hr) was comparable to the range of background gamma exposure rates (8 - 17 μR/hr)

4.5 MARSSIM Statistical Tests

The power of the statistical framework of MARSSIM is apparent when there are still measurable levels of contamination at a site at levels approaching, and in some cases exceeding the DCGLs. It enables Wilcoxon Rank Sum non-parametric comparison of a sampled area distribution to a reference background area distribution plus DCGLs.

In the current survey, where all measurements are not only well below DCGLs but also, for the most part, below instrument and counter MDAs, does not require such sophisticated statistical tests. A simple comparison of measured data vs. DCGLs and MDAs is sufficient, as is done in Tables 4 and 5. Furthermore, inspection of the tables in Appendix A and B reveals that the **gross** dpm/100 cm^2 measurements, even prior to background subtraction, are also less than the DCGLs. For these reasons, MARSSIM Wilcoxon Rank Sum statistical tests were not performed for the Downey data.

4.6 Soil and Building Debris Sampling

This section summarizes the results of gamma spectroscopy performed on soil, concrete, water, and paint chip samples from the Downey facility basement floor, auxiliary warehouse ceiling and corner room of Building 001 (see Figure 2 and the area maps of Appendix C for sample locations). Each sample was analyzed in the counting laboratory using a Canberra high-purity GeLi gamma spectrometer. Appendix D shows detailed results of each sample. Table 5 summarizes the gross radionuclide concentrations.. No evidence of contamination from the 1950's atomic research operations was found in any of these samples.

Several items in Table 5 deserve some amplification.

MDA (minimum detectable activity) is a function of background count rate, time of count, instrument efficiency, sample weight, and other factors. Thus a different count time or different sample weight would result in different MDA values. The variances noted in MDA in the table are due primarily to different sample weights and count times.

TABLE 5: SUMMARY OF GAMMA SPECTROMETER ANALYSIS OF SAMPLES

SAMPLE NUMBER*	LOCATION/ TYPE	DATE	NUCLIDE	DETECTED pCi/gm	MDA pCi/gm	LIMIT* pCi/gm	Comments
ENV00125	WAREHOUSE PAINT CHIPS	11/21/00	None Detected	No Activity	No Activity	N/A	
ENV00129	BASEMENT SOIL	12/5/00	K-40	14.9	0.5	N/A	Non-regulated, Naturally Occurring
ENV00130	BASEMENT SOIL	12/5/00	K-40	15.0	0.08	N/A	Non-regulated, Naturally Occurring
ENV00131	BASEMENT SOIL	12/5/00	K-40	15.1	0.46	N/A	Non-regulated, Naturally Occurring
ENV00132	BASEMENT SOIL/ CONCRETE	12/6/00	K-40	13.9	0.49	N/A	Non-regulated, Naturally Occurring
ENV00133	BASEMENT WATER	12/6/00	None Detected	No Activity	No Activity	N/A	
ENV00134	BASEMENT CONCRETE	12/8/00	K-40	23.5	0.94	N/A	Non-regulated, Naturally Occurring
ENV00136	CORNER ROOM/FLOOR & WALL CONCRETE	12/7/00	K-40	17.8	0.14	N/A	Non-regulated, Naturally Occurring
ENV00136	CORNER ROOM/ FLOOR & WALL CONCRETE	12/7/00	Cs-137	0.0076	0.008	9.20	< MDA. Typical Soil Background
ENV00136	CORNER ROOM/ FLOOR & WALL CONCRETE	12/7/00	U-235	0.067	0.012	30	Typical Soil Background
ENV00144	BASEMENT PIPE SECTION	12/15/00	K-40	1.4	0.07	N/A	Non-regulated, Naturally Occurring

NOTES: * Soil DCGLs from Reference 26
MDA means minimum detectable activity

ENV00136 contains a trace quantity of cesium-137. Reference 28 provides typical US background for cesium-137 in rock and soil as 0.7 pCi/g with range of 0.1 to 3.5 pCi/g. Note also that the measured value of 0.0076 pCi/g for sample ENV00136 is less than the minimum detectable activity (MDA) and is therefore not a very credible number. Normally the gamma spectroscopic software would not report this level of cesium. In this case the software did report

it because the measured value was close to the MDA. Note also that the count time for this sample was 50,000 seconds, much more than the typical count time of 1,000 seconds.

ENV00136 contains trace levels of uranium-235. Reference 29 reports typical uranium-238 activity in rock and soil as 7 to 60 bequerels/kilogram. This translates into 0.19 to 1.62 pCi/g. The ratio of U-235 to U-238 in naturally occurring uranium is 0.7% by weight or 5% by activity. Therefore typical uranium-235 activity in soil or rock is 0.01 to 0.81 pCi/g. The measured activity for ENV00136 is within this range. Note also that the confidence level of U-235 in sample ENV00136 is very low at 0.726. This is because of interference of the U-235 185.7 keV energy gamma with the Ra-226 185.9 keV energy gamma. Note the Ra-226 result was indeed rejected due to this very interference. Hence the measured U-235 result is not a very credible number.

All samples contain varying levels of potassium-40 up to 23.5 pCi/g. Reference 30 discusses naturally occurring potassium-40. K-40 is 0.0118% of total potassium with a half-life of 1.3 x 10^9 years. It is the most prevalent of all naturally occurring radionuclides on earth, and is found in all soil and rock, all plants and animals, and all foods we eat. It is therefore the dominant radionuclide in the human body, at about 0.1 microcurie per person, accounting for approximately 10% of our exposure to natural background radiation.

5.0 SUMMARY

A radiation survey was performed of the northeastern portion of Building 001of the Downey facility that once housed a 4-watt nuclear reactor. The areas surveyed comprised all the rooms, offices, and laboratories used by the Atomic Energy Research Department of North American Aviation during 1948 to 1955. Industry accepted protocols and approved cleanup criteria were used in the design and implementation of the survey.

Table 4 summarizes 464 total alpha and beta surface contamination instrument measurements, and 460 removable alpha and beta surface contamination wipe samples that demonstrate compliance with appropriate regulatory cleanup standards (DCGLs). Appendices A and B provide the detailed field measurements and analyses for each location where surface contamination measurements were taken. Not only do none of the net values exceed DCGLs, but the majority also do not even exceed the minimum detectable activity (MDA) of the instrument or counter. Not only do none of the net (background subtracted) values exceed DCGLs, but none of the gross values exceed the DCGLs also.

Table 4 and Appendix A also provide a summary of 464 surface gamma exposure rate measurements, all of which are within the measured background range shown in Table 2.

Table 5 represents a summary of gamma spectrometry results of all nine soil, paint, concrete and water samples that were taken, No evidence of man made contamination was found in any sample.

Detailed computer printouts of all nine samples are provided in Appendix D. Analysis and/or computer printout from laboratory counters (gamma spectroscopy and alpha/beta Tennelec) are given in the report for every sample and wipe taken.

No evidence of radioactive contamination was found in the facility and regulatory cleanup standards promulgated by the DOE, NRC, and California DHS were met. The area is therefore suitable for release for "unrestricted use" with no radiological restrictions.

6.0 REFERENCES

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Appendix E

Traffic Technical Memo
July 8, 2009

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TECHNICAL MEMORANDUM

TO: Mr. Mark Sellheim, Principal Planner, City of Downey
Mr. John Perfitt, City of Downey
Mr. Edwin Norris, City of Downey
CC: Mr. Craig Fajnor, CAJA

FROM: Srinath Raju, P.E.
Christopher Munoz

SUBJECT: Tierra Luna Specific Plan Project
Supplemental Updated Traffic Impact Analysis

DATE: July 8, 2009 **REF:** RA 260Upd

This technical memorandum summarizes an updated traffic analysis for the Tierra Luna Specific Plan Project conducted by Raju Associates, Inc. including the remaining entitlement of the Kaiser Project located south of the Tierra Luna Project area in the list of related projects. This update is being provided as part of the responses to comments on the Draft Environmental Impact Report (DEIR) for the Tierra Luna Specific Plan Project.

The updated traffic analysis included in this memorandum uses the same traffic impact analysis guidelines and methodologies included in the *Traffic Study for the Tierra Luna Specific Plan Project*, Raju Associates, January 2009, incorporated as part of the DEIR for the Tierra Luna Specific Plan Project. Future Year 2020 without Project and Future Year 2020 with Project conditions scenarios have been updated to include the remaining entitlement of the Kaiser Project. The updated analyses include updates and revisions to all the relevant elements namely the intersection level of service (LOS) analyses at the 105 study intersections, Congestion Management Program (CMP) location analyses, freeway segment analyses, access analyses, and alternatives analyses. The analyses summaries and results are described in more detail in the following sections.

UPDATED FUTURE YEAR 2020 WITHOUT PROJECT TRAFFIC PROJECTIONS

The Future Year 2020 without Project traffic estimates were updated to include the remaining entitlement associated with the Kaiser Project. The Kaiser Project is located south of the Tierra Luna Specific Plan Project area, bounded by Congressman Steve Horn way on the north, Imperial Highway on the south, Ardis Avenue on the west and Bellflower Boulevard on the east. The Kaiser Project as part of the Downey Landing Specific Plan has a total entitlement for 1,000,000 square feet and includes a six-story hospital use, two four-story medical office buildings and a central plant building. Currently, one of the medical office buildings (MOB 1) of size 116,294 square feet, and the central plant of size 30,090 square feet have been built, occupied and in operation since 2007. Based on discussions between the City of Downey and Kaiser representatives, the following use summary was obtained - the hospital consisting of 680,000 square feet and the remaining medical office building (MOB 2) consisting of 173,616 square feet have not been built yet and therefore, are not yet operational and are not expected to open until the end of 2009. These two components have been included in the updated related projects list shown in Table 1. As indicated in the table, there are a total of 62 related projects. These related projects are illustrated in Figure 1.

In order to update the Future Year 2020 without Project traffic volumes, the trip generation for the Kaiser project was determined. Based on the Downey Landing Specific Plan Program EIR, Table 3.9-7 Project Generated Traffic – February 5, 2002 Site Plan, the Kaiser Project's 1,000,000 square foot entitlement generated 22,450 daily trips of which 1,397 trips would occur during the morning peak hour and 1,722 trips would occur during the evening peak hour.

Using the same trip rates used for the above, it was determined that the remaining components from the Kaiser project would generate a total of approximately 17,683 daily trips including 1,082 trips during the morning peak hour and 1,261 trips during the evening peak hour. Table 2 summarizes the Kaiser Project's trip generation.

The Kaiser project traffic was assigned to the street system network based on the geographical trip distribution pattern included in the Downey Landing Specific Program EIR. These traffic estimates were added to the Future Year 2020 without Project volumes to obtain the updated traffic volumes. Figures 2A-2G illustrates the updated Future Year 2020 without Project traffic volumes.

TABLE 1
LIST OF RELATED PROJECTS

Map No.	Project Name	Location	Description	Size
City of Santa Fe Springs				
1	Villages at Heritage Springs [1]	Telegraph Rd./Clark Av./Bloomfield Av./Norwalk Bl.	Single-Family Homes	554 units
2	Carmenita Plaza [1]	10120 Carmenita Rd.	Multi-tenant commericial	6,500 s.f.
3	Felipe's Cabinets [1]	11790 Slauson Av.	Warehouse/Office	11,462 s.f.
4	McMaster Carr Supply Co. [1]	9630 Norwalk Bl.	Warehouse	85,000 s.f.
5	Kiewit Office Building [2]	10704 Shoemaker Av.	Office	23,500 s.f.
6	Golden Springs Development [2]	Carmenita Rd. & Foster Rd.	Industrial	200,000 s.f.
7	Petro Builders Industrial Building [2]	10145 Geary Av.	Maintenance Building	4,656 s.f.
City of Commerce				
8	Citadel Expansion [3]	5675 Telegraph Rd.	Retail Outlet Center Office Building	253,200 s.f. 30,000 s.f.
City of Lynwood				
9	Retail Building [4]	3801-3831 Martin Luther King Jr. Bl.	Retail	15,900 s.f.
10	Commercial Building [4]	3791 Martin Luther King Jr. Bl.	Office Building	4,140 s.f.
11	Oakwood Plaza [4]	3211 Oakwood Av.	Retail	14,800 s.f.
12	Commercial Retail Building [4]	10820 Atlantic Av.	Commercial Retail	17,670 s.f.
13	Warehouse [4]	11298 Alameda St.	Warehouse	7,200 s.f.
City of Paramount				
14	Commercial Retail Center [6]	13729-33 Garfield Av.	Retail Center Super Market Fast Food Restaurant	4,800 s.f. 7,300 s.f. 2,670 s.f.
15	Masse Homes [6]	8415-8427 Adams St.	Single-Family Homes	7 units
16	Chanslor Investments, Inc. [6]	8329-8335 Somerset Bl.	Single-Family Homes	8 units
17	Felix Homes [6]	16603-16613 Indiana Av.	Single-Family Homes	6 units
18	Cerro Metals [7]	14900 Garfield Av.	Grocery Warehouse	551,821 s.f.
City of South Gate				
19	Elementary School No. 4 [8]	SW corner of Firestone Bl. & Dorothy Av.	Elementary School	950 students
20	Infill Project [8]	Tweedy Bl. between Atlantic Bl. & Pinehurst Av.	Shopping Center	46,600 s.f.
21	Calden Avenue Condominiums (Tierra del Rey) [8]	Southern Av. between Calden Av. & Alameda St.	Condominiums Mini-Storage	107 units 100,000 s.f.
22	Firestone Mixed-Use Project (Firestone Village) [8]	Firestone Bl. between South Gate Av. & Greenview Av.	Shopping Center Single-Family Homes	18,090 s.f. 47 units
23	LAUSD Elementary School #9	Firestone Bl. between Long Beach Bl. & Santa Fe Av.	Elementary School	650 students
24	LAUSD High School	Tweedy Bl and Atlantic Bl	High School	1,500 students
25	Industrial Building [8]	Southern Av. between Rayo Av. & L.A. River	Industrial	75,000 s.f.
26	WAMU Center [8]	NW corner of Firestone Bl. & Long Beach Bl.	Bank	8,000 s.f.
27	Firestone Bl./Atlantic Av. Int. Improv. Project [8]	NW corner of Atlantic Av. & Firestone Bl.	City Hall Annex	8,000 s.f.
28	Food Market	NW corner of Firestone Bl. & State St.	Shopping Center	20,000 s.f.
29	The Gateway Retail Project (El Portal) [9]	NW corner of Atlantic Av. & Firestone Bl.	Shopping Center	600,000 s.f.

TABLE 1 (continued)
LIST OF RELATED PROJECTS

Map No.	Project Name	Location	Description	Size
City of Bellflower				
30	Bellflower Vascular Access Center [10]	16506 Lakewood Bl.	Pharmacy/Medical Offices	13,000 s.f.
31	Seven-Eleven Store [10]	14300 Bellflower Bl.	Retail	2,052 s.f.
City of Norwalk [11]				
32	Shopping Center Remodel	Imperial Hwy. & Norwalk Bl.	Restaurant	5,490 s.f.
			Retail	10,360 s.f.
			Retail	4,890 s.f.
33	Industrial/Office Complex	Rosecrans Av. & Shoemaker Rd.	Retail	11,954 s.f.
			Warehouse	14,843 s.f.
			Manufacturing	14,730 s.f.
			Restaurant	5,000 s.f.
			Industrial	3,332 s.f.
			Medical Office	9,582 s.f.
			Industrial	19,536 s.f.
34	Fresh & Easy Market	Rosecrans Av. & Studebaker Rd.	Super Market	14,800 s.f.
City of Pico Rivera [12]				
35	Pico Rivera Market Place	8909 Washington Bl.	Fitness Center	50,000 s.f.
			Retail Building	35,000 s.f.
			Retail	9,300 s.f.
36	Pico Rivera Village Walk 15	Whittier Bl. & Paramount Bl.	Movie/Retail Center	135,106 s.f.
37	Veranda Crest	5216 Rosemead Bl.	Condominiums	42 units
38	Target Center	8878 Whittier Bl.	Retail	7,050 s.f.
39	Used Car Sales Lot	8642 E. Beverly Bl.	Used Car Sales Lot	1,997 s.f.
40	7 Single-Family Homes	Durfee Av. & Gallatin Rd.	Single-Family Homes	7 units
41	BNSF MOW Expansion	7427 Rosemead Bl.	Office Building	5,170 s.f.
42	Retail Center	9316 & 9332 Washington Bl.	Retail	11,400 s.f.
43	Industrial Building	San Gabriel River Pkwy	Industrial	2,600 s.f.
44	Office Building	9244 Beverly Rd.	Office Building	6,912 s.f.
City of Bell Gardens				
45	Shopping Center [13]	6420 Gage Av.	Retail Shopping Center	11,000 s.f.
46	Casino Expansion [13]	7301 Eastern Av.	Event Center	12,000 s.f.
47	Tentative Parcel Map No. 063646 [8]	5614 Clara St.	Single Family Homes	7 units
48	Office Building [8]	6244 Florence Av.	Office Building	2,710 s.f.
49	Tentative Tract Map No. 067931 [8]	5829 Muller St and 5842-48 Quinn St.	Condominiums	10 units
50	Tentative Tract Map No. 069086 [8]	5517 Quinn St.	Condominiums	7 units
City of Downey				
51	Los Angeles County Data Center [14]	Erickson Avenue & Flores Street	Office Building	90 employees
52	Lakewood Boulevard Commercial Center [7]	SW corner of Lakewood Bl. & Firestone Bl.	Office Building	8,000 s.f.
53	Lakewood Retail/Office Building	9637 Lakewood Bl.	Office and Retail	9,320 s.f.
54	Florence Retail Center	7877 Florence Av.	Retail	15,421 s.f.
55	Florence Medical Office Building 1 [7]	Florence Av.	Medical Office	31,500 s.f.

TABLE 1 (continued)
LIST OF RELATED PROJECTS

Map No.	Project Name	Location	Description	Size
56	Desert Reign Church and Davita Dialysis Clinic [7]	11610 Lakewood Boulevard	Church (570-seat sanctuary) Dialysis Clinic	27,528 s.f. 9,000 s.f.
57	Hall Road	9236 Hall Rd.	Industrial/Condominiums	200,000 s.f.
58	Florence Condominiums	9100-9126 Florence Av.	Condominiums	17 d.u.
59	Quinn Office Building	8129 Florence Av.	Office Building	4,308 s.f.
60	Walgreens	9020 Firestone Bl.	Retail	12,202 s.f.
61	Rodriguez Professional Building	8036 Florence Av.	Office Building	16,110 s.f.
62	Kaiser Medical Center [15]	NW corner of Bellflower Bl. & Imperial Hwy.	Hospital Medical Office	680,000 s.f. 173,616 s.f.

[1] Information obtained from City of Santa Fe Springs Planning Department - Wayne Morrell, Principal Planner, 562-868-0511x7362, waynemorrell@santafesprings.org
[2] Information obtained from City of Santa Fe Springs Website
[3] Information obtained from City of Commerce Planning Department - Mercenia Lugo, Planning Div. mercenial@ci.commerce.ca.us, 323-722-4805x2811
[4] Information obtained from City of Lynwood Planning Department
[5] Information obtained from City of Lynwood Website
[6] Information obtained from City of Paramount Planning Department - Wendy Macias, Community Dev. Planner, 562-220-2060, wmacias@paramountcity.com
[7] *Traffic Sensitivity Analysis for Rancho Los Amigos National Rehabilitation Center Project*, Kaku Associates, January 2008
[8] *South Gate Gateway Project, Draft Environmental Impact Report (DEIR)* , November 14. 2007 - Alvie Betancourt, Senior Planner, 323-563-9526
[9] *Firestone Boulevard/Atlantic Avenue Intersection Improvements Project, Draft Environmental Impact Report (DEIR)*, July 10. 2007.
[10] Information obtained from City of Bellflower Planning Department - Carlos Luis, Assist. Planner, 562-804-1424x2314, cluis@bellflower.org
[11] Information obtained from City of Norwalk Planning Department - Community Dev. Dept., 562-929-5744, planning@ci.norwalk.ca.us
[12] Information obtained from City of Pico Rivera Planning Department - Sergio Ruiz, Planning Div. 562-801-4332, sruiz@pico-rivera.org
[13] Information obtained from City of Bell Gardens Planning Department - Mr. Hailes Soto, Planning Division, 562-806-7722, hsoto@bellgardens.org
[14] *Traffic Study for the County of Los Angeles Data Center Project* , Raju Associates, April 2008
[15] Information provided by Kaiser Foundation Hospitals, Inc.

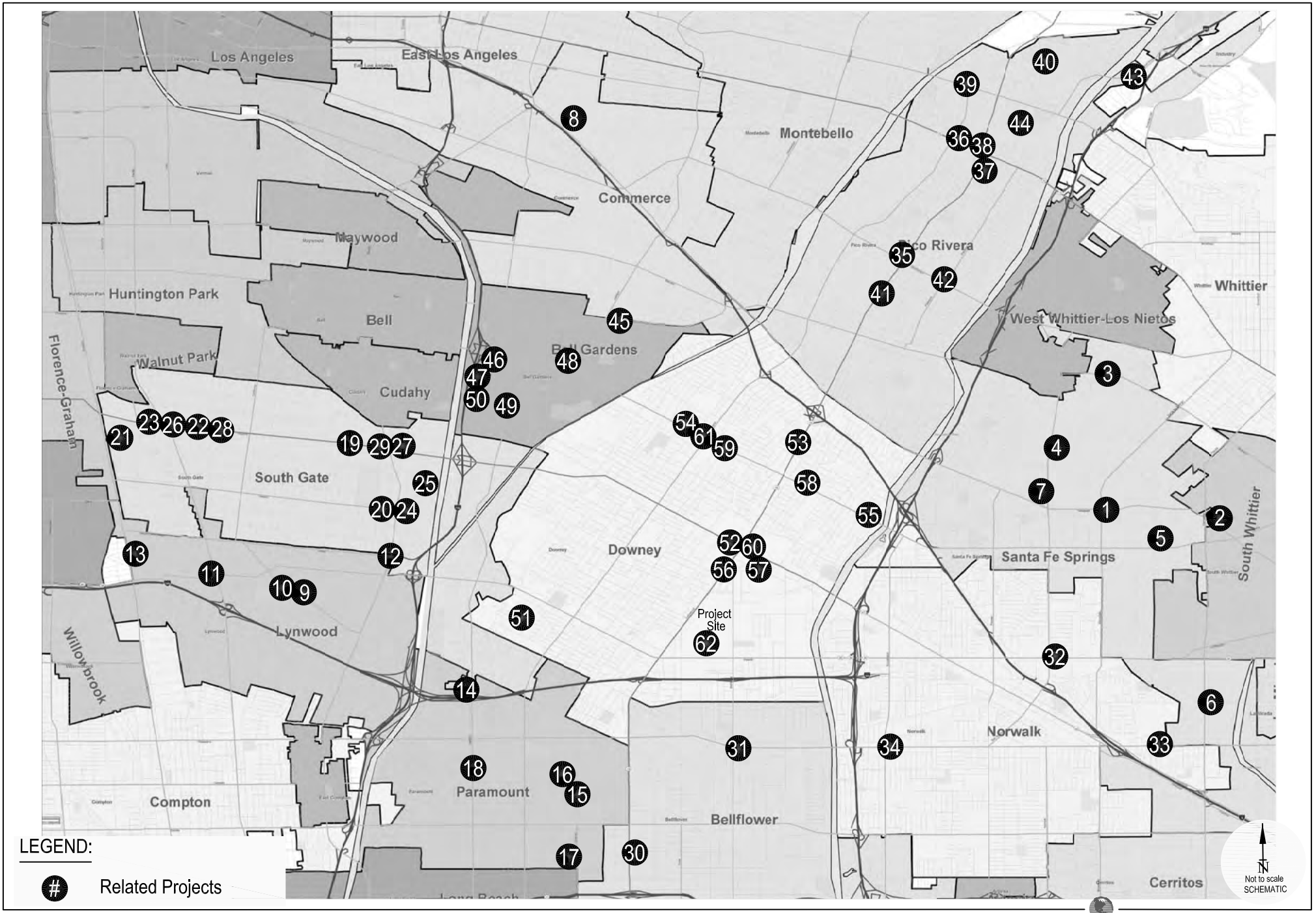


FIGURE 1
LOCATION OF RELATED PROJECTS

RAJU Associates, Inc.

TABLE 2
KAISER DEVELOPMENT ESTIMATED PROJECT TRIP GENERATION

Kaiser Medical Center 1,000,000 square foot Entitlement [1]

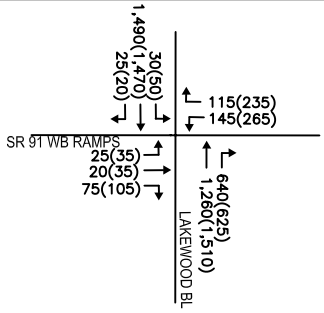
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Hospital	707,300 s.f.	11,870	501	185	686	156	495	651
Medical Office Building	292,700 s.f.	10,580	569	142	711	289	782	1,071
	Trip Generation Total	22,450	1,070	327	1,397	445	1,277	1,722
Trip Rates								
Hospital + Central Plant	Trips per 1,000 s.f.	16.78	73%	27%	0.97	24%	76%	0.92
Medical Office Building	Trips per 1,000 s.f.	36.13	80%	20%	2.43	27%	73%	3.66

[1] From *Downey Landing Specific Plan Progam EIR*, Table 3.9-7 - Project Generated Traffic - Kaiser Development - February 5, 2002 Site Plan
Trip rate included in table are based on ITE, Trip Generation Informational Report, 6th Edition, 1997.

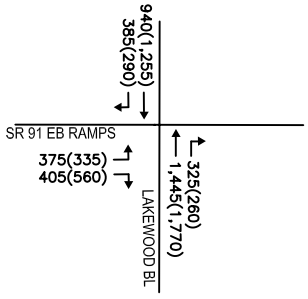
Kaiser Medical Center - Remaining Portion to be Built [2]

Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Hospital	680,000 s.f.	11,410	482	178	660	150	476	626
Medical Office Building	173,616 s.f.	6,273	338	84	422	171	464	635
	Trip Generation Total	17,683	820	262	1,082	321	940	1,261
Trip Rates								
Hospital + Central Plant	Trips per 1,000 s.f.	16.78	73%	27%	0.97	24%	76%	0.92
Medical Office Building	Trips per 1,000 s.f.	36.13	80%	20%	2.43	27%	73%	3.66

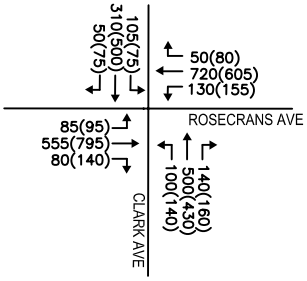
[2] Square footage information provided by City of Downey and Kaiser Foundation Hospitals, Inc.



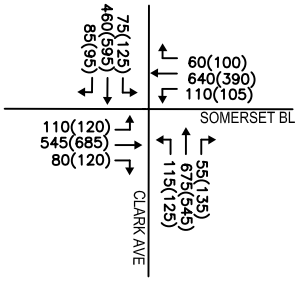
1. LAKEWOOD BL/SR-91 WB RAMPS



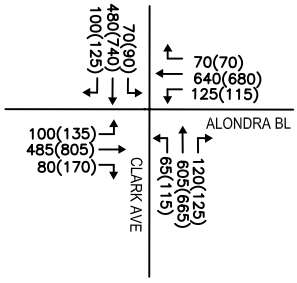
2. LAKEWOOD BL/SR-91 EASTBOUND RAMPS



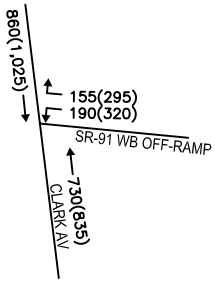
3. CLARK AV/ROSECRANS AV



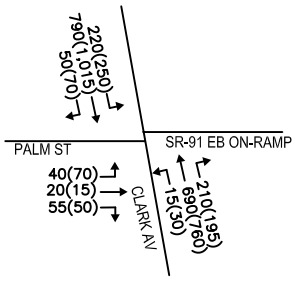
4. CLARK AV/SOMERSET BL



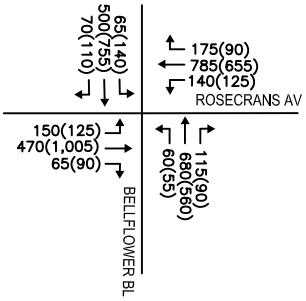
5. CLARK AV/ALONDRA BL



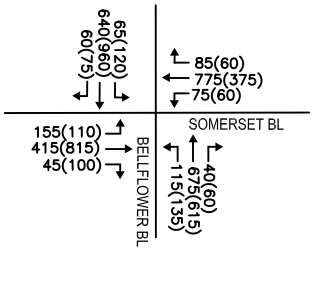
6. CLARK AV/SR-91 WB OFF-RAMP



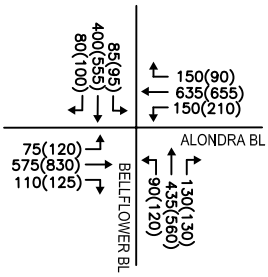
7. CLARK AV- PALM ST/SR-91 EB ON-RAMP



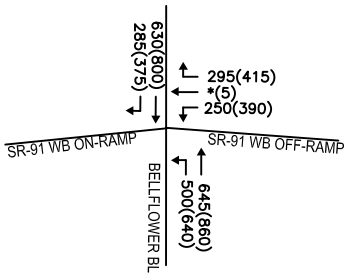
8. BELLFLOWER BL/ROSECRANS AV



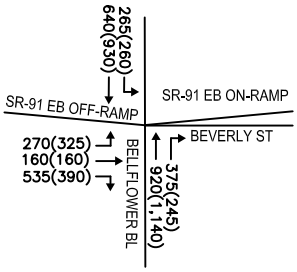
9. BELLFLOWER BL/SOMERSET BL



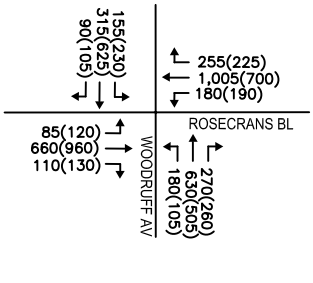
10. BELLFLOWER BL/ALONDRA BL



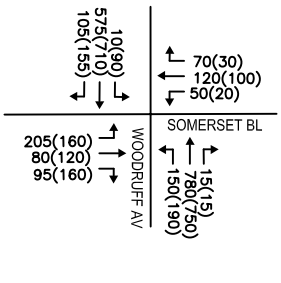
11. BELLFLOWER BL/SR-91 WB RAMPS



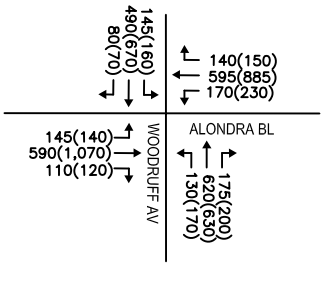
12. BELLFLOWER BL/BEVERLY ST - SR-91 EB-RAMPS



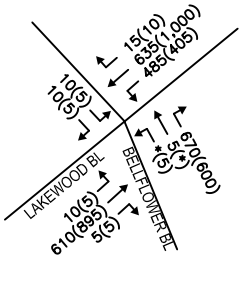
13. WOODRUFF AV/ ROSECRANS AV



14. WOODRUFF AV/ SOMERSET BL



15. WOODRUFF AV/ALONDRA BL



16. LAKEWOOD BL/BELLFLOWER BL

LEGEND:

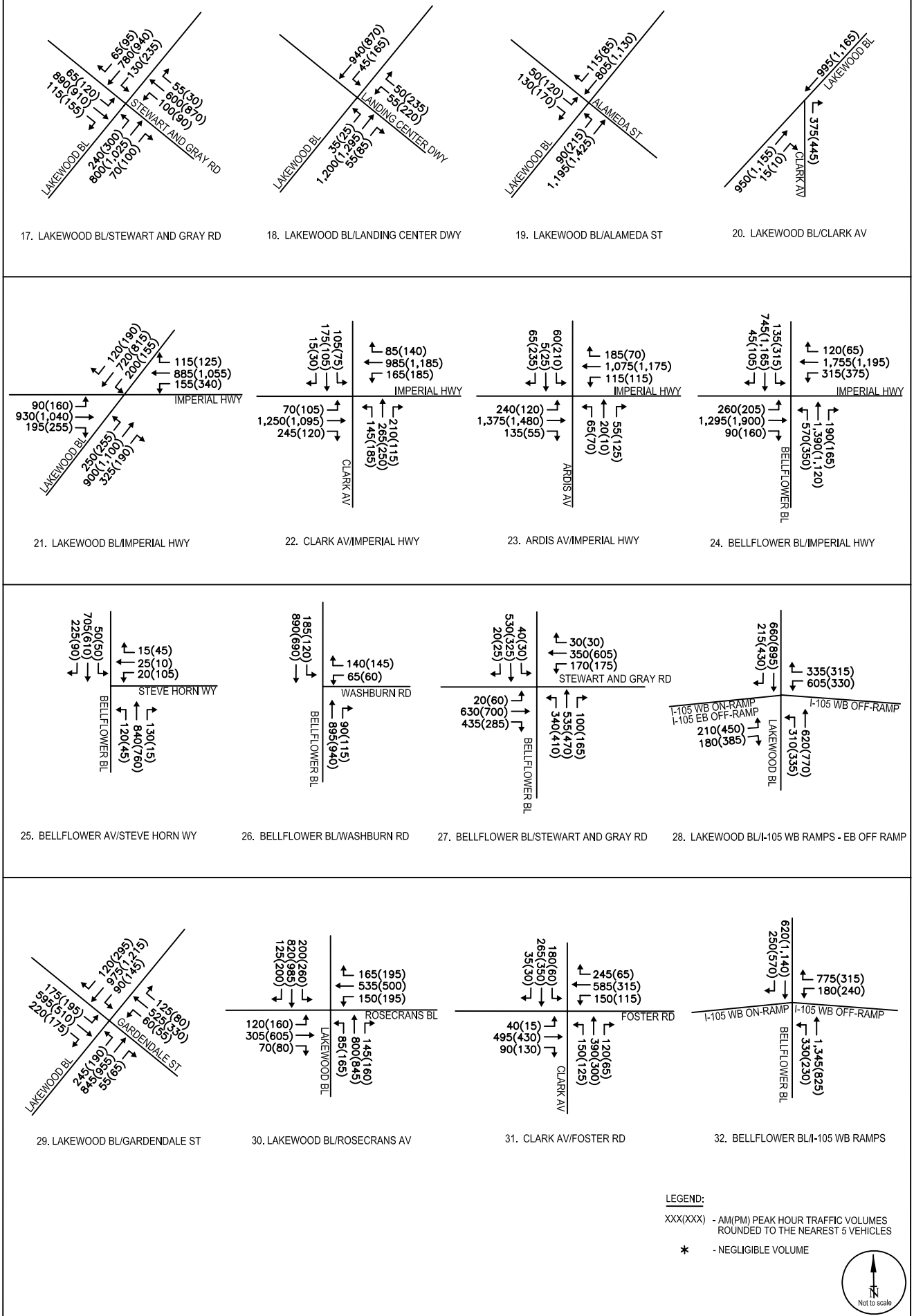
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

N
Not to scale

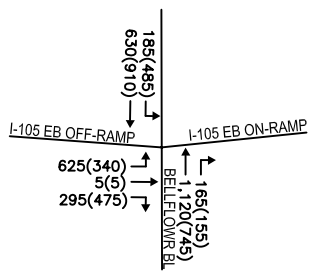
RAJU Associates, Inc.

FIGURE 2A
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES

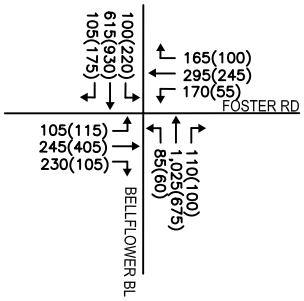


RAJU Associates, Inc.

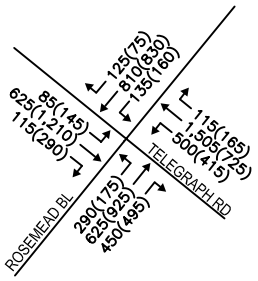
FIGURE 2B
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES



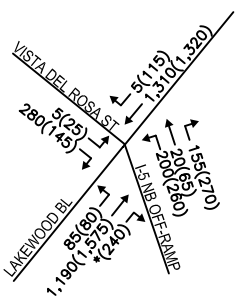
33. BELLFLOWER BL/I-105 EB RAMPS



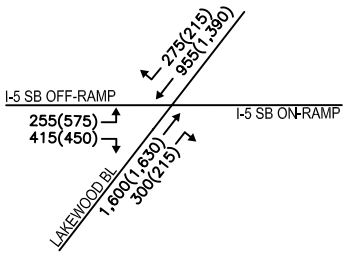
34. BELLFLOWER BL/FOSTER RD



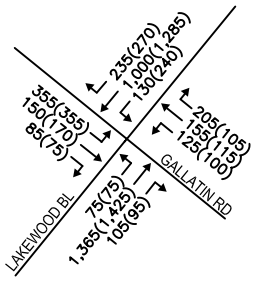
35. ROSEMEAD BL/TELEGRAPH RD



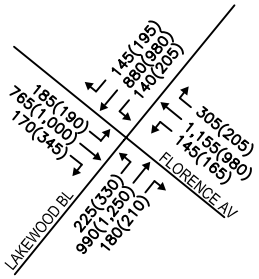
36. LAKEWOOD BL/VISTA DEL ROSA ST - I-5 NB OFF-RAMP



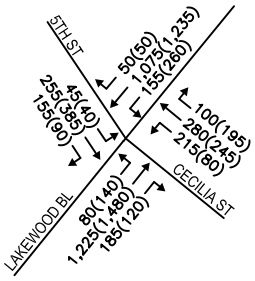
37. LAKEWOOD BL/I-5 SB RAMPS



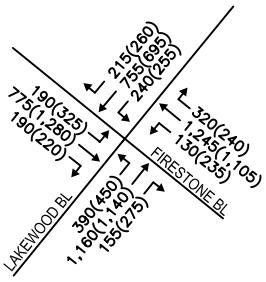
38. LAKEWOOD BL/GALLATIN RD



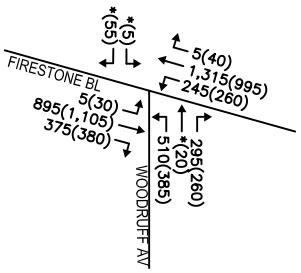
39. LAKEWOOD BL/FLORENCE AV



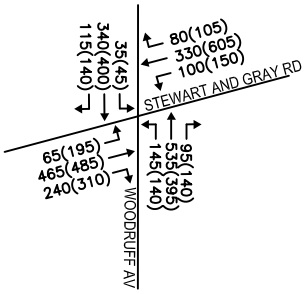
40. LAKEWOOD BL/5TH ST - CECILIA ST



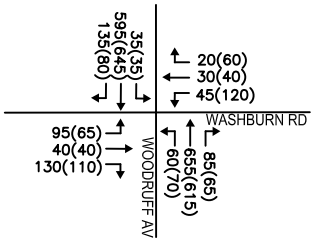
41. LAKEWOOD BL/FIRESTONE BL



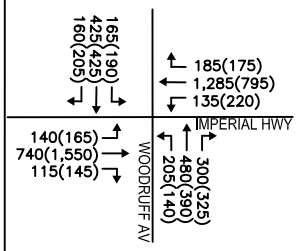
42. FIRESTONE BL/WOODRUFF AV



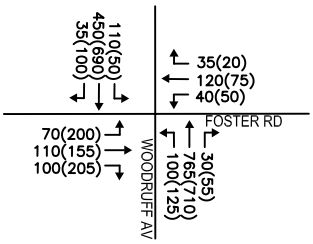
43. WOODRUFF AV/STEWART AND GRAY RD



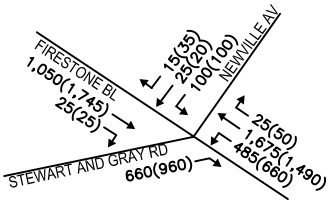
44. WOODRUFF AV/WASHBURN RD



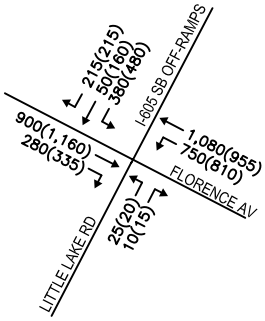
45. WOODRUFF AV/IMPERIAL HWY



46. WOODRUFF AV/FOSTER RD



47. STEWART AND GRAY RD - NEWVILLE AV/FIRESTONE BL



48. LITTLE LAKE RD - I-605 SB RAMPS/FLORENCE AV

LEGEND:

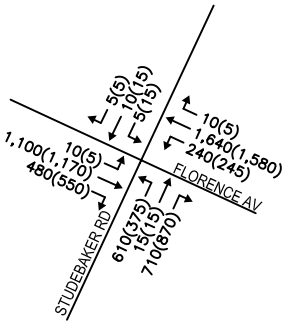
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

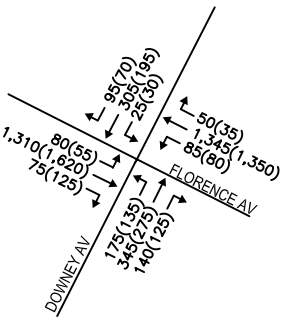
N
Not to scale

RAJU Associates, Inc.

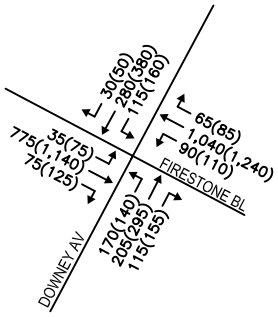
FIGURE 2C
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES



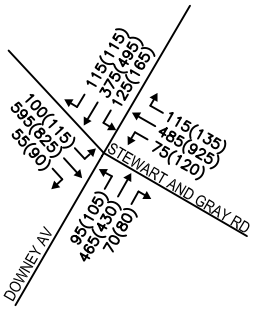
49. STUDEBAKER RD/FLORENCE AV



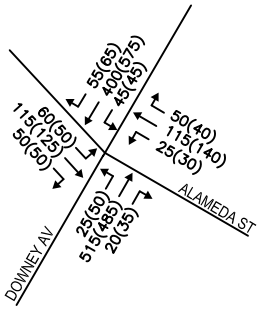
50. DOWNEY AV/FLORENCE AV



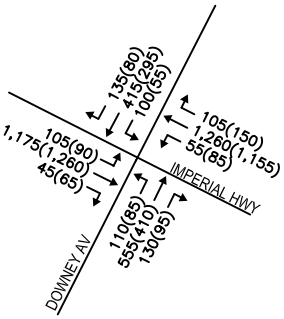
51. DOWNEY AV/FIRESTONE BL



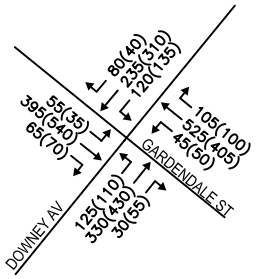
52. DOWNEY AV/STEWART AND GRAY RD



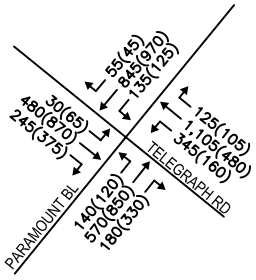
53. DOWNEY AV/ALAMEDA ST



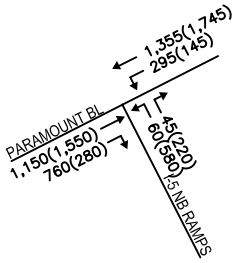
54. DOWNEY AV/IMPERIAL HWY



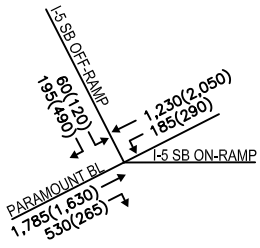
55. DOWNEY AV/GARDENDALE ST



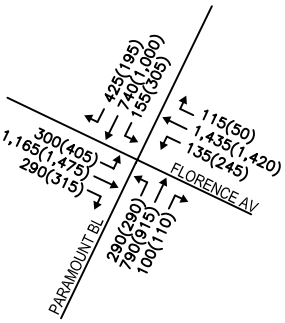
56. PARAMOUNT BL/TELEGRAPH RD



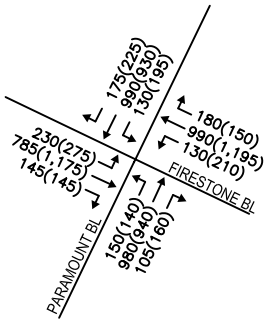
57. PARAMOUNT BL/I-5 NB RAMPS



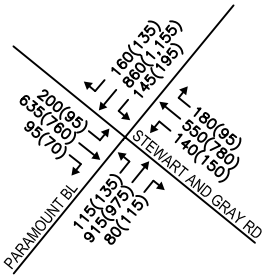
58. PARAMOUNT BL/I-5 SB RAMPS



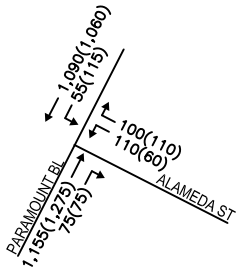
59. PARAMOUNT BL/FLORENCE AV



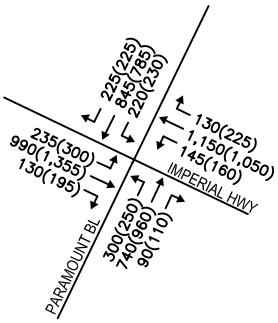
60. PARAMOUNT BL/FIRESTONE BL



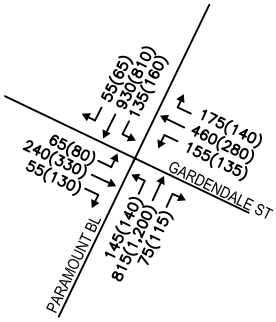
61. PARAMOUNT BL/STEWART AND GRAY RD



62. PARAMOUNT BL/ALAMEDA ST



63. PARAMOUNT BL/IMPERIAL HWY



64. PARAMOUNT BL/ GARDENDALE ST

LEGEND:

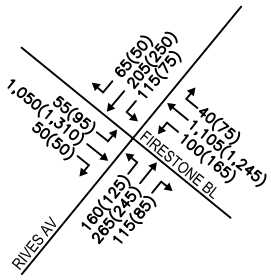
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

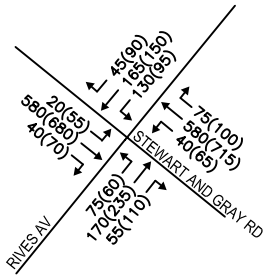
N
Not to scale

RAJU Associates, Inc.

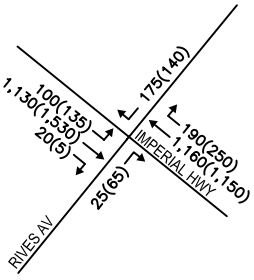
FIGURE 2D
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES



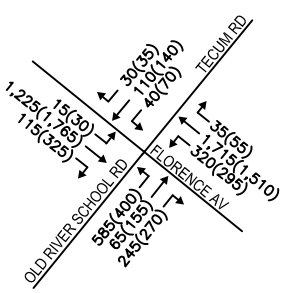
65. RIVES AV/FIRESTONE BL



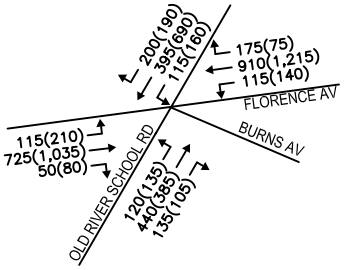
66. RIVES AV/STEWART AND GRAY RD



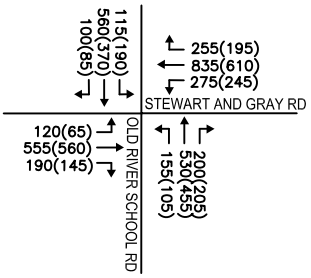
67. RIVES AV/IMPERIAL HWY



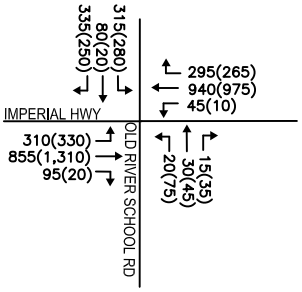
68. OLD RIVER SCHOOL RD - TECUM RD/FLORENCE AV



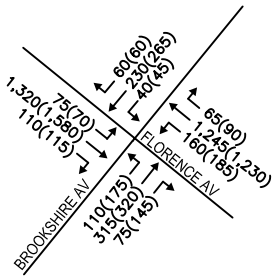
69. OLD RIVER SCHOOL RD/ FIRESTONE BL - BURNS AV



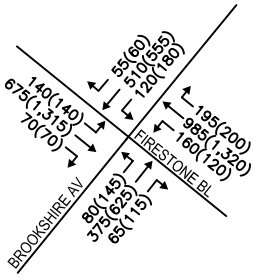
70. OLD RIVER SCHOOL RD/ STEWART AND GRAY RD



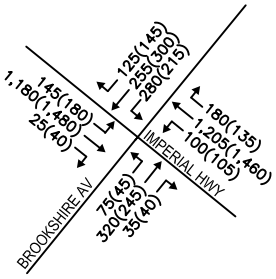
71. OLD RIVER SCHOOL RD/ IMPERIAL HWY



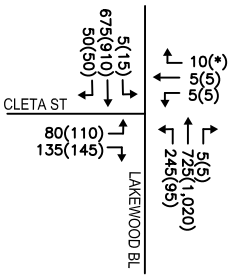
72. BROOKSHIRE AV/FLORENCE AV



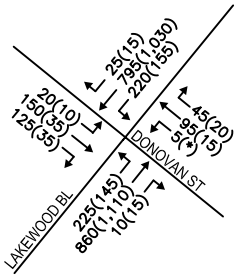
73. BROOKSHIRE AV/FIRESTONE BL



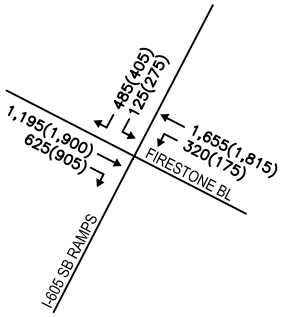
74. BROOKSHIRE AV/IMPERIAL HWY



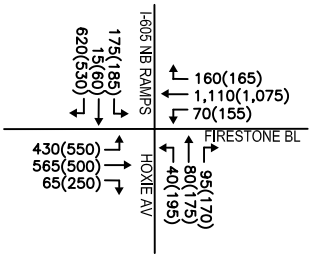
75. LAKEWOOD BL/CLETA ST



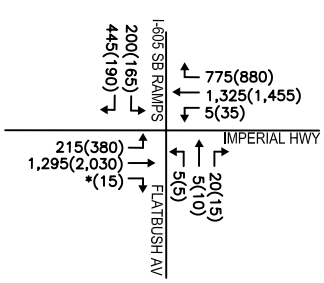
76. LAKEWOOD BL/DONOVAN ST



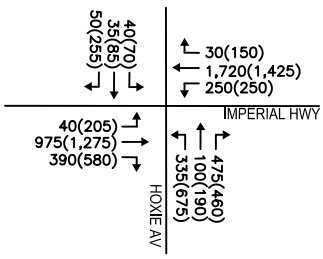
77. I-605 SB RAMPS/FIRESTONE BL



78. HOXIE AV - I-605 NB RAMPS/ FIRESTONE BL



79. FLATBUSH AV - I-605 SB RAMPS/ IMPERIAL HWY



80. HOXIE AV/IMPERIAL HWY

LEGEND:

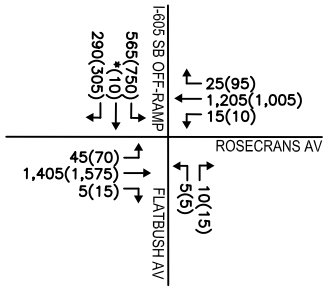
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

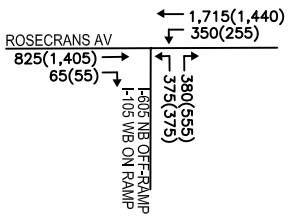
N
Not to scale

RAJU Associates, Inc.

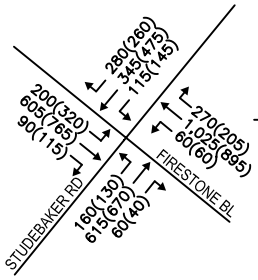
FIGURE 2E
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES



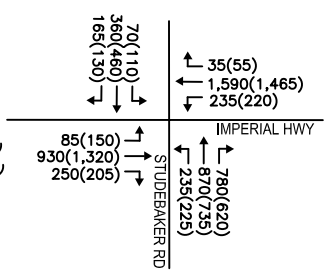
81. FLATBUSH AV - I-605 SB OFF-RAMP/ ROSECRANS AV



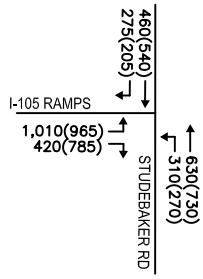
82. I-605 NB OFF-RAMP - I-105 WB ON-RAMP/ ROSECRANS AV



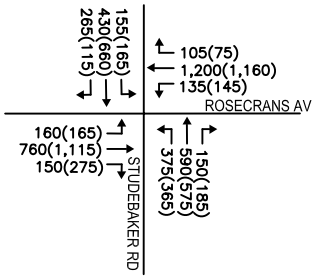
83. STUDEBAKER RD/FIRESTONE BL



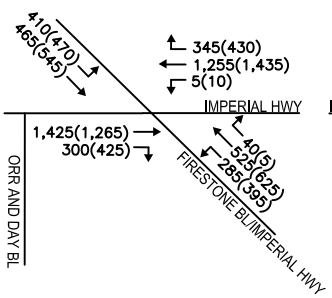
84. STUDEBAKER RD/IMPERIAL HWY



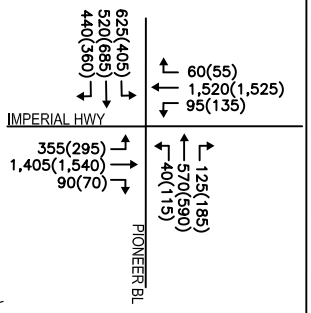
85. STUDEBAKER RD/ I-105 WB ON-RAMP AND EB OFF-RAMP



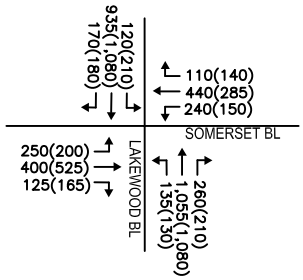
86. STUDEBAKER RD/ROSECRANS AV



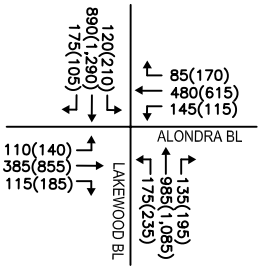
87. ORR AND DAY BL- FIRESTONE BL/ IMPERIAL HWY



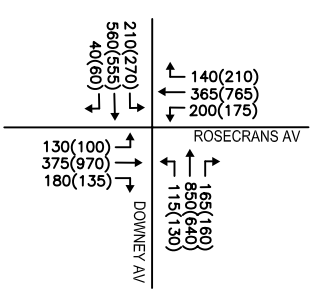
88. PIONEER BL/IMPERIAL HWY



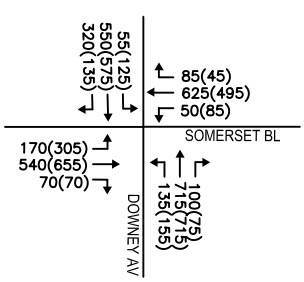
89. LAKEWOOD BL/SOMERSET BL



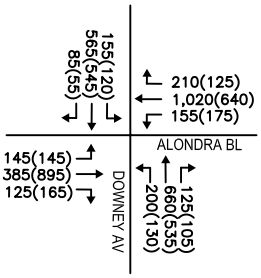
90. LAKEWOOD BL/ALONDRA BL



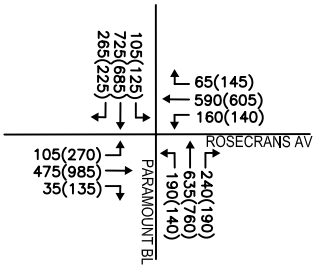
91. DOWNEY AV/ROSECRANS AV



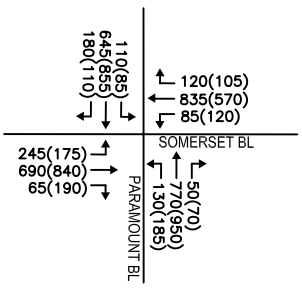
92. DOWNEY AV/SOMERSET BL



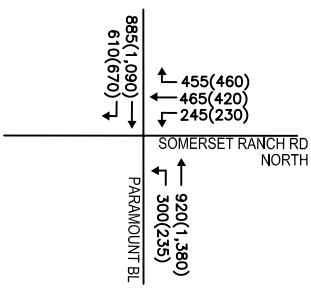
93. DOWNEY AV/ALONDRA BL



94. PARAMOUNT BL/ROSECRANS AV



95. PARAMOUNT BL/SOMERSET BL



96. PARAMOUNT BL/ SOMERSET RANCH RD NORTH

LEGEND:

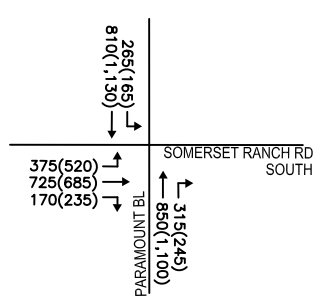
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

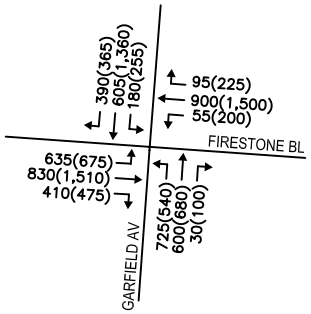
N
Not to scale

RAJU Associates, Inc.

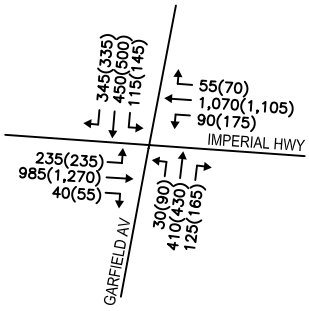
FIGURE 2F
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES



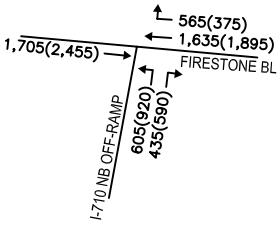
97. PARAMOUNT BL/ SOMERSET RANCH RD SOUTH



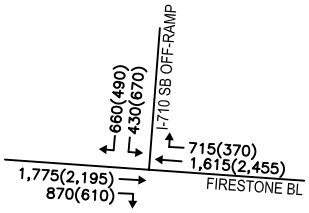
98. GARFIELD AV/FIRESTONE BL



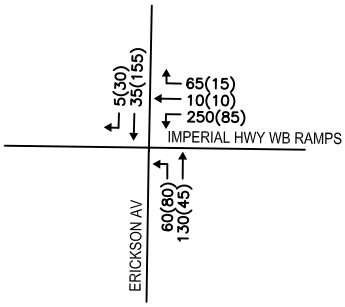
99. GARFIELD AV/IMPERIAL HWY



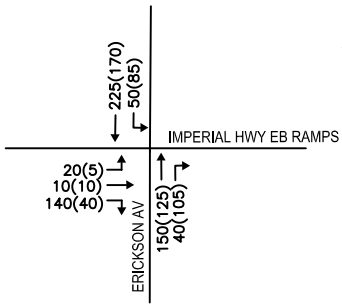
100. I-710 NB OFF-RAMP/ FIRESTONE BL



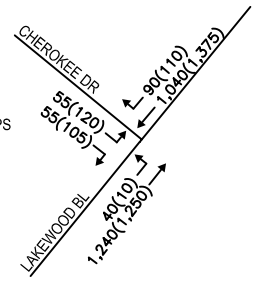
101. I-710 SB OFF-RAMP/FIRESTONE BL



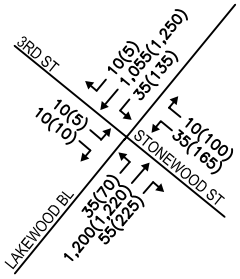
102. ERICKSON AV/ IMPERIAL HWY WB RAMPS



103. ERICKSON AV/ IMPERIAL HWY EB RAMPS



104. LAKEWOOD BL/CHEROKEE DR



105. LAKEWOOD BL/3RD ST - STONEWOOD ST

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

N
Not to scale

RAJU Associates, Inc.

FIGURE 2G
FUTURE (2020) WITHOUT PROJECT PEAK HOUR TRAFFIC VOLUMES

UPDATED FUTURE YEAR 2020 WITH PROJECT TRAFFIC PROJECTIONS

The trip generation for the Proposed Project has not changed since the publication of the DEIR for the Tierra Luna Specific Plan Project. The Proposed Project's trip generation would result in a net total of approximately 32,118 daily trips of which 1,714 trips (1,052 inbound, 662 outbound) would occur during the morning peak hour and 3,098 trips (1,363 inbound, 1,735 outbound) during the evening peak hour.

Figures 3A-3G summarizes the net-project only traffic volumes. These trips were combined with the updated Future Year 2020 without Project traffic volumes to obtain the updated Future Year 2020 with Project traffic volumes. The Future Year 2020 Cumulative plus Project updated traffic volumes during both A.M. and P.M. peak hours are presented in Figures 4A-4G.

FUTURE YEAR 2020 WITHOUT PROJECT TRAFFIC CONDITIONS UPDATE

Utilizing the updated traffic volumes, the 105 study intersections were analyzed using the ICU methodology. The updated Future 2020 without Project intersection operating conditions for the AM and PM peak hours are shown in Table 3. Figures 5A, 5B, 6A and 6B graphically illustrate the future without project AM and PM peak hour levels of service at each of the analyzed intersections, respectively.

From Table 3, the following observations can be made. Approximately 88% of the intersections in the morning peak hour and 72% of the intersections in the evening peak hour are expected to operate at satisfactory levels of service (i.e., LOS D or better). At these locations, motorists experience little to tolerable amounts of delay. About 6% of the intersections in the morning peak hour and 15% of the intersections in the evening peak hour are expected to operate at LOS E. At these locations, motorists experience measurable delay and traffic flow is restricted. The remaining 6% of the intersections in the morning peak hour and 13% of the locations in the evening peak hour are expected to experience LOS F (congested) conditions.

Capacity calculation worksheets for updated Future (2020) without Project conditions are attached in the Appendix to this memorandum.

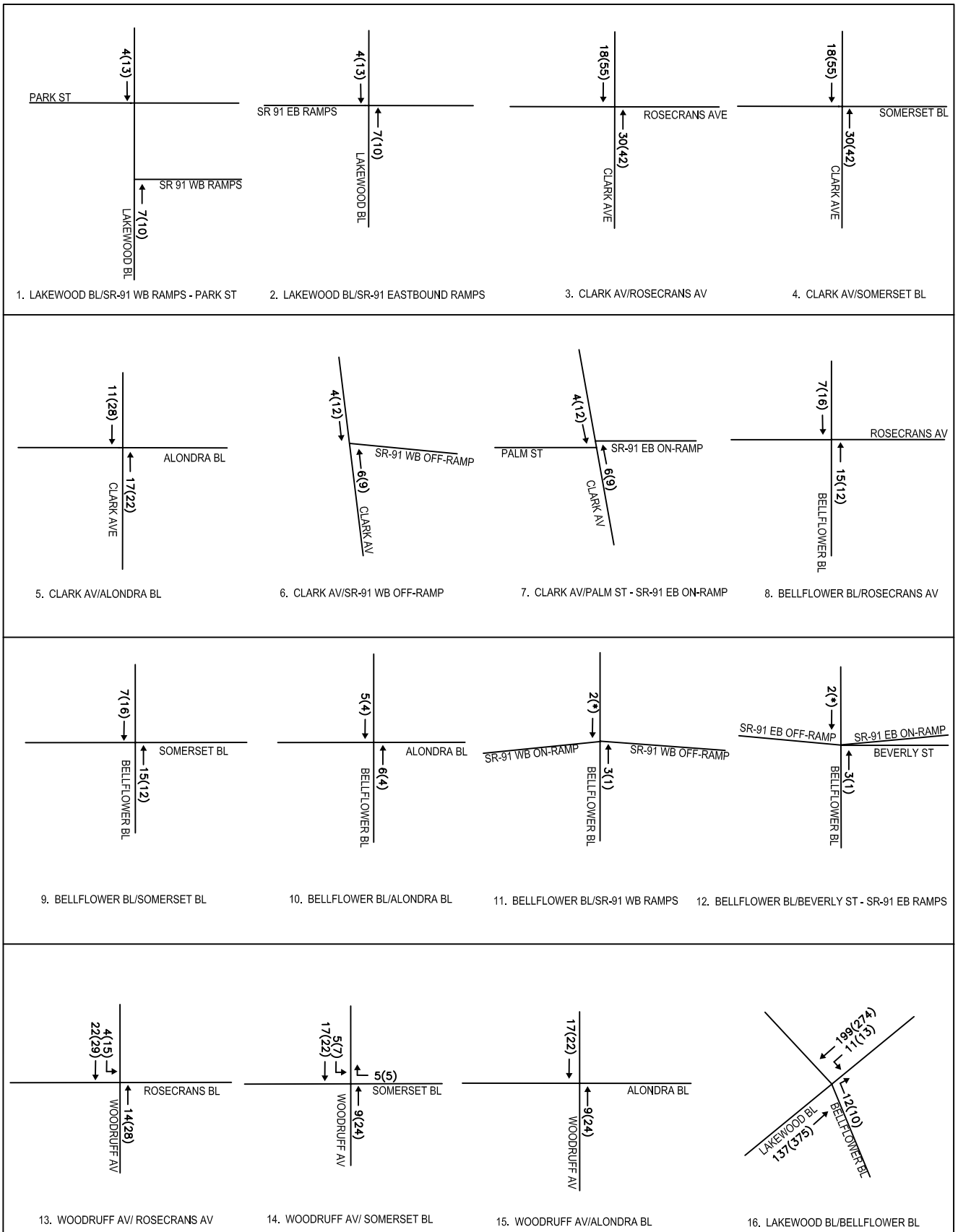


FIGURE 3A
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES

RAJU Associates, Inc.

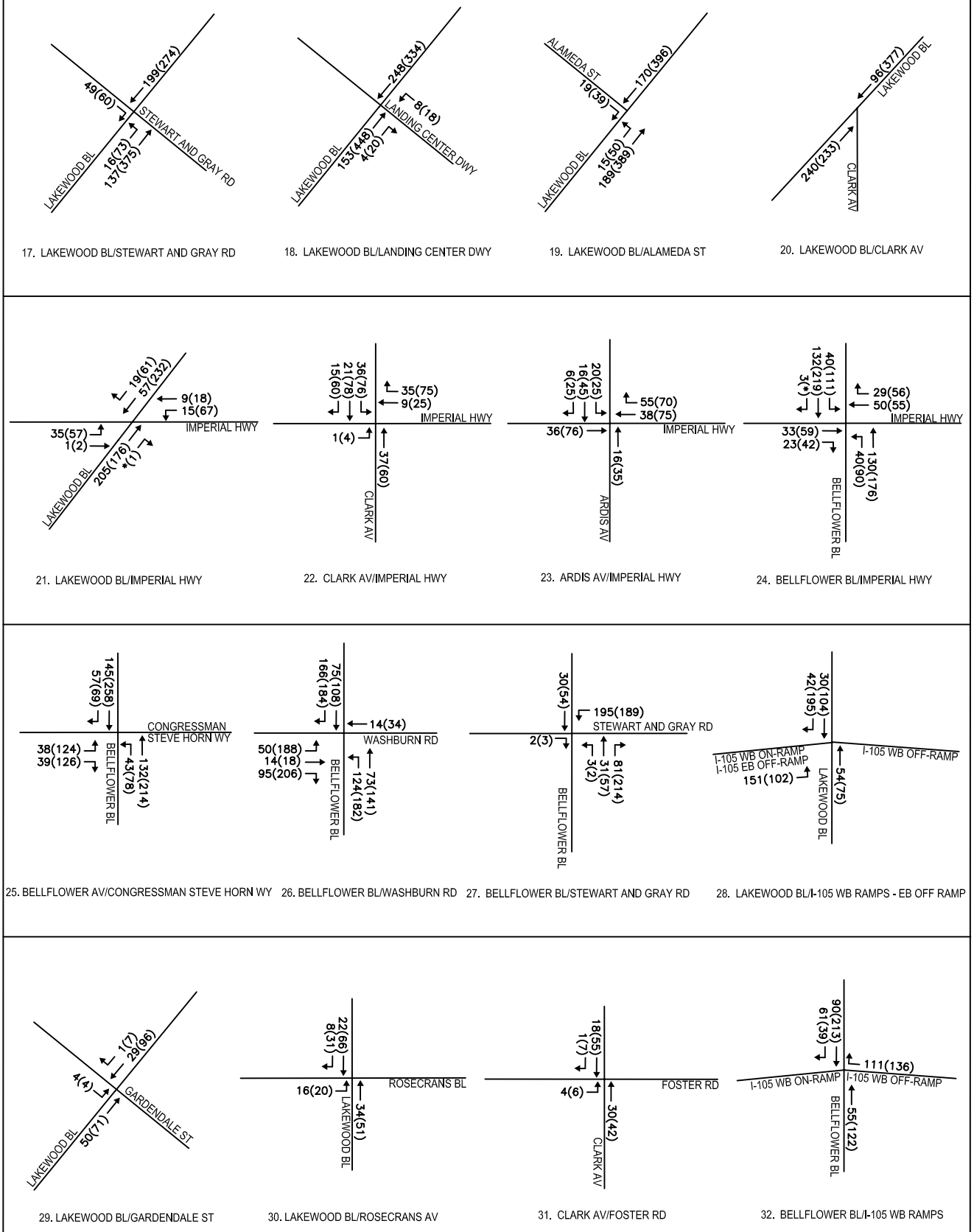
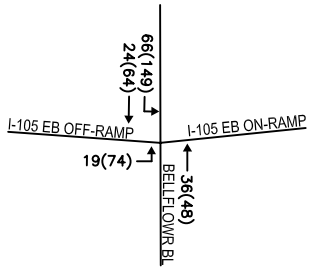
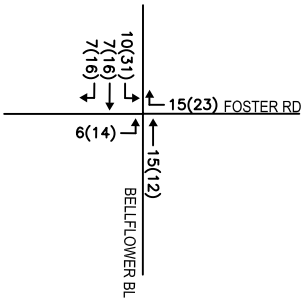


FIGURE 3B
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES

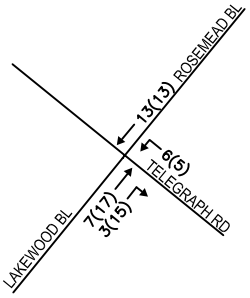
RAJU Associates, Inc.



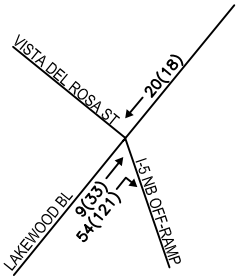
33. BELLFLOWER BL/I-105 EB RAMPS



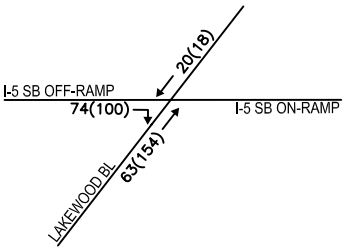
34. BELLFLOWER BL/FOSTER RD



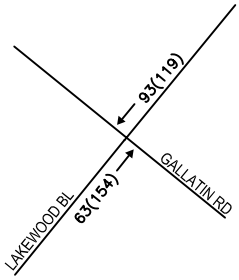
35. ROSEMEAD BL - LAKEWOOD BL/ TELEGRAPH RD



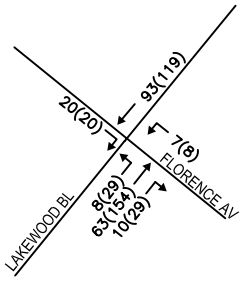
36. LAKEWOOD BL/ VISTA DEL ROSA ST - I-5 NB OFF-RAMP



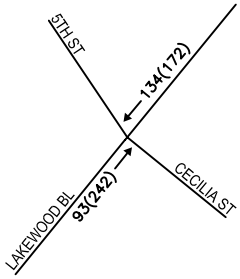
37. LAKEWOOD BL/I-5 SB RAMPS



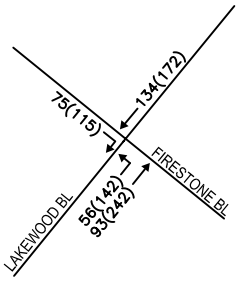
38. LAKEWOOD BL/GALLATIN RD



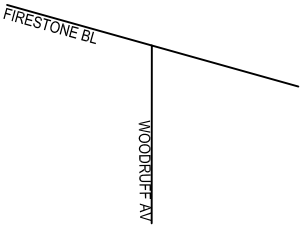
39. LAKEWOOD BL/FLORENCE AV



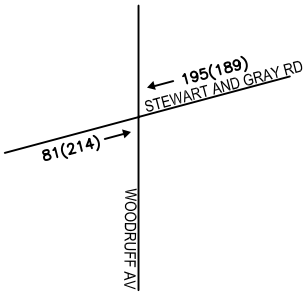
40. LAKEWOOD BL/5TH ST - CECILIA ST



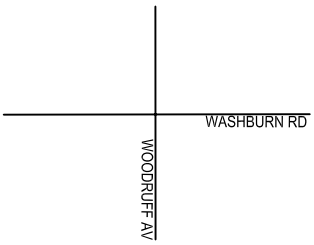
41. LAKEWOOD BL/FIRESTONE BL



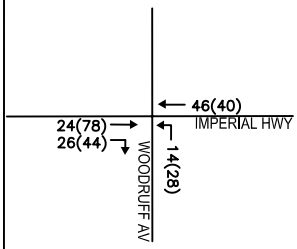
42. FIRESTONE BL/WOODRUFF AV



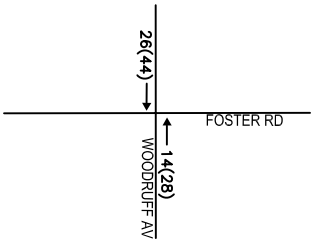
43. WOODRUFF AV/STEWART AND GRAY RD



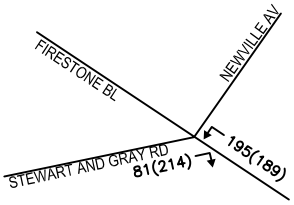
44. WOODRUFF AV/WASHBURN RD



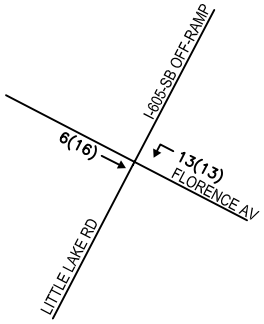
45. WOODRUFF AV/IMPERIAL HWY



46. WOODRUFF AV/FOSTER RD



47. STEWART AND GRAY RD - NEWVILLE AV/FIRESTONE BL



48. LITTLE LAKE RD - I-605 SB RAMPS/FLORENCE AV

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES

* - NEGLIGIBLE VOLUME

N
Not to scale

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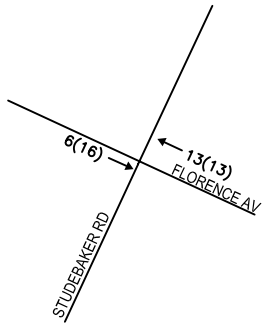
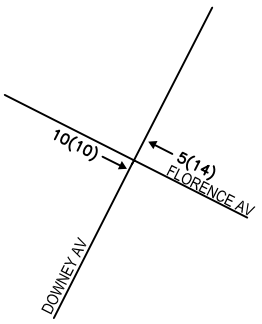
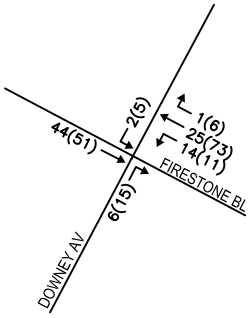
FIGURE 3C
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



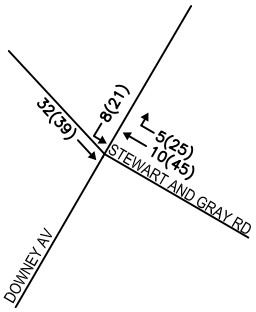
49. STUDEBAKER RD/FLORENCE AV



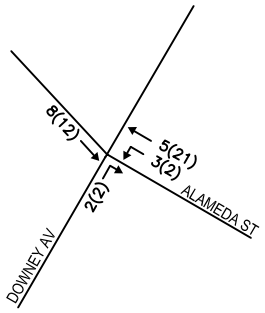
50. DOWNEY AV/FLORENCE AV



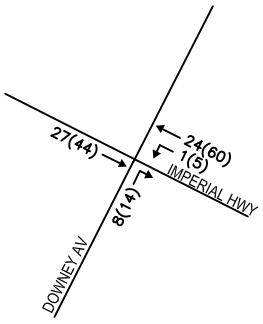
51. DOWNEY AV/FIRESTONE BL



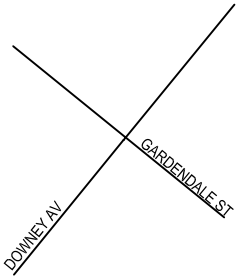
52. DOWNEY AV/STEWART AND GRAY RD



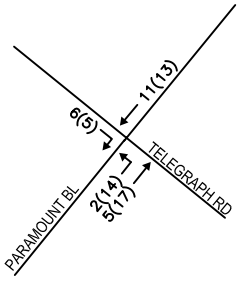
53. DOWNEY AV/ALAMEDA ST



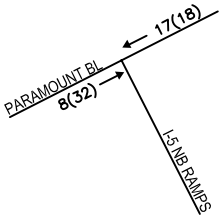
54. DOWNEY AV/IMPERIAL HWY



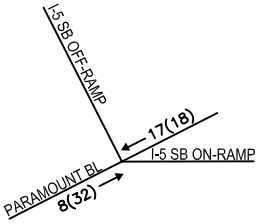
55. DOWNEY AV/GARDENDALE ST



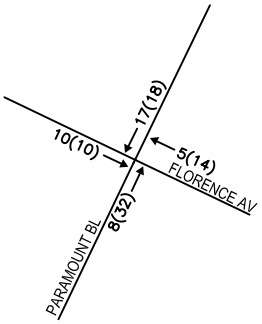
56. PARAMOUNT BL/TELEGRAPH RD



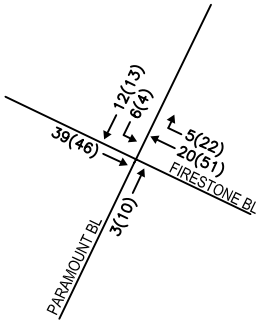
57. PARAMOUNT BL/I-5 NB RAMPS



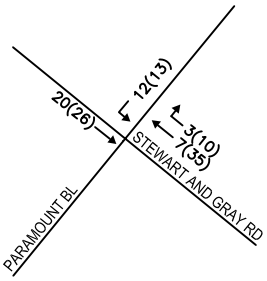
58. PARAMOUNT BL/I-5 SB RAMPS



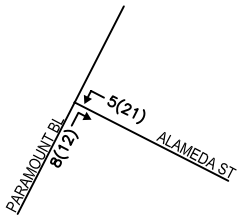
59. PARAMOUNT BL/FLORENCE AV



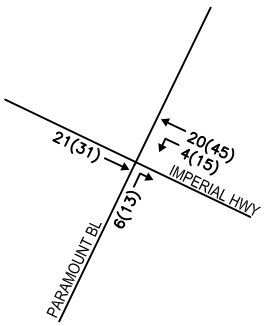
60. PARAMOUNT BL/FIRESTONE BL



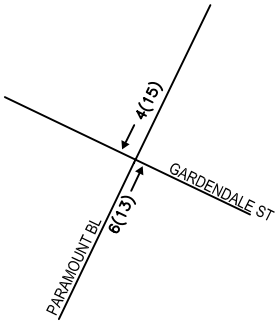
61. PARAMOUNT BL/STEWART AND GRAY RD



62. PARAMOUNT BL/ALAMEDA ST



63. PARAMOUNT BL/IMPERIAL HWY



64. PARAMOUNT BL/ GARDENDALE ST

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES

∗ - NEGLIGIBLE VOLUME

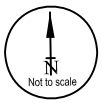


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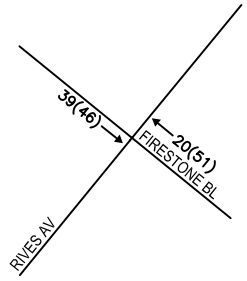
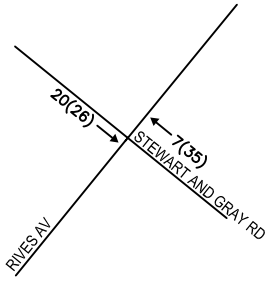
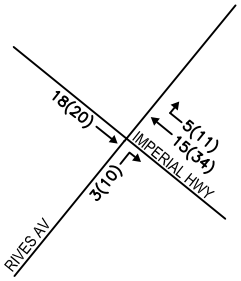
FIGURE 3D
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



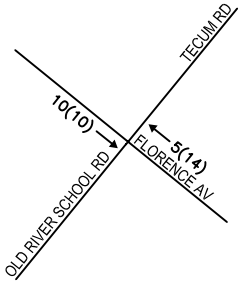
65. RIVES AV/FIRESTONE BL



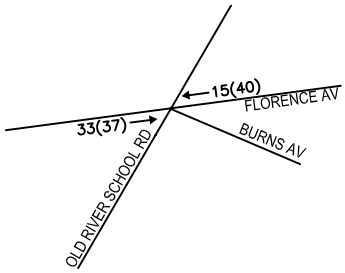
66. RIVES AV/STEWART AND GRAY RD



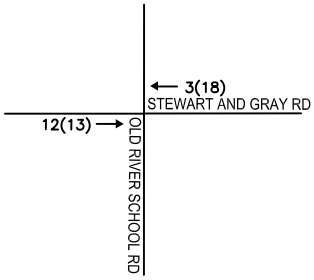
67. RIVES AV/IMPERIAL HWY



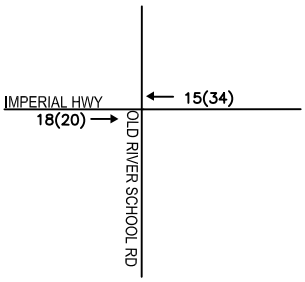
68. OLD RIVER SCHOOL RD - TECUM RD/FLORENCE AV



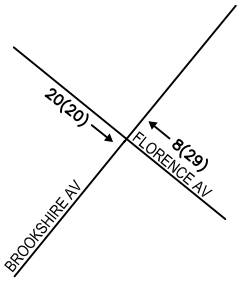
69. OLD RIVER SCHOOL RD/ FIRESTONE BL - BURNS AV



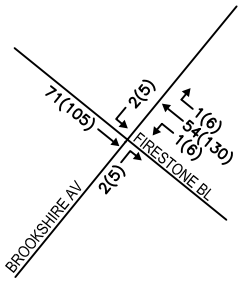
70. OLD RIVER SCHOOL RD/ STEWART AND GRAY RD



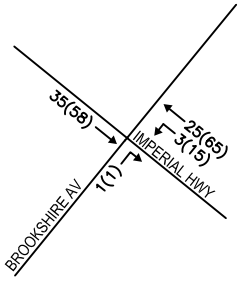
71. OLD RIVER SCHOOL RD/ IMPERIAL HWY



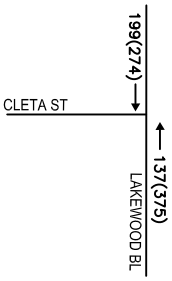
72. BROOKSHIRE AV/FLORENCE AV



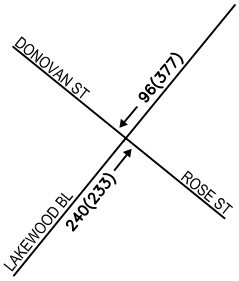
73. BROOKSHIRE AV/FIRESTONE BL



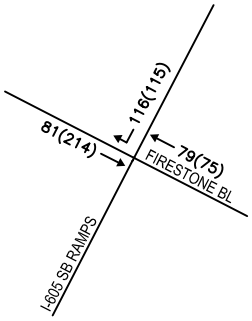
74. BROOKSHIRE AV/IMPERIAL HWY



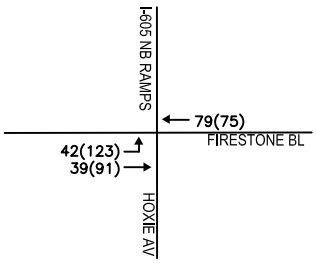
75. LAKEWOOD BL/CLETA ST



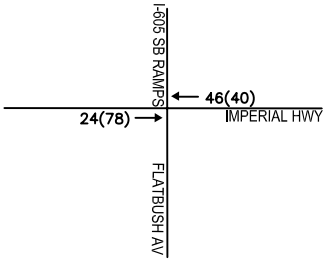
76. LAKEWOOD BL/DONOVAN ST - ROSE ST



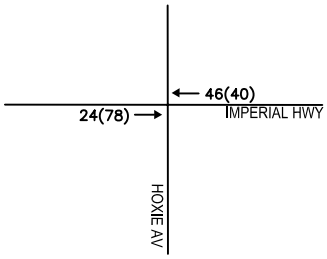
77. I-605 SB RAMPS/FIRESTONE BL



78. HOXIE AV - I-605 NB RAMPS/ FIRESTONE BL



79. FLATBUSH AV - I-605 SB RAMPS/ IMPERIAL HWY



80. HOXIE AV/IMPERIAL HWY

LEGEND:

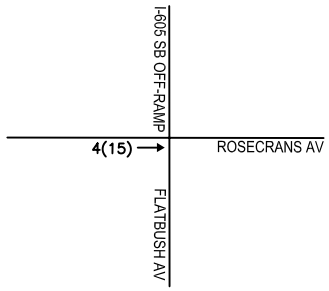
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES

* - NEGLIGIBLE VOLUME

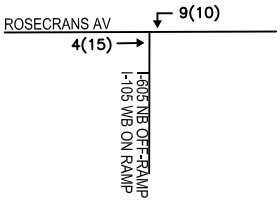
N
Not to scale

RAJU Associates, Inc.

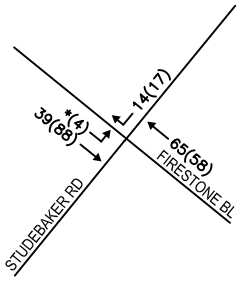
FIGURE 3E
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



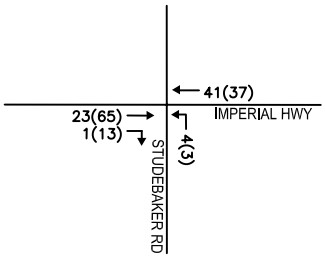
81. FLATBUSH AV - I-605 SB OFF-RAMP/ ROSECRANS AV



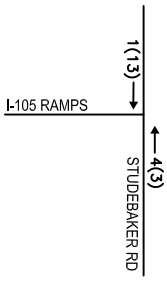
82. I-605 NB OFF-RAMP - I-105 WB ON-RAMP/ ROSECRANS AV



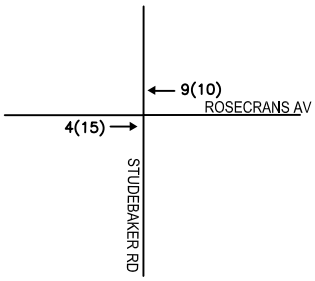
83. STUDEBAKER RD/FIRESTONE BL



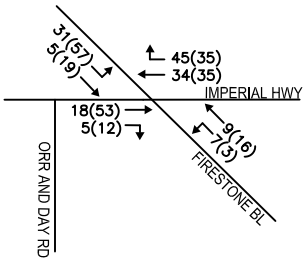
84. STUDEBAKER RD/IMPERIAL HWY



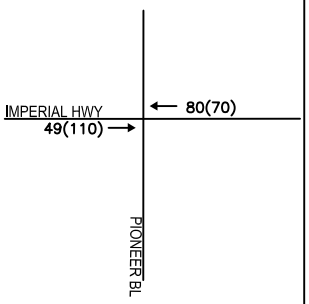
85. STUDEBAKER RD/ I-105 WB ON-RAMP - EB OFF-RAMP



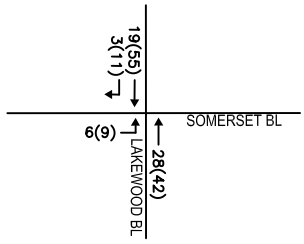
86. STUDEBAKER RD/ROSECRANS AV



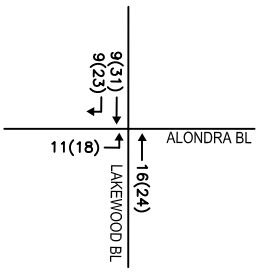
87. ORR AND DAY RD - FIRESTONE BL/IMPERIAL HWY



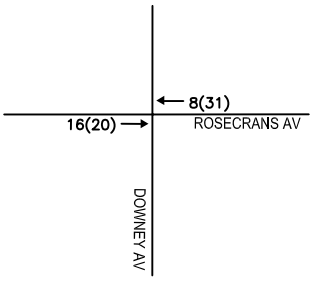
88. PIONEER BL/IMPERIAL HWY



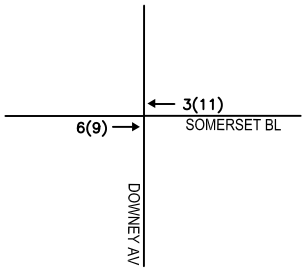
89. LAKEWOOD BL/SOMERSET BL



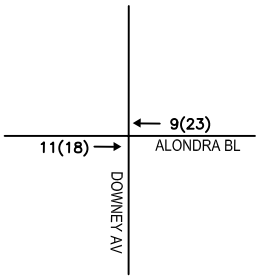
90. LAKEWOOD BL/ALONDRA BL



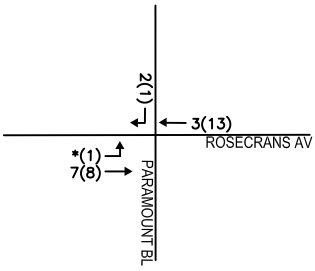
91. DOWNEY AV/ROSECRANS AV



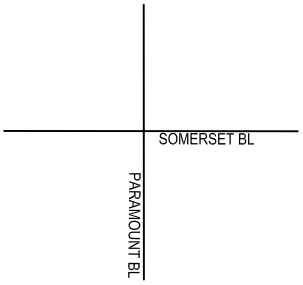
92. DOWNEY AV/SOMERSET BL



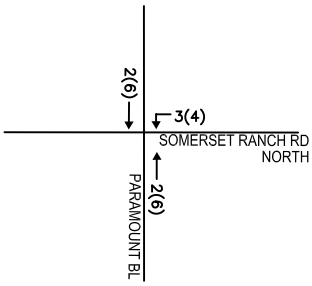
93. DOWNEY AV/ALONDRA BL



94. PARAMOUNT BL/ROSECRANS AV



95. PARAMOUNT BL/SOMERSET BL



96. PARAMOUNT BL/ SOMERSET RANCH RD NORTH

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES

* - NEGLIGIBLE VOLUME

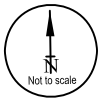


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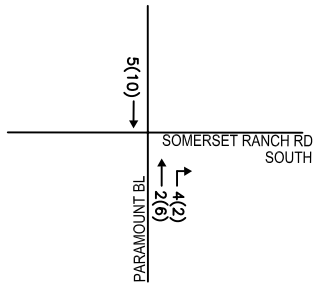
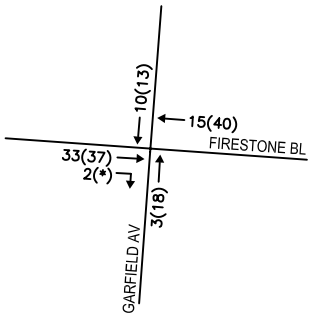
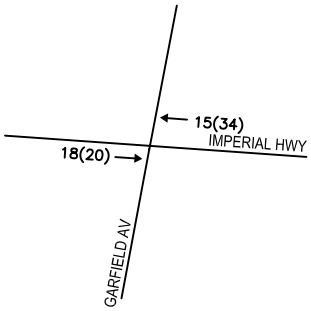
FIGURE 3F
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



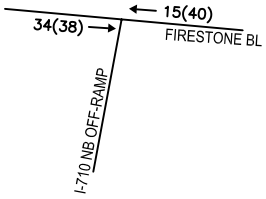
97. PARAMOUNT BL/
SOMERSET RANCH RD SOUTH



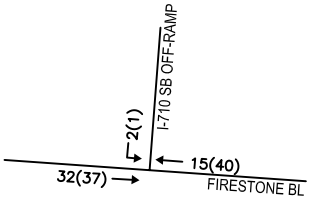
98. GARFIELD AV/FIRESTONE BL



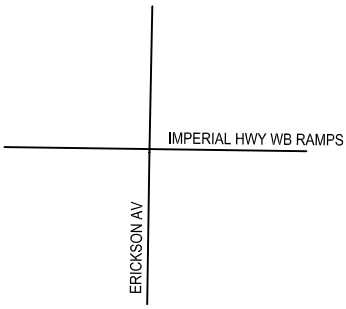
99. GARFIELD AV/IMPERIAL HWY



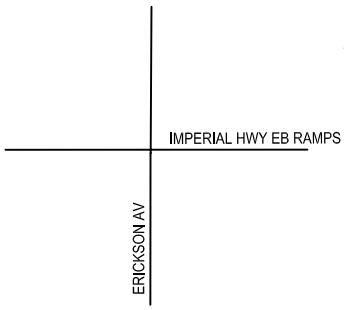
100. I-710 NB OFF-RAMP/
FIRESTONE BL



101. I-710 SB OFF-RAMP/FIRESTONE BL

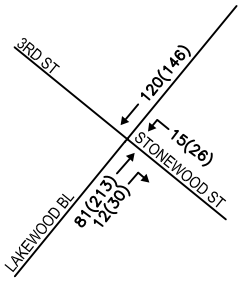


102. ERICKSON AV/
IMPERIAL HWY WB RAMPS



103. ERICKSON AV/
IMPERIAL HWY EB RAMPS

104. LAKEWOOD BL/CHEROKEE DR



105. LAKEWOOD BL/3RD ST - STONEWOOD ST

LEGEND:

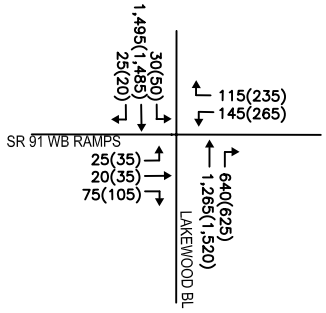
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES

* - NEGLIGIBLE VOLUME

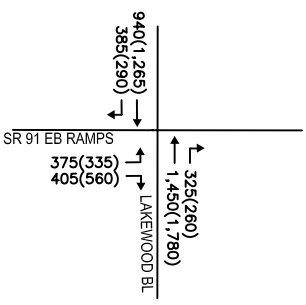
N
Not to scale

RAJU Associates, Inc.

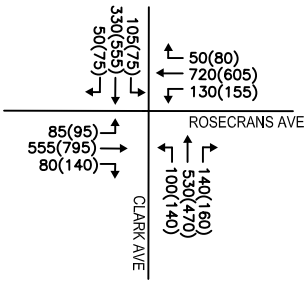
FIGURE 3G
NET PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



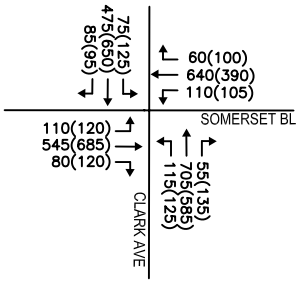
1. LAKEWOOD BL/SR-91 WB RAMPS



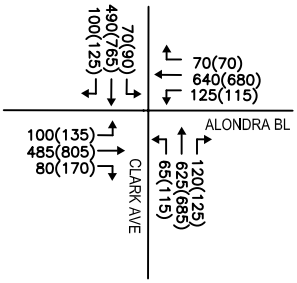
2. LAKEWOOD BL/SR-91 EASTBOUND RAMPS



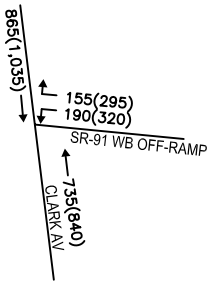
3. CLARK AV/ROSECRANS AV



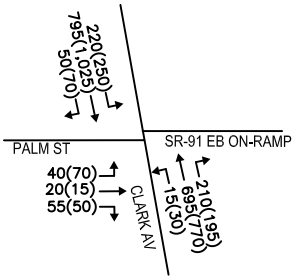
4. CLARK AV/SOMERSET BL



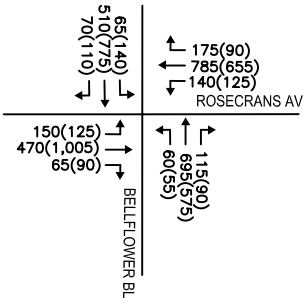
5. CLARK AV/ALONDRA BL



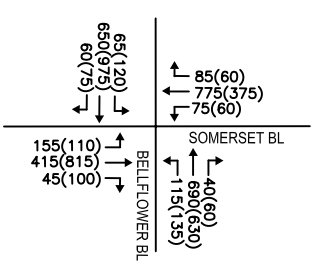
6. CLARK AV/SR-91 WB OFF-RAMP



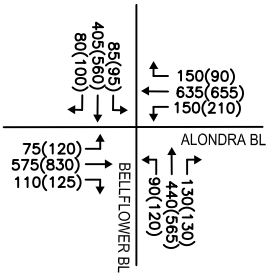
7. CLARK AV- PALM ST/SR-91 EB ON-RAMP



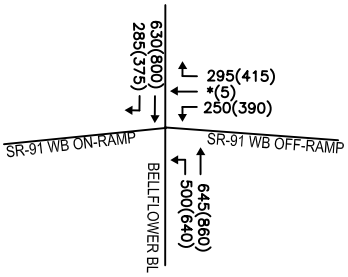
8. BELLFLOWER BL/ROSECRANS AV



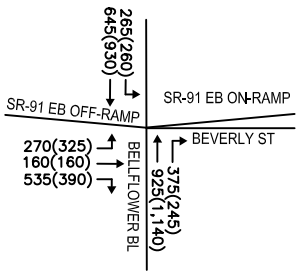
9. BELLFLOWER BL/SOMERSET BL



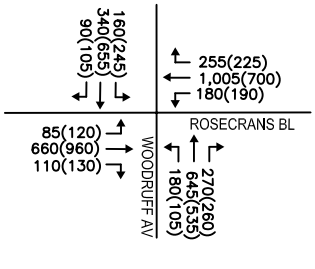
10. BELLFLOWER BL/ALONDRA BL



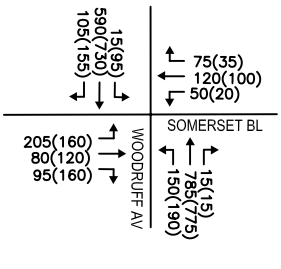
11. BELLFLOWER BL/SR-91 WB RAMPS



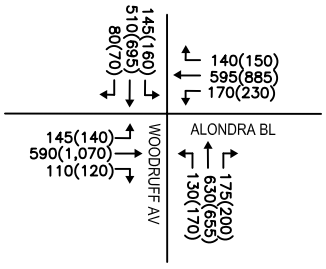
12. BELLFLOWER BL/BEVERLY ST - SR-91 EB-RAMPS



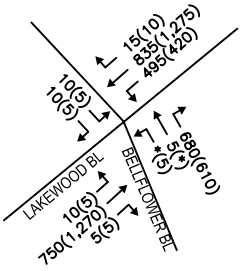
13. WOODRUFF AV/ ROSECRANS AV



14. WOODRUFF AV/ SOMERSET BL



15. WOODRUFF AV/ALONDRA BL



16. LAKEWOOD BL/BELLFLOWER BL

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

N
Not to scale

RAJU Associates, Inc.

FIGURE 4A
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES

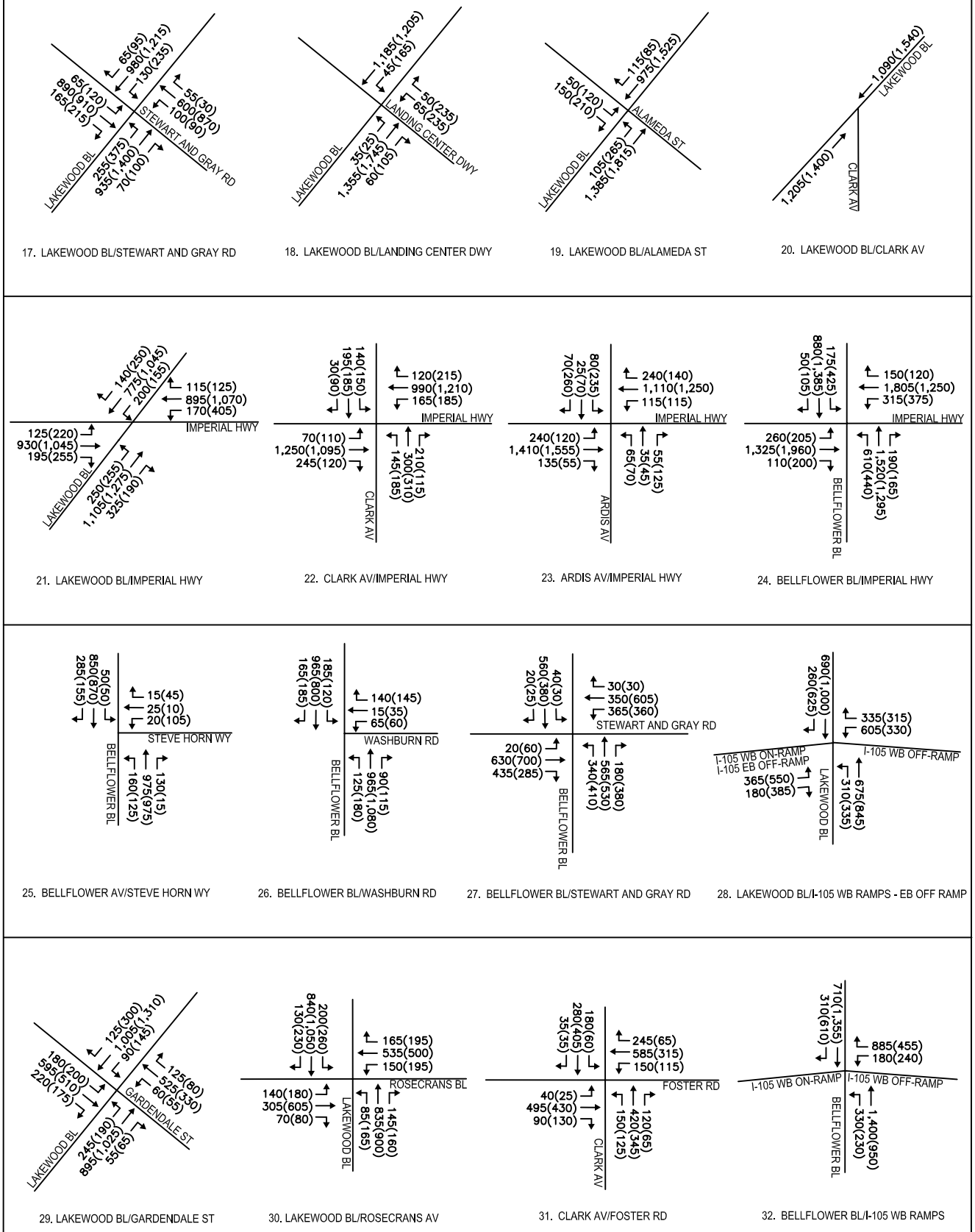
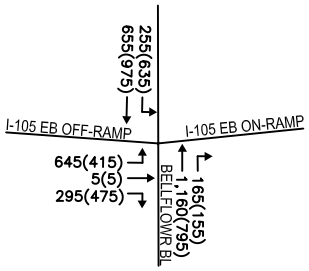
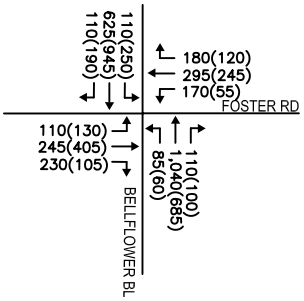


FIGURE 4B
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES

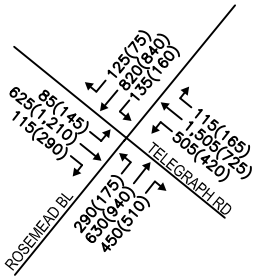
RAJU Associates, Inc.



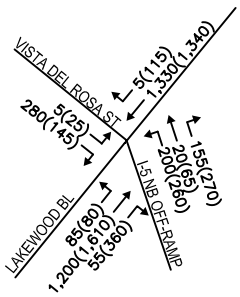
33. BELLFLOWER BL/I-105 EB RAMPS



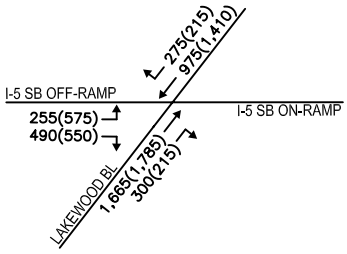
34. BELLFLOWER BL/FOSTER RD



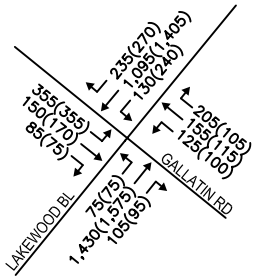
35. ROSEMEAD BL/TELEGRAPH RD



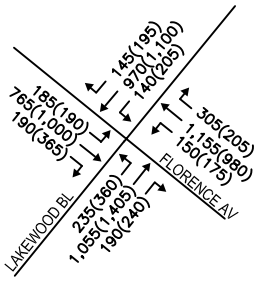
36. LAKEWOOD BL/VISTA DEL ROSA ST - I-5 NB OFF-RAMP



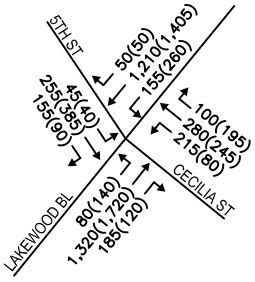
37. LAKEWOOD BL/I-5 SB RAMPS



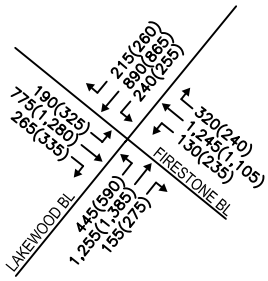
38. LAKEWOOD BL/GALLATIN RD



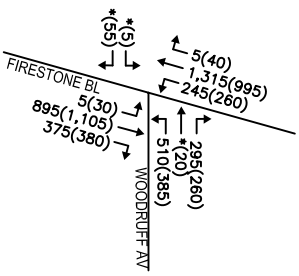
39. LAKEWOOD BL/FLORENCE AV



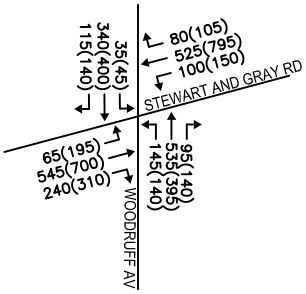
40. LAKEWOOD BL/5TH ST - CECILIA ST



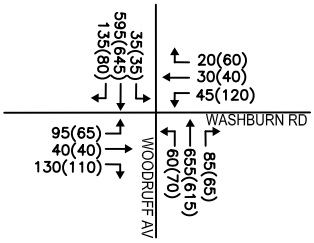
41. LAKEWOOD BL/FIRESTONE BL



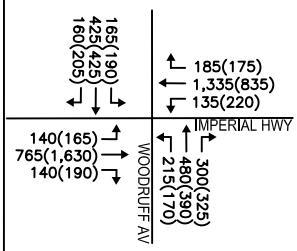
42. FIRESTONE BL/WOODRUFF AV



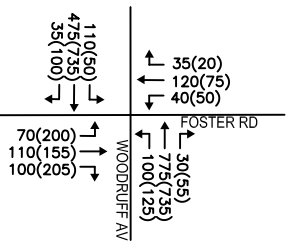
43. WOODRUFF AV/STEWART AND GRAY RD



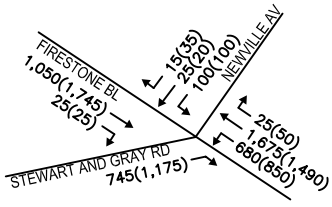
44. WOODRUFF AV/WASHBURN RD



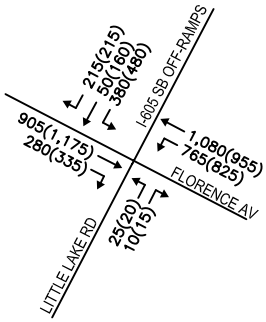
45. WOODRUFF AV/IMPERIAL HWY



46. WOODRUFF AV/FOSTER RD



47. STEWART AND GRAY RD - NEWVILLE AV/FIRESTONE BL



48. LITTLE LAKE RD - I-605 SB RAMPS/FLORENCE AV

LEGEND:

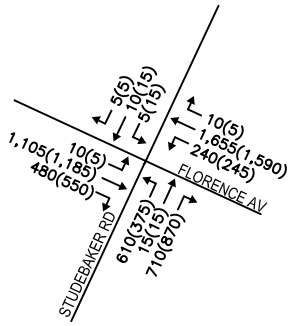
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

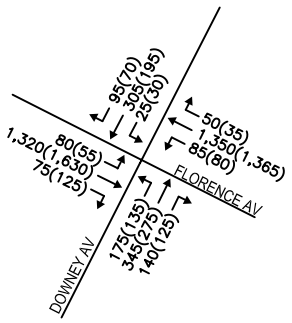
N
Not to scale

RAJU Associates, Inc.

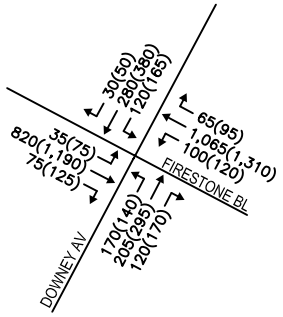
FIGURE 4C
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES



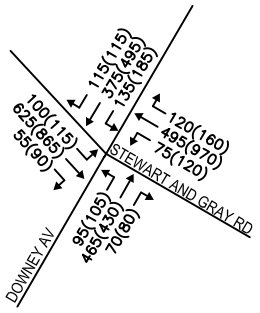
49. STUDEBAKER RD/FLORENCE AV



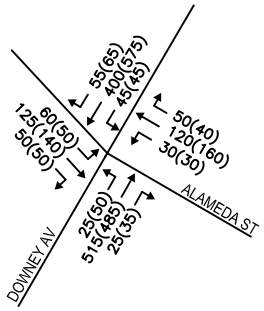
50. DOWNEY AV/FLORENCE AV



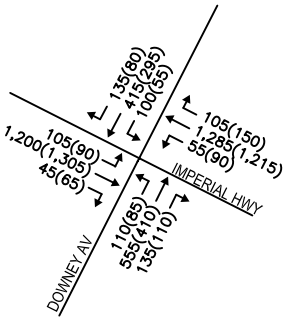
51. DOWNEY AV/FIRESTONE BL



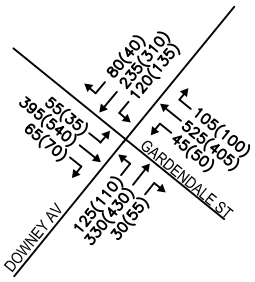
52. DOWNEY AV/STEWART AND GRAY RD



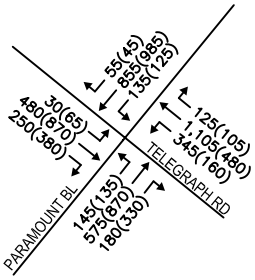
53. DOWNEY AV/ALAMEDA ST



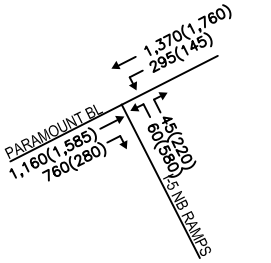
54. DOWNEY AV/IMPERIAL HWY



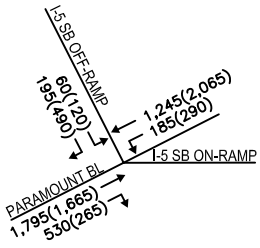
55. DOWNEY AV/GARDENDALE ST



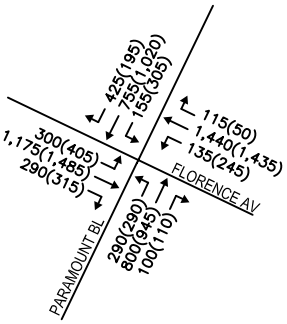
56. PARAMOUNT BL/TELEGRAPH RD



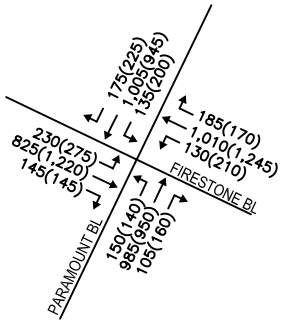
57. PARAMOUNT BL/I-5 NB RAMPS



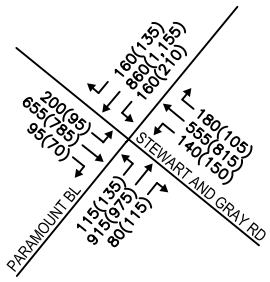
58. PARAMOUNT BL/I-5 SB RAMPS



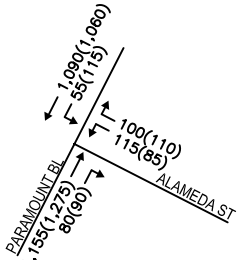
59. PARAMOUNT BL/FLORENCE AV



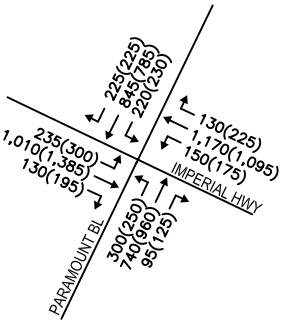
60. PARAMOUNT BL/FIRESTONE BL



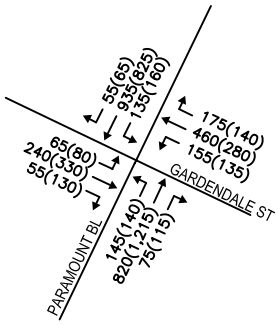
61. PARAMOUNT BL/STEWART AND GRAY RD



62. PARAMOUNT BL/ALAMEDA ST



63. PARAMOUNT BL/IMPERIAL HWY



64. PARAMOUNT BL/ GARDENDALE ST

LEGEND:

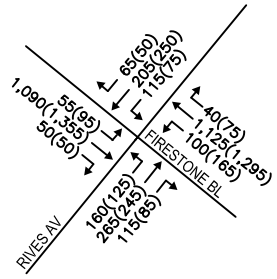
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

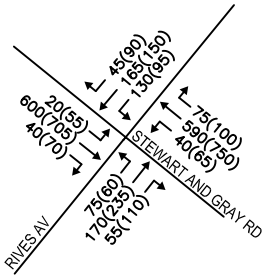
N
Not to scale

RAJU Associates, Inc.

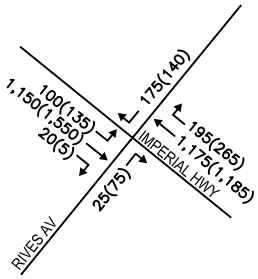
FIGURE 4D
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES



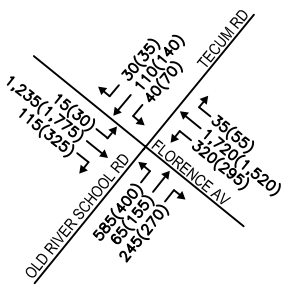
65. RIVES AV/FIRESTONE BL



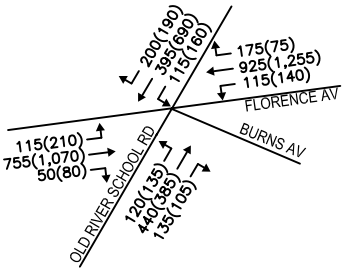
66. RIVES AV/STEWART AND GRAY RD



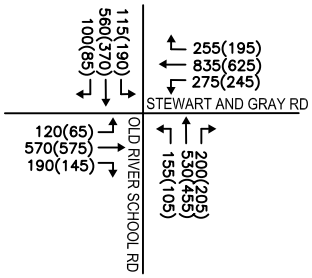
67. RIVES AV/IMPERIAL HWY



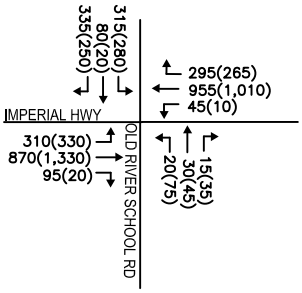
68. OLD RIVER SCHOOL RD - TECUM RD/FLORENCE AV



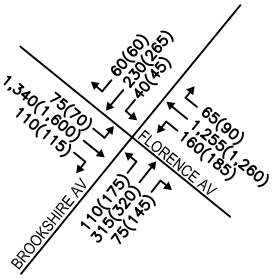
69. OLD RIVER SCHOOL RD/ FIRESTONE BL - BURNS AV



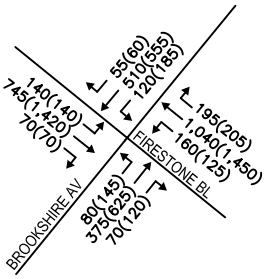
70. OLD RIVER SCHOOL RD/ STEWART AND GRAY RD



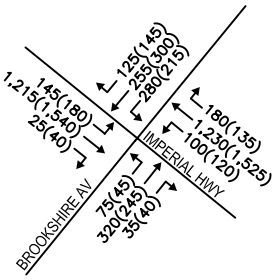
71. OLD RIVER SCHOOL RD/ IMPERIAL HWY



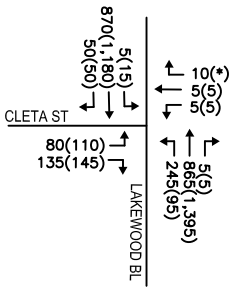
72. BROOKSHIRE AV/FLORENCE AV



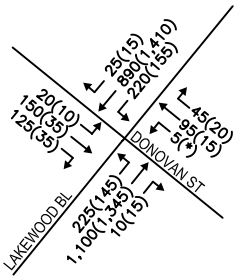
73. BROOKSHIRE AV/FIRESTONE BL



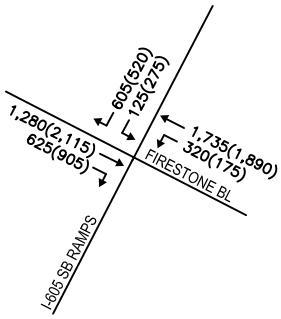
74. BROOKSHIRE AV/IMPERIAL HWY



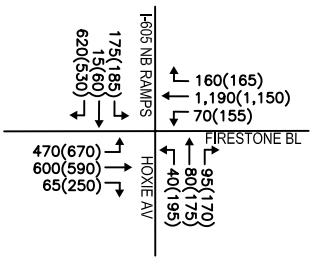
75. LAKEWOOD BL/CLETA ST



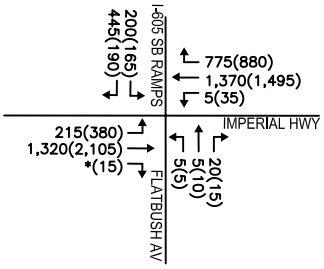
76. LAKEWOOD BL/DONOVAN ST



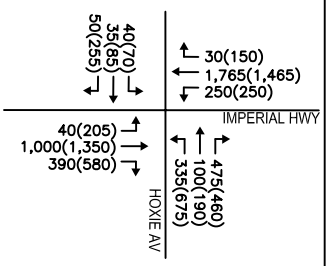
77. I-605 SB RAMPS/FIRESTONE BL



78. HOXIE AV - I-605 NB RAMPS/ FIRESTONE BL



79. FLATBUSH AV - I-605 SB RAMPS/ IMPERIAL HWY



80. HOXIE AV/IMPERIAL HWY

LEGEND:

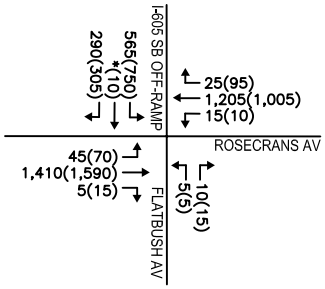
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

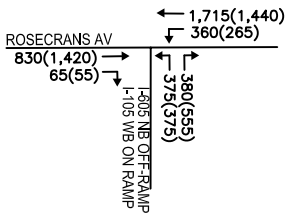
N
Not to scale

RAJU Associates, Inc.

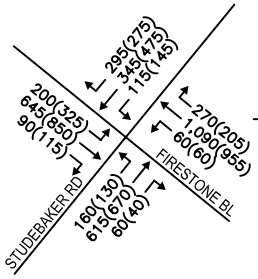
FIGURE 4E
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES



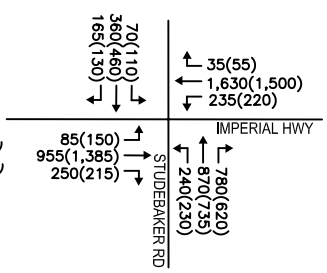
81. FLATBUSH AV - I-605 SB OFF-RAMP/ ROSECRANS AV



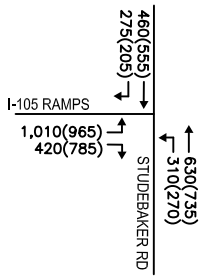
82. I-605 NB OFF-RAMP - I-105 WB ON-RAMP/ ROSECRANS AV



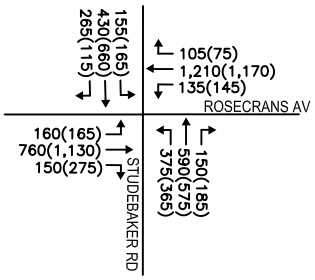
83. STUDEBAKER RD/FIRESTONE BL



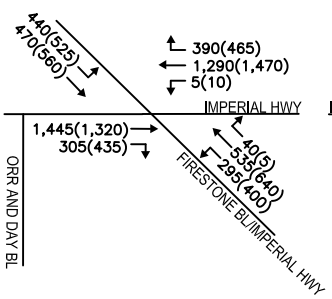
84. STUDEBAKER RD/IMPERIAL HWY



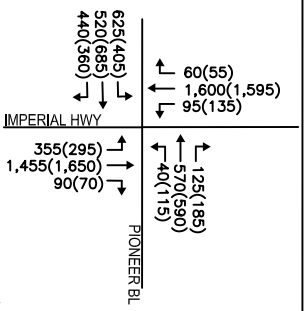
85. STUDEBAKER RD/ I-105 WB ON-RAMP AND EB OFF-RAMP



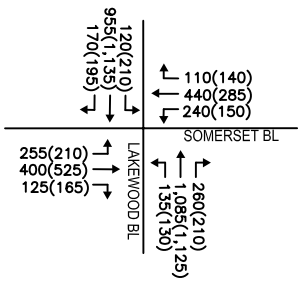
86. STUDEBAKER RD/ROSECRANS AV



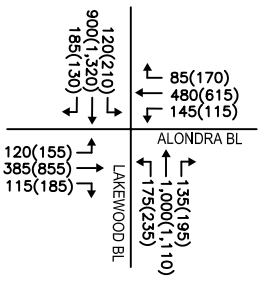
87. ORR AND DAY BL- FIRESTONE BL/ IMPERIAL HWY



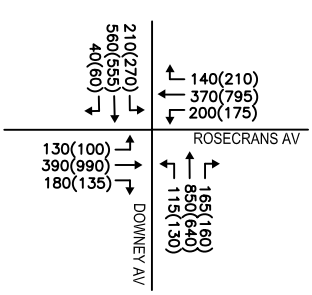
88. PIONEER BL/IMPERIAL HWY



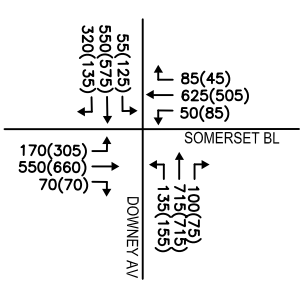
89. LAKEWOOD BL/SOMERSET BL



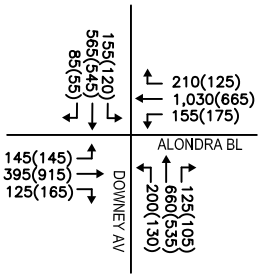
90. LAKEWOOD BL/ALONDRA BL



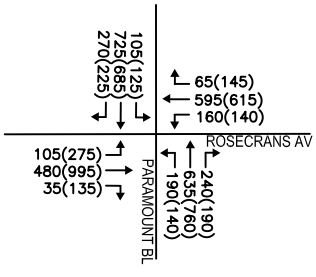
91. DOWNEY AV/ROSECRANS AV



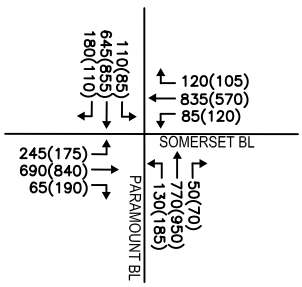
92. DOWNEY AV/SOMERSET BL



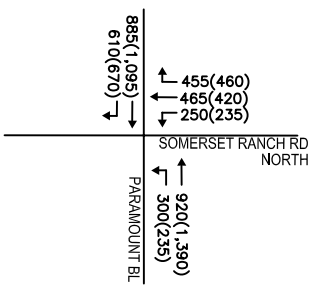
93. DOWNEY AV/ALONDRA BL



94. PARAMOUNT BL/ROSECRANS AV



95. PARAMOUNT BL/SOMERSET BL



96. PARAMOUNT BL/ SOMERSET RANCH RD NORTH

LEGEND:

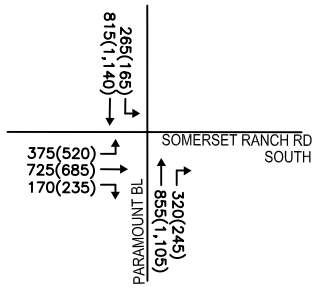
XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

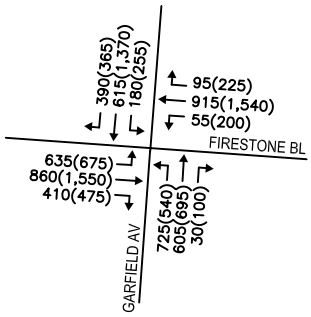
N
Not to scale

RAJU Associates, Inc.

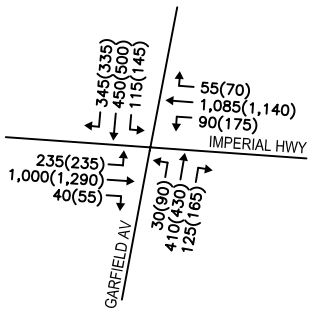
FIGURE 4F
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES



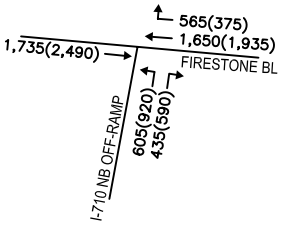
97. PARAMOUNT BL/
SOMERSET RANCH RD SOUTH



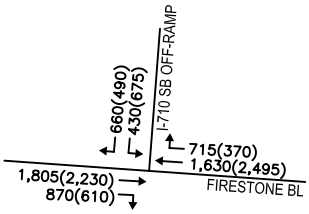
98. GARFIELD AV/FIRESTONE BL



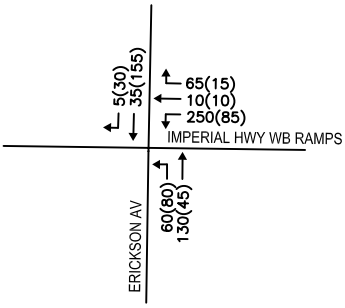
99. GARFIELD AV/IMPERIAL HWY



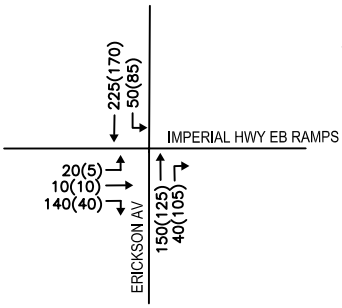
100. I-710 NB OFF-RAMP/
FIRESTONE BL



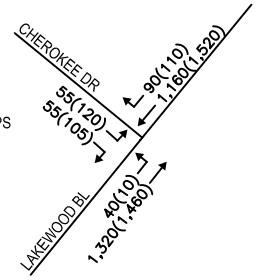
101. I-710 SB OFF-RAMP/FIRESTONE BL



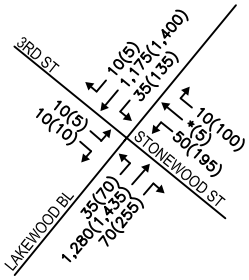
102. ERICKSON AV/
IMPERIAL HWY WB RAMPS



103. ERICKSON AV/
IMPERIAL HWY EB RAMPS



104. LAKEWOOD BL/CHEROKEE DR



105. LAKEWOOD BL/3RD ST - STONEWOOD ST

LEGEND:

XXX(XXX) - AM(PM) PEAK HOUR TRAFFIC VOLUMES ROUNDED TO THE NEAREST 5 VEHICLES

* - NEGLIGIBLE VOLUME

N
Not to scale

RAJU Associates, Inc.

FIGURE 4G
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES

TABLE 3
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
City of Downey								
23	Ardis Avenue & Imperial Highway	AM	0.600	A	0.638	B	0.038	No
		PM	0.708	C	0.762	C	0.054	No
33	Bellflower Boulevard & I-105 Eastbound Ramps	AM	0.704	C	0.760	C	0.056	No
		PM	0.780	C	0.900	D	0.120	No
32	Bellflower Boulevard & I-105 Westbound Ramps	AM	0.762	C	0.814	D	0.052	No
		PM	0.730	C	0.814	D	0.084	No
34	Bellflower Boulevard & Foster Road	AM	0.770	C	0.782	C	0.012	No
		PM	0.677	B	0.698	B	0.021	No
24	Bellflower Boulevard & Imperial Highway	AM	1.244	F	1.327	F	0.083	**Yes**
		PM	1.313	F	1.450	F	0.137	**Yes**
25	Bellflower Boulevard & Congressman Steve Horn Way	AM	0.506	A	0.571	A	0.065	No
		PM	0.573	A	0.726	C	0.153	No
27	Bellflower Boulevard & Stewart and Gray Road	AM	0.786	C	0.919	E	0.133	No
		PM	0.793	C	0.930	E	0.137	No
26	Bellflower Boulevard & Washburn Road	AM	0.563	A	0.684	B	0.121	No
		PM	0.541	A	0.843	D	0.302	No
73	Brookshire Avenue & Firestone Boulevard	AM	0.621	B	0.632	B	0.011	No
		PM	0.809	D	0.841	D	0.032	No
72	Brookshire Avenue & Florence Avenue	AM	0.658	B	0.662	B	0.004	No
		PM	0.779	C	0.783	C	0.004	No
74	Brookshire Avenue & Imperial Highway	AM	0.767	C	0.772	C	0.005	No
		PM	0.770	C	0.783	C	0.013	No
31	Clark Avenue & Foster Road	AM	0.703	C	0.715	C	0.012	No
		PM	0.548	A	0.570	A	0.022	No
22	Clark Avenue & Imperial Highway	AM	0.726	C	0.760	C	0.034	No
		PM	0.630	B	0.696	B	0.066	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
53	Downey Avenue & Alameda Street	AM	0.422	A	0.428	A	0.006	No
		PM	0.468	A	0.482	A	0.014	No
51	Downey Avenue & Firestone Boulevard	AM	0.599	A	0.622	B	0.023	No
		PM	0.809	D	0.834	D	0.025	No
50	Downey Avenue & Florence Avenue	AM	0.677	B	0.678	B	0.001	No
		PM	0.683	B	0.685	B	0.002	No
55	Downey Avenue & Gardendale Street	AM	0.518	A	0.518	A	0.000	No
		PM	0.556	A	0.556	A	0.000	No
54	Downey Avenue & Imperial Highway	AM	0.728	C	0.736	C	0.008	No
		PM	0.621	B	0.637	B	0.016	No
52	Downey Avenue & Stewart and Gray Road	AM	0.596	A	0.611	B	0.015	No
		PM	0.764	C	0.799	C	0.035	No
103	Erickson Avenue & Imperial Highway Eastbound Ramps [3]	AM	8.9 sec	A	8.9 sec	A	-	No
		PM	8.3 sec	A	8.3 sec	A	-	No
		AM	0.286	[4]	0.286	[4]	0.000	
		PM	0.256	[4]	0.256	[4]	0.000	
102	Erickson Avenue & Imperial Highway Westbound Ramps [3]	AM	10.1 sec	B	10.1 sec	B	-	No
		PM	8.6 sec	A	8.6 sec	A	-	No
		AM	0.308	[4]	0.308	[4]	0.000	
		PM	0.241	[4]	0.241	[4]	0.000	
105	Lakewood Boulevard & 3rd Street-Stonewood Street	AM	0.404	A	0.430	A	0.026	No
		PM	0.555	A	0.617	B	0.062	No
40	Lakewood Boulevard & 5th Street	AM	0.843	D	0.873	D	0.030	No
		PM	0.923	E	0.999	E	0.076	No
19	Lakewood Boulevard & Alameda Street	AM	0.382	A	0.424	A	0.042	No
		PM	0.563	A	0.676	B	0.113	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
16	Lakewood Boulevard & Bellflower Boulevard	AM	0.596	A	0.631	B	0.035	No
		PM	0.606	B	0.692	B	0.086	No
104	Lakewood Boulevard & Cherokee Drive	AM	0.520	A	0.548	A	0.028	No
		PM	0.643	B	0.689	B	0.046	No
20	Lakewood Boulevard & Clark Avenue	AM	0.426	A	0.469	A	0.043	No
		PM	0.483	A	0.560	A	0.077	No
75	Lakewood Boulevard & Cleta Street	AM	0.469	A	0.510	A	0.041	No
		PM	0.431	A	0.488	A	0.057	No
76	Lakewood Boulevard & Donovan Street	AM	0.605	B	0.655	B	0.050	No
		PM	0.481	A	0.538	A	0.057	No
41	Lakewood Boulevard & Firestone Boulevard [1]	AM	0.825	D	0.888	D	0.063	No
		PM	0.873	D	0.997	E	0.124	No
39	Lakewood Boulevard & Florence Avenue	AM	0.875	D	0.900	D	0.025	No
		PM	0.938	E	0.990	E	0.052	No
38	Lakewood Boulevard & Gallatin Road	AM	1.091	F	1.111	F	0.020	**Yes**
		PM	1.081	F	1.130	F	0.049	**Yes**
29	Lakewood Boulevard & Gardendale Street	AM	0.911	E	0.923	E	0.012	No
		PM	0.940	E	0.975	E	0.035	No
28	Lakewood Boulevard & I-105 Westbound Ramps/Eastbound Off-Ramp	AM	0.697	B	0.758	C	0.061	No
		PM	0.849	D	0.917	E	0.068	No
37	Lakewood Boulevard & I-5 Southbound Ramps	AM	0.694	B	0.753	C	0.059	No
		PM	0.721	C	0.815	D	0.094	No
21	Lakewood Boulevard & Imperial Highway	AM	0.714	C	0.766	C	0.052	No
		PM	0.850	D	0.929	E	0.079	No
18	Lakewood Boulevard & Landing Center Driveway	AM	0.414	A	0.449	A	0.035	No
		PM	0.610	B	0.732	C	0.122	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
30	Lakewood Boulevard & Rosecrans Avenue [1]	AM	0.814	D	0.835	D	0.021	No
		PM	0.893	D	0.922	E	0.029	No
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.869	D	0.066	No
		PM	0.895	D	1.017	F	0.122	**Yes**
36	Lakewood Boulevard & Vista Del Rosa Street/I-5 Northbound Off-Ramp	AM	0.726	C	0.745	C	0.019	No
		PM	0.917	E	0.965	E	0.048	No
48	Little Lake Road/I-605 Southbound Ramps & Florence Avenue	AM	0.796	C	0.802	D	0.006	No
		PM	0.951	E	0.958	E	0.007	No
69	Old River School Road & Firestone Boulevard & Burns Avenue	AM	0.719	C	0.724	C	0.005	No
		PM	0.970	E	0.983	E	0.013	No
71	Old River School Road & Imperial Highway	AM	0.774	C	0.777	C	0.003	No
		PM	0.776	C	0.783	C	0.007	No
70	Old River School Road & Stewart and Gray Road	AM	0.749	C	0.753	C	0.004	No
		PM	0.751	C	0.755	C	0.004	No
68	Old River School Road/Tecum Road & Florence Avenue	AM	0.859	D	0.861	D	0.002	No
		PM	0.986	E	0.988	E	0.002	No
62	Paramount Boulevard & Alameda Street	AM	0.652	B	0.657	B	0.005	No
		PM	0.701	C	0.718	C	0.017	No
60	Paramount Boulevard & Firestone Boulevard	AM	0.890	D	0.898	D	0.008	No
		PM	1.014	F	1.033	F	0.019	No
59	Paramount Boulevard & Florence Avenue	AM	0.943	E	0.949	E	0.006	No
		PM	1.073	F	1.081	F	0.008	No
64	Paramount Boulevard & Gardendale Street	AM	0.664	B	0.666	B	0.002	No
		PM	0.762	C	0.766	C	0.004	No
57	Paramount Boulevard & I-5 Northbound Ramps	AM	0.760	C	0.760	C	0.000	No
		PM	1.037	F	1.047	F	0.010	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
58	Paramount Boulevard & I-5 Southbound Ramps [2]	AM	*** sec	F	*** sec	F	-	No
		PM	*** sec	F	*** sec	F	-	No
		AM	0.896	[4]	0.899	[4]	0.003	
		PM	1.099	[4]	1.109	[4]	0.010	
63	Paramount Boulevard & Imperial Highway	AM	0.817	D	0.821	D	0.004	No
		PM	0.969	E	0.984	E	0.015	No
61	Paramount Boulevard & Stewart and Gray Road	AM	0.854	D	0.865	D	0.011	No
		PM	0.939	E	0.948	E	0.009	No
56	Paramount Boulevard & Telegraph Road	AM	0.837	D	0.846	D	0.009	No
		PM	0.854	D	0.868	D	0.014	No
65	Rives Avenue & Firestone Boulevard	AM	0.689	B	0.697	B	0.008	No
		PM	0.743	C	0.752	C	0.009	No
67	Rives Avenue & Imperial Highway [2]	AM	15.0 sec	B	15.1 sec	C	-	No
		PM	15.0 sec	B	15.5 sec	C	-	No
		AM	0.492	[4]	0.496	[4]	0.004	
		PM	0.516	[4]	0.531	[4]	0.015	
66	Rives Avenue & Stewart and Gray Road	AM	0.586	A	0.593	A	0.007	No
		PM	0.703	C	0.714	C	0.011	No
35	Rosemead Boulevard & Telegraph Road [1]	AM	1.040	F	1.048	F	0.008	No
		PM	1.216	F	1.229	F	0.013	No
47	Stewart and Gray Road & Firestone Boulevard	AM	0.612	B	0.644	B	0.032	No
		PM	0.854	D	0.928	E	0.074	No
49	Studebaker Road & Florence Avenue	AM	0.850	D	0.854	D	0.004	No
		PM	0.843	D	0.847	D	0.004	No
42	Woodruff Avenue & Firestone Boulevard (E)	AM	0.618	B	0.618	B	0.000	No
		PM	0.672	B	0.672	B	0.000	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
46	Woodruff Avenue & Foster Road	AM	0.506	A	0.511	A	0.005	No
		PM	0.555	A	0.568	A	0.013	No
45	Woodruff Avenue & Imperial Highway	AM	0.754	C	0.773	C	0.019	No
		PM	0.831	D	0.857	D	0.026	No
43	Woodruff Avenue & Stewart and Gray Road	AM	0.528	A	0.553	A	0.025	No
		PM	0.658	B	0.717	C	0.059	No
44	Woodruff Avenue & Washburn Road	AM	0.461	A	0.461	A	0.000	No
		PM	0.511	A	0.511	A	0.000	No
City of Bellflower								
10	Bellflower Boulevard & Alondra Boulevard	AM	0.639	B	0.641	B	0.002	No
		PM	0.809	D	0.810	D	0.001	No
12	Bellflower Boulevard & Beverly Street/SR-91 Eastbound Ramps	AM	0.886	D	0.886	D	0.000	No
		PM	0.864	D	0.864	D	0.000	No
9	Bellflower Boulevard & Compton Boulevard	AM	0.758	C	0.760	C	0.002	No
		PM	0.832	D	0.837	D	0.005	No
8	Bellflower Boulevard & Rosecrans Avenue	AM	0.782	C	0.786	C	0.004	No
		PM	0.827	D	0.832	D	0.005	No
11	Bellflower Boulevard & SR-91 Westbound Ramps	AM	0.793	C	0.793	C	0.000	No
		PM	1.010	F	1.010	F	0.000	No
5	Clark Avenue & Alondra Boulevard	AM	0.658	B	0.663	B	0.005	No
		PM	0.821	D	0.829	D	0.008	No
4	Clark Avenue & Compton Boulevard	AM	0.662	B	0.672	B	0.010	No
		PM	0.713	C	0.730	C	0.017	No
7	Clark Avenue & Palm St/SR-91 Eastbound On-Ramp	AM	0.596	A	0.598	A	0.002	No
		PM	0.649	B	0.652	B	0.003	No
3	Clark Avenue & Rosecrans Avenue	AM	0.580	A	0.589	A	0.009	No
		PM	0.659	B	0.676	B	0.017	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
6	Clark Avenue & SR-91 Westbound Off-Ramp	AM	0.488	A	0.490	A	0.002	No
		PM	0.634	B	0.637	B	0.003	No
90	Lakewood Boulevard & Alondra Boulevard	AM	0.735	C	0.738	C	0.003	No
		PM	1.046	F	1.055	F	0.009	No
89	Lakewood Boulevard & Compton Boulevard/Somerset Boulevard	AM	0.916	E	0.929	E	0.013	No
		PM	0.944	E	0.958	E	0.014	No
1	Lakewood Boulevard & Park Street/SR-91 Westbound Ramps	AM	0.650	B	0.651	B	0.001	No
		PM	0.826	D	0.829	D	0.003	No
2	Lakewood Boulevard & SR-91 Eastbound Ramps	AM	0.649	B	0.650	B	0.001	No
		PM	0.730	C	0.732	C	0.002	No
15	Woodruff Avenue & Alondra Boulevard	AM	0.763	C	0.766	C	0.003	No
		PM	0.974	E	0.982	E	0.008	No
14	Woodruff Avenue & Compton Boulevard	AM	0.593	A	0.600	A	0.007	No
		PM	0.629	B	0.638	B	0.009	No
13	Woodruff Avenue & Rosecrans Avenue	AM	0.840	D	0.847	D	0.007	No
		PM	0.860	D	0.879	D	0.019	No
City of Norwalk								
87	Firestone Boulevard & Imperial Highway/Orr and Day Road [1]	AM	0.763	C	0.777	C	0.014	No
		PM	0.813	D	0.843	D	0.030	No
79	Flatbush Avenue/I-605 Southbound Ramps & Imperial Highway	AM	0.784	C	0.791	C	0.007	No
		PM	0.833	D	0.839	D	0.006	No
81	Flatbush Avenue/I-605 Southbound Off-Ramp & Rosecrans Avenue	AM	0.757	C	0.758	C	0.001	No
		PM	0.884	D	0.888	D	0.004	No
78	Hoxie Avenue/I-605 Northbound Ramps & Firestone Boulevard	AM	0.911	E	0.937	E	0.026	No
		PM	0.908	E	0.935	E	0.027	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
80	Hoxie Avenue & Imperial Highway	AM	0.779	C	0.784	C	0.005	No
		PM	1.001	F	1.018	F	0.017	No
82	I-605 Northbound Off-Ramp/I-105 Westbound On-Ramp & Rosecrans Avenue	AM	0.714	C	0.718	C	0.004	No
		PM	0.895	D	0.899	D	0.004	No
77	I-605 Southbound Ramps & Firestone Boulevard	AM	0.844	D	0.888	D	0.044	No
		PM	0.977	E	1.044	F	0.067	**Yes**
88	Pioneer Boulevard & Imperial Highway	AM	1.035	F	1.052	F	0.017	No
		PM	0.928	E	0.943	E	0.015	No
83	Studebaker Road & Firestone Boulevard	AM	0.810	D	0.831	D	0.021	No
		PM	0.878	D	0.899	D	0.021	No
84	Studebaker Road & Imperial Highway	AM	0.874	D	0.883	D	0.009	No
		PM	0.831	D	0.844	D	0.013	No
86	Studebaker Road & Rosecrans Avenue	AM	0.839	D	0.841	D	0.002	No
		PM	0.973	E	0.978	E	0.005	No
85	Studebaker Road & I-105 Westbound On-Ramp/Eastbound Off-Ramp	AM	0.875	D	0.876	D	0.001	No
		PM	0.837	D	0.841	D	0.004	No
City of Paramount								
93	Downey Avenue & Alondra Boulevard	AM	0.918	E	0.921	E	0.003	No
		PM	0.817	D	0.822	D	0.005	No
91	Downey Avenue & Rosecrans Avenue	AM	1.007	F	1.012	F	0.005	No
		PM	1.080	F	1.086	F	0.006	No
92	Downey Avenue & Somerset Boulevard	AM	0.785	C	0.786	C	0.001	No
		PM	0.787	C	0.791	C	0.004	No
94	Paramount Boulevard & Rosecrans Avenue	AM	0.778	C	0.780	C	0.002	No
		PM	0.869	D	0.872	D	0.003	No
95	Paramount Boulevard & Somerset Boulevard	AM	0.890	D	0.890	D	0.000	No
		PM	0.916	E	0.916	E	0.000	No

TABLE 3 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
	City of South Gate							
98	Garfield Avenue & Firestone Boulevard	AM	0.948	E	0.954	E	0.006	No
		PM	1.260	F	1.273	F	0.013	No
99	Garfield Avenue & Imperial Highway	AM	0.690	B	0.694	B	0.004	No
		PM	0.728	C	0.735	C	0.007	No
100	I-710 Northbound Off-Ramp & Firestone Boulevard	AM	0.820	D	0.825	D	0.005	No
		PM	1.013	F	1.025	F	0.012	No
101	I-710 Southbound Off-Ramp & Firestone Boulevard	AM	0.857	D	0.864	D	0.007	No
		PM	1.101	F	1.114	F	0.013	No
96	Paramount Boulevard & Somerset Ranch Road North	AM	0.875	D	0.875	D	0.000	No
		PM	0.891	D	0.891	D	0.000	No
97	Paramount Boulevard & Somerset Ranch Road South	AM	0.738	C	0.739	C	0.001	No
		PM	0.828	D	0.830	D	0.002	No

*** Intersection delay cannot be calculated.
[1] Los Angeles County Congestion Management Program (CMP) monitoring location.
[2] Unsignalized intersections - stop-controlled on all approach.
[3] Unsignalized intersections - stop-controlled on minor approach(es).

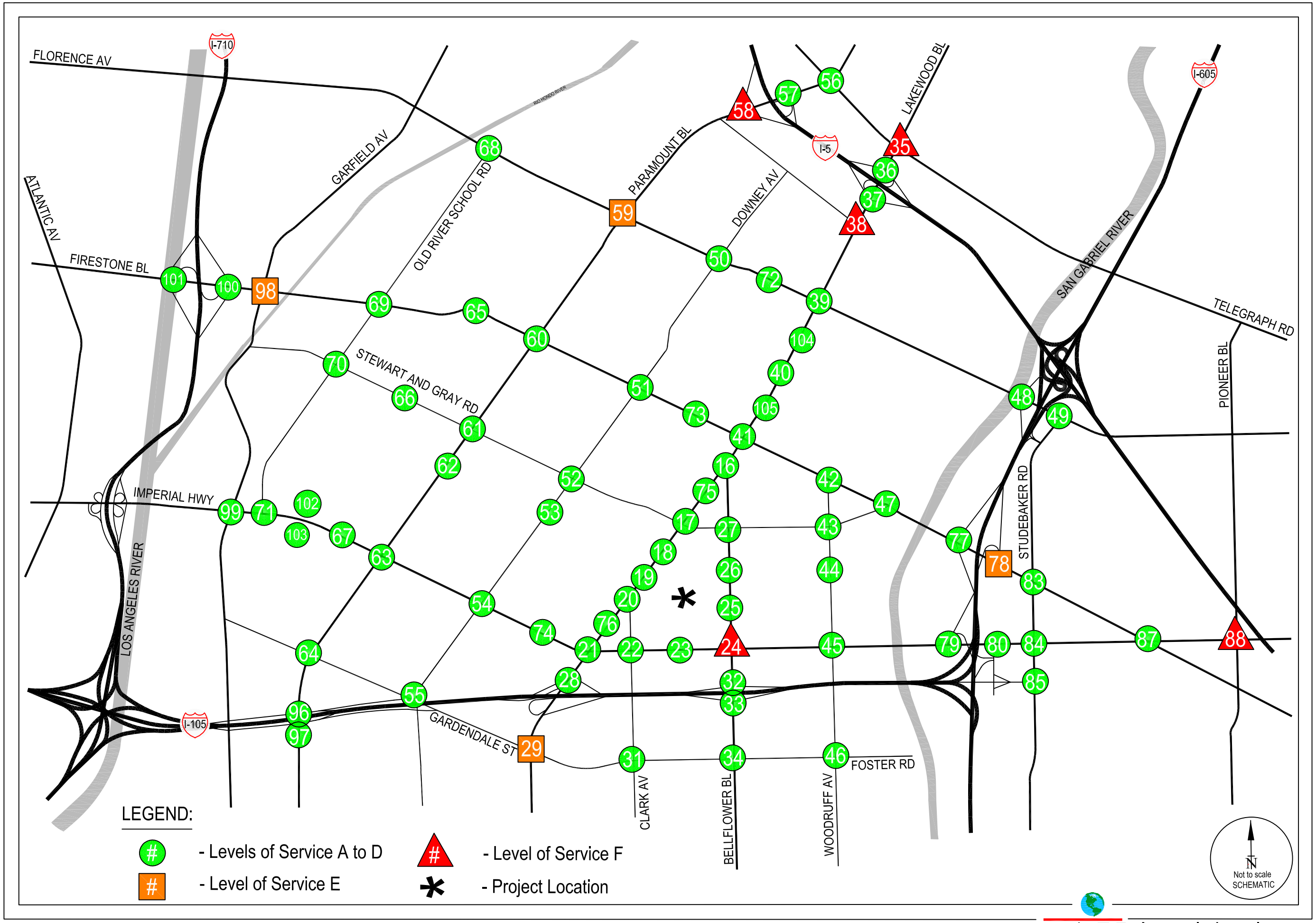


FIGURE 5A
FUTURE (2020) WITHOUT PROJECT AM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

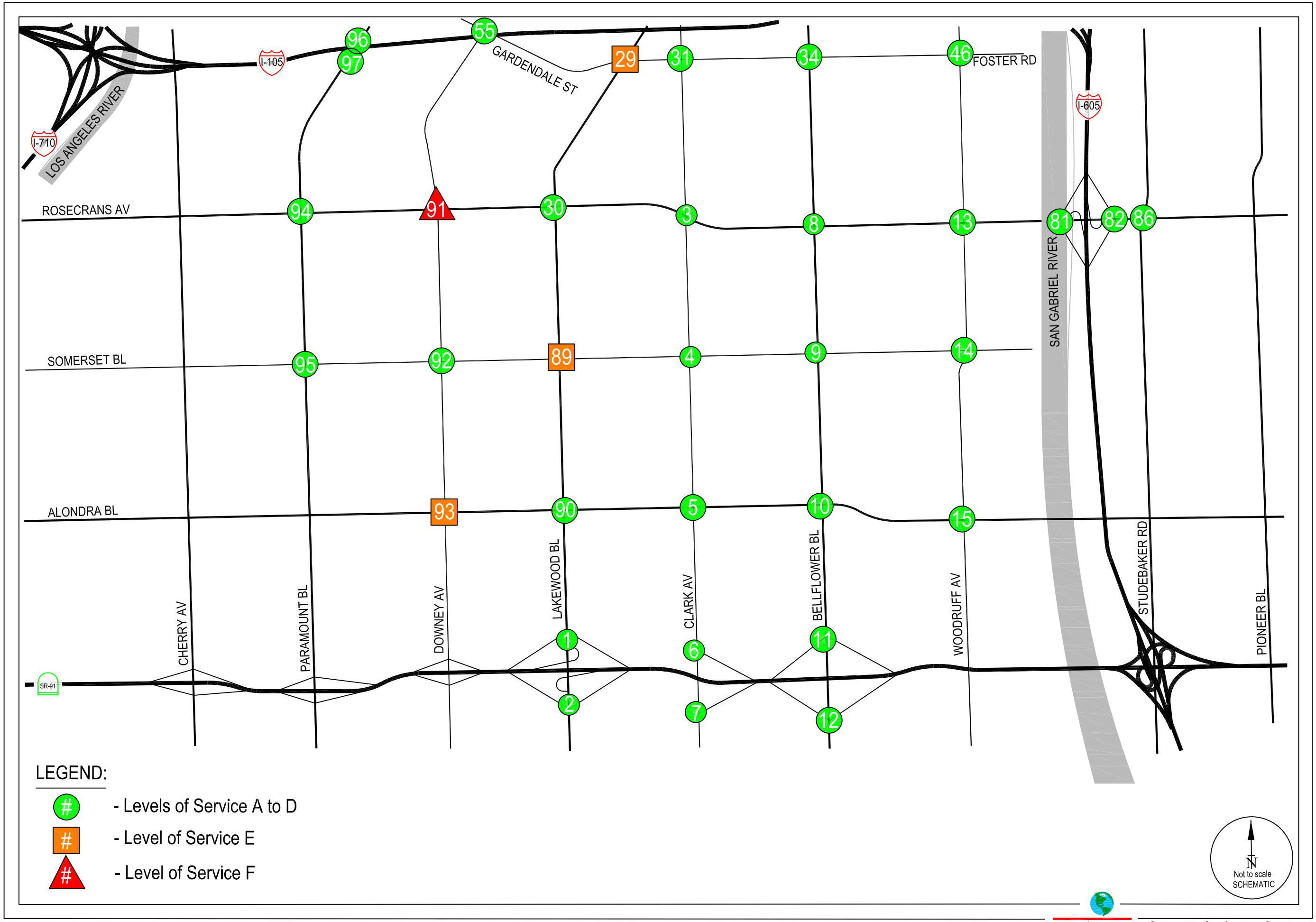


FIGURE 5B
FUTURE (2020) WITHOUT PROJECT AM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

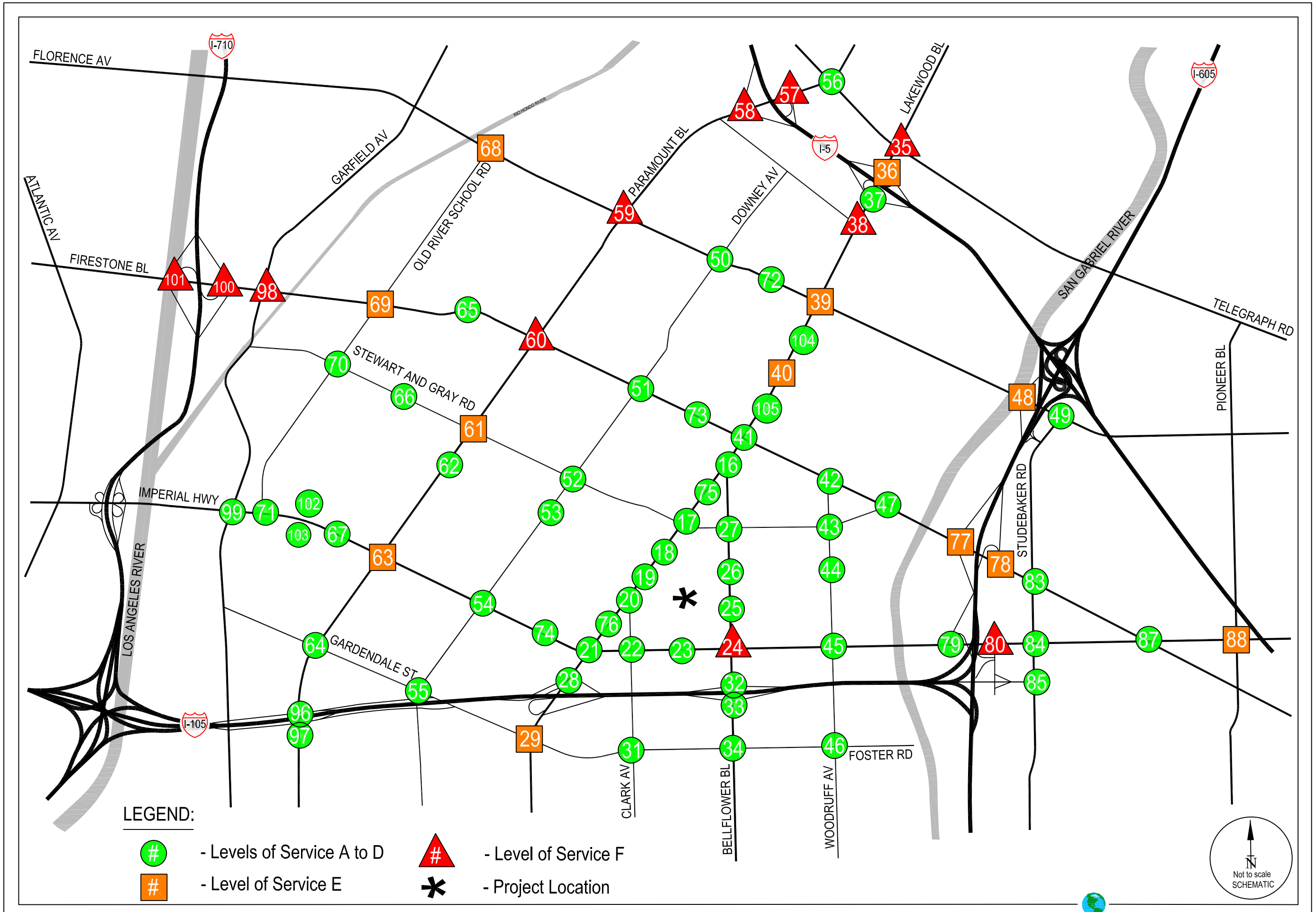


FIGURE 6A
FUTURE (2020) WITHOUT PROJECT PM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

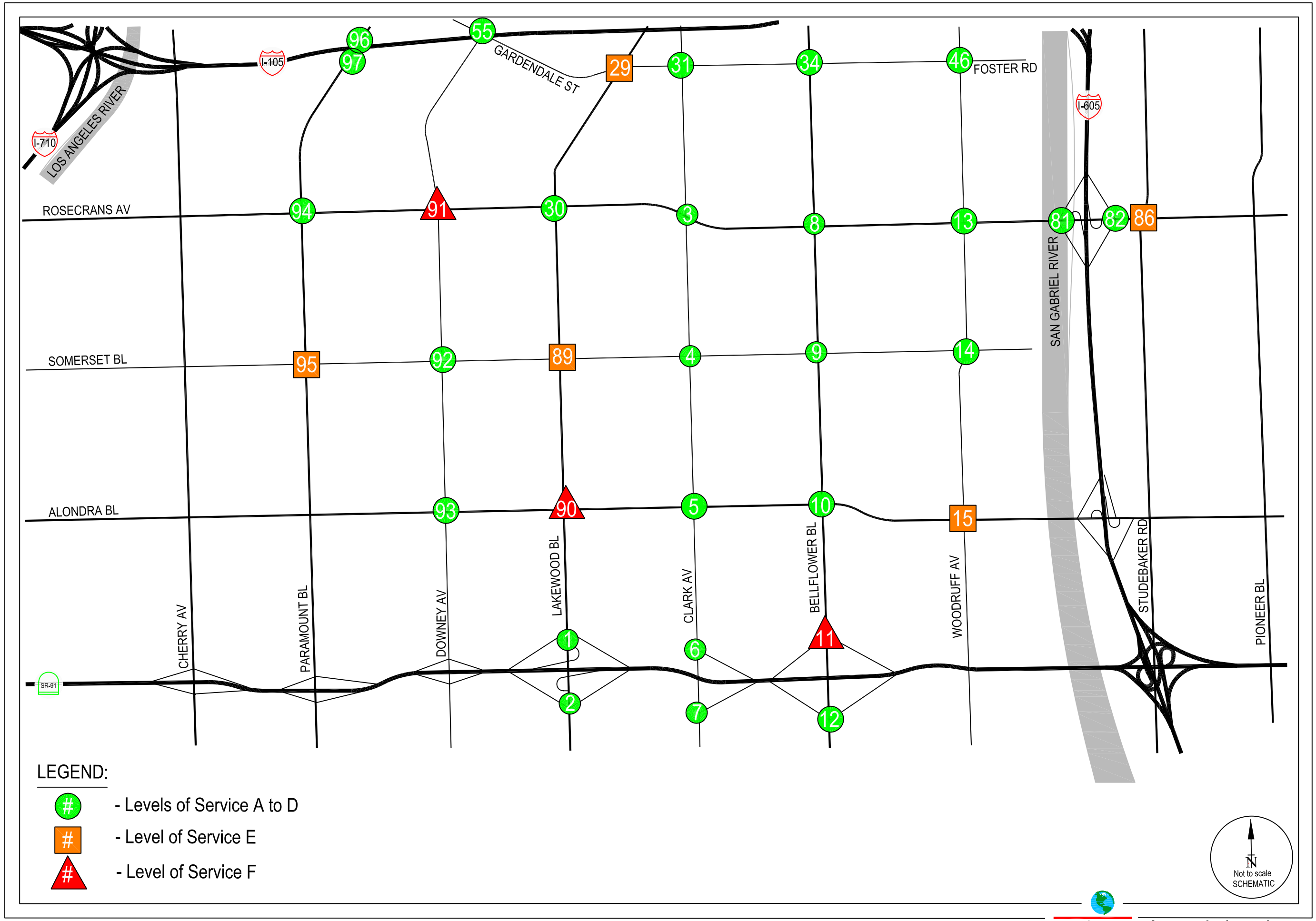


FIGURE 6B
FUTURE (2020) WITHOUT PROJECT PM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

FUTURE YEAR 2020 WITH PROJECT TRAFFIC CONDITIONS UPDATE

The updated Future Year 2020 with Project intersection operating conditions for the AM and PM peak hours are also shown in Table 3. Figures 7A, 7B, 8A and 8B graphically illustrate the updated Future Year 2020 with Project AM and PM peak hour levels of service at the analyzed intersections, respectively.

Again, from Table 3, the following observations can be made. Approximately 87% and 65% of the intersections are expected to operate at satisfactory levels of service (i.e., LOS D or better), 7% and 20% at LOS E and 6% and 15% at LOS F during AM and PM peak hours, respectively. This compares with 6% and 15% at LOS E and 6% and 13% at LOS F during the AM and PM peak hours, respectively in the Future 2020 without project conditions scenario. In general, the PM peak hour conditions would be worse than the AM peak hour conditions.

Capacity calculation worksheets for Future (2020) with Project conditions are attached in the Appendix to this memorandum.

PROJECT IMPACTS

Using the City of Downey's significant impact criterion (V/C greater than 1.000 LOS F with a project increase in V/C greater than or equal to 0.020), the traffic impacts at the analysis locations were determined. Table 3 also summarizes the intersections projected to be significantly impacted by the proposed Tierra Luna Specific Plan Project before mitigations, during the AM and PM peak hours. It can be observed that 2 intersections during the AM peak hour and 4 intersections during the PM peak hour would be significantly impacted by the Proposed Project. These are the same intersections that were identified to be significantly impacted in the DEIR document. They include the following locations:

- Lakewood Boulevard/Gallatin Road – AM and PM Peak Hours
- Lakewood Boulevard/Stewart & Gray Road – PM Peak Hour
- Bellflower Boulevard/Imperial Highway – AM and PM Peak Hours
- I-605 Southbound Ramps/Firestone Boulevard – PM Peak Hour

Therefore, specific mitigation measures would be required for the Proposed Project to address these impacts.

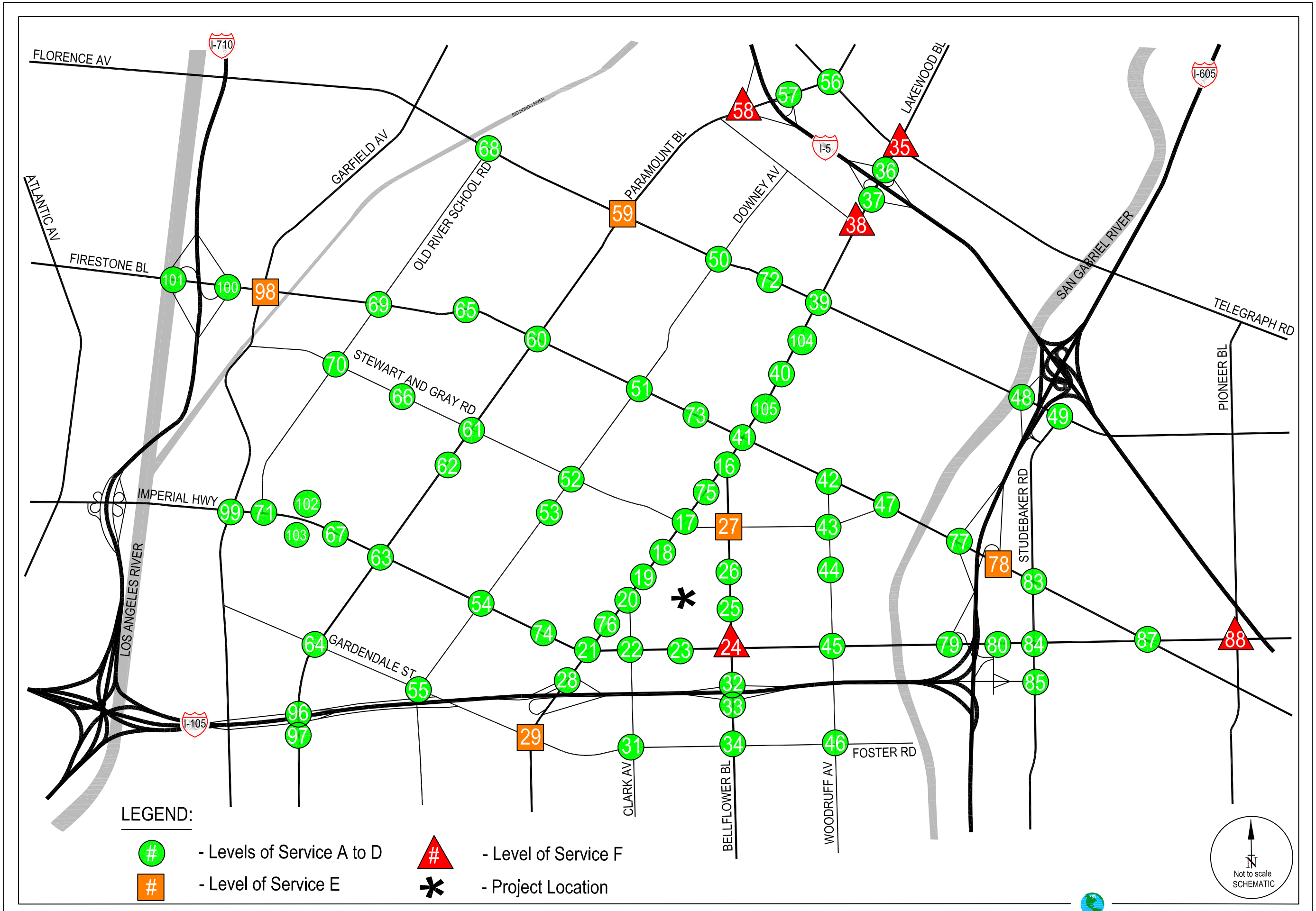


FIGURE 7A
FUTURE (2020) WITH PROJECT AM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

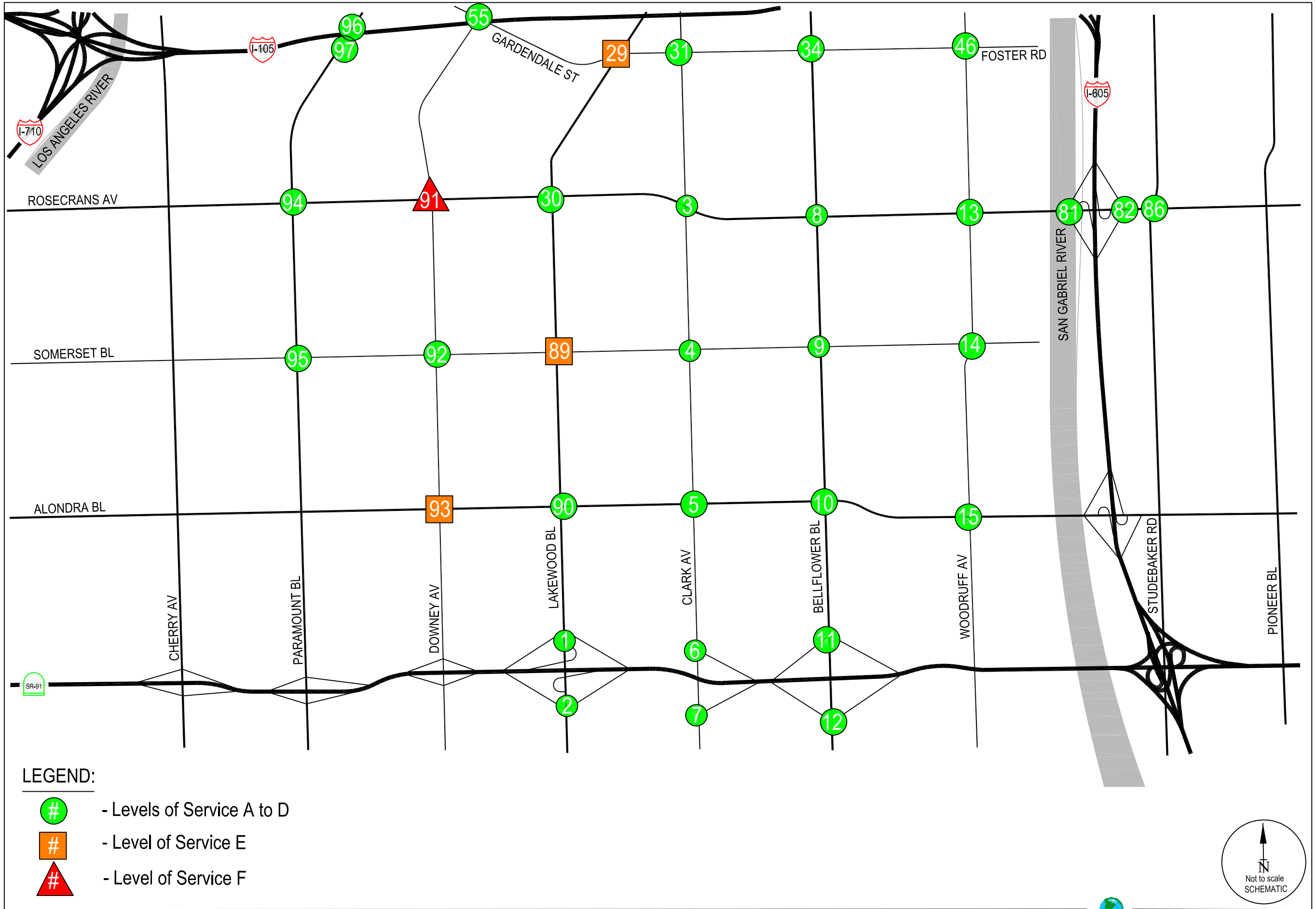


FIGURE 7B
FUTURE (2020) WITH PROJECT AM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

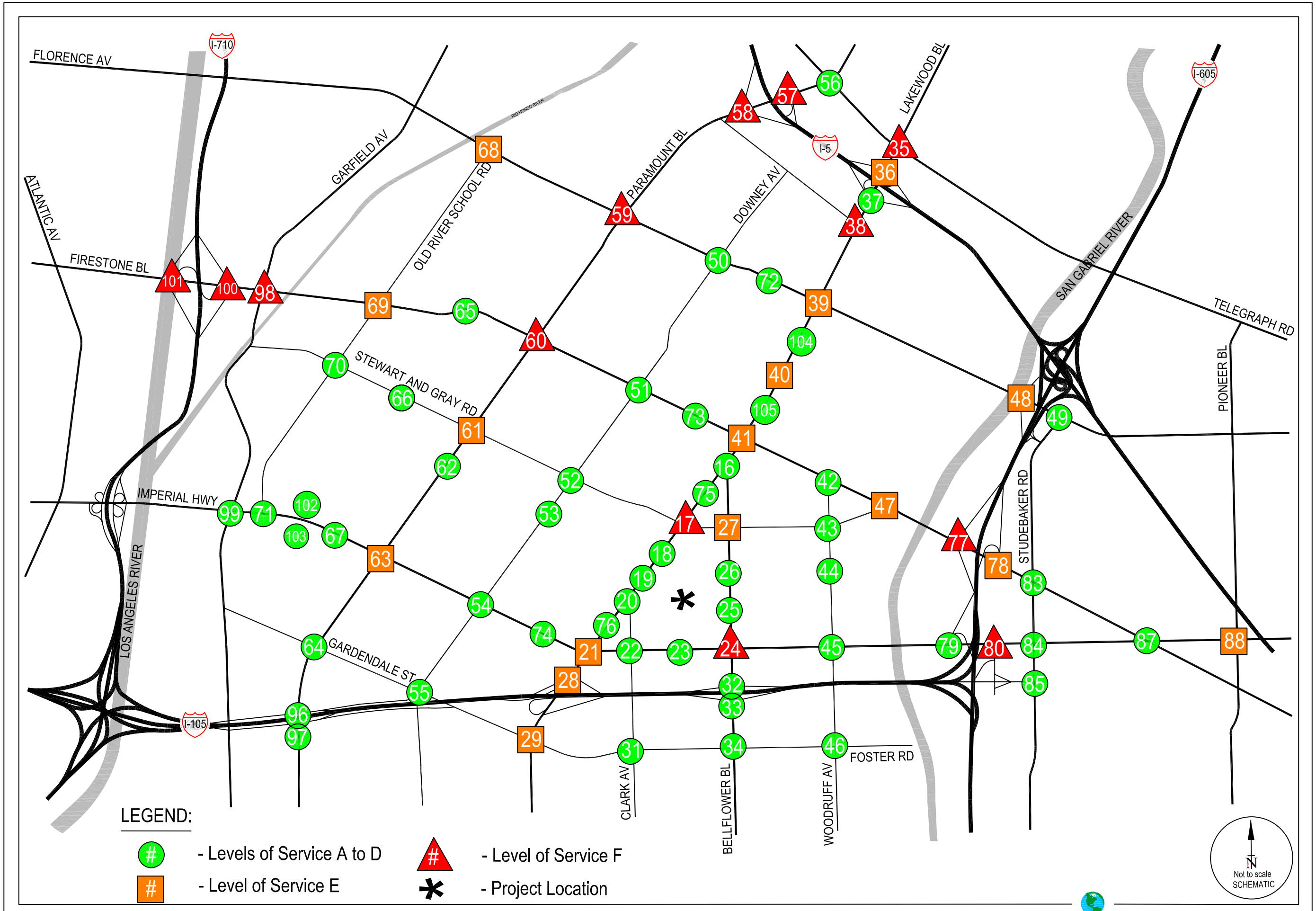


FIGURE 8A
FUTURE (2020) WITH PROJECT PM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

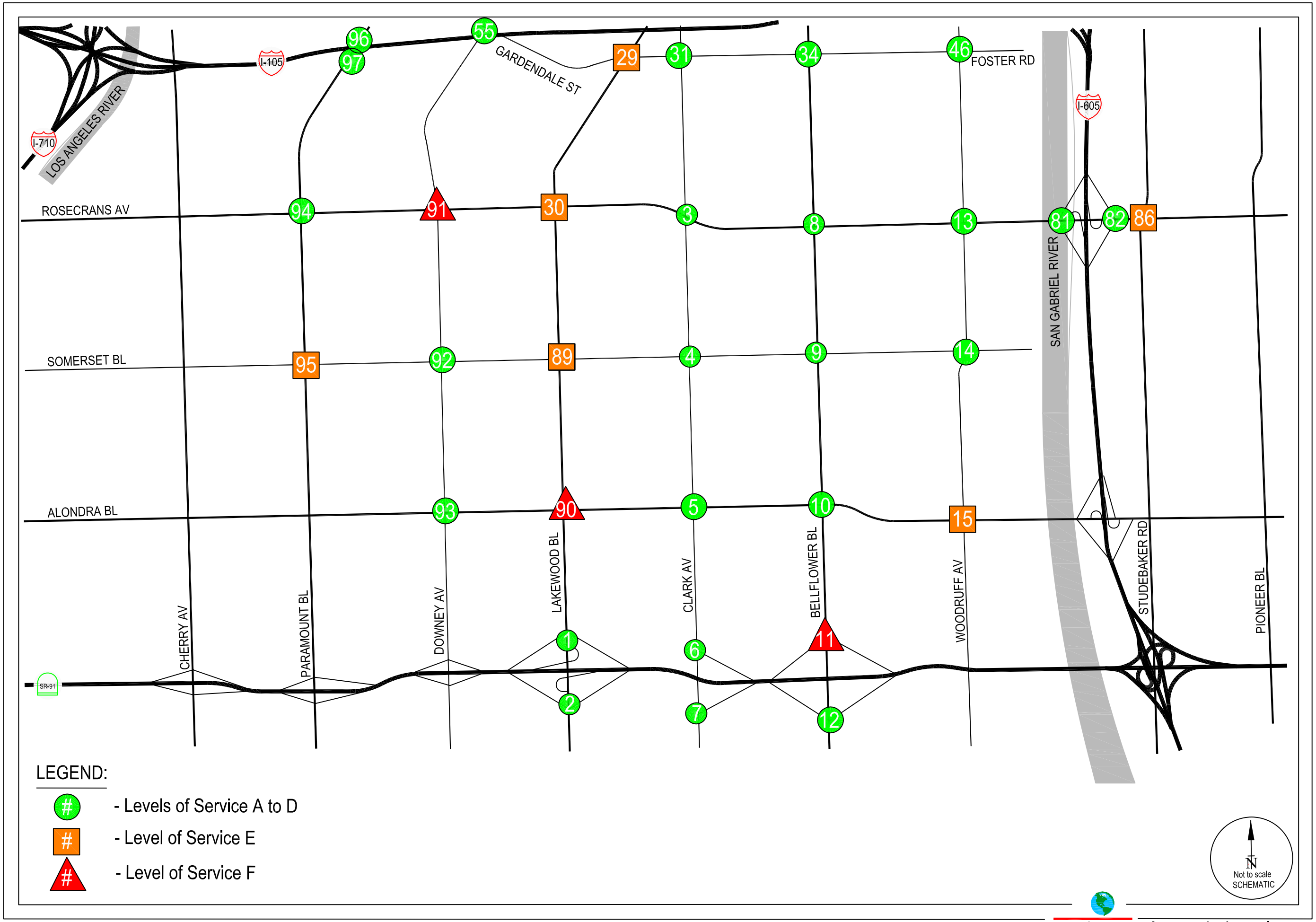


FIGURE 8B
FUTURE (2020) WITH PROJECT PM PEAK HOUR - LEVELS OF SERVICE

RAJU Associates, Inc.

MITIGATION MEASURES

The same mitigation measures as those described in the *Traffic Study for the Tierra Luna Specific Plan, Raju Associates, January 2009* incorporated in the DEIR for the Tierra Luna Specific Plan Project would be required to alleviate the Proposed Project's impacts. The results of the implementation of the recommended improvements are summarized in Table 4. As indicated in the table, the recommended improvements would fully mitigate the project-related impacts at the four impacted intersections.

Capacity calculation worksheets for Future (2020) with Project with Mitigation conditions are attached in the Appendix to this technical memorandum.

REGIONAL CONGESTION MANAGEMENT PROGRAM (CMP) ANALYSIS

CMP Arterial Monitoring Locations Analysis

Table 5 summarizes the LOS at each of the CMP arterial monitoring locations for updated future conditions with and without the project. As indicated in the table, none of the CMP arterial monitoring locations would be significantly impacted by the Tierra Luna Specific Plan Project.

CMP Freeway Monitoring Stations Analysis

Table 6 summarizes the incremental increase in the D/C ratio which can be attributed to the Proposed Project during the AM and PM peak hours. Using the CMP significant impact criteria, the Proposed Project will not have any significant impacts during both the AM and PM peak hours.

ACCESS ANALYSIS

The access analysis was evaluated using the updated traffic volumes for the three access scenarios. To summarize, the three access network scenarios were evaluated with different combinations of traffic control at key access intersection locations along Lakewood Boulevard. A brief description of each of access scenarios is provided on the following page.

TABLE 4
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS WITH MITIGATION MEASURES

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact	Future (2020) with Project w/Mitigation V/C	Future (2020) with Project w/Mitigation LOS	Project Increase in V/C	Significant Impact
City of Downey												
24	Bellflower Boulevard & Imperial Highway	AM	1.244	F	1.327	F	0.083	**Yes**	1.206	F	-0.038	No
		PM	1.313	F	1.450	F	0.137	**Yes**	1.328	F	0.015	No
38	Lakewood Boulevard & Gallatin Road	AM	1.091	F	1.111	F	0.020	**Yes**	1.063	F	-0.028	No
		PM	1.081	F	1.130	F	0.049	**Yes**	1.092	F	0.011	No
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.869	D	0.066	No	0.818	D	0.015	No
		PM	0.895	D	1.017	F	0.122	**Yes**	0.953	E	0.058	No
City of Norwalk												
77	I-605 Southbound Ramps & Firestone Boulevard	AM	0.844	D	0.888	D	0.044	No	0.831	D	-0.013	No
		PM	0.977	E	1.044	F	0.067	**Yes**	0.994	E	0.017	No

TABLE 5
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - CMP MONITORING LOCATIONS

Map #	INTERSECTION	Peak Hour	Existing (2008) V/C	Existing (2008) LOS	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project V/C	Future (2020) with Project LOS	Project Increase in V/C	Significant Impact
City of Downey										
41	Lakewood Boulevard & Firestone Boulevard [1]	AM	0.771	C	0.825	D	0.888	D	0.063	No
		PM	0.980	E	0.873	D	0.997	E	0.124	No
30	Lakewood Boulevard & Rosecrans Avenue [1]	AM	0.756	C	0.814	D	0.835	D	0.021	No
		PM	0.834	D	0.893	D	0.922	E	0.029	No
35	Rosemead Boulevard/Lakewood Boulevard & Telegraph Road [1]	AM	0.982	E	1.04	F	1.048	F	0.008	No
		PM	1.150	F	1.216	F	1.229	F	0.013	No
City of Norwalk										
87	Firestone Boulevard & Imperial Highway/Orr and Day Road [1]	AM	0.717	C	0.763	C	0.777	C	0.014	No
		PM	0.756	C	0.813	D	0.843	D	0.030	No

[1] Los Angeles County Congestion Management Program (CMP) monitoring location.

TABLE 6
CMP FREEWAY MONITORING STATIONS - OPERATING CONDITIONS--FUTURE 2020 AM PEAK HOUR

			AM Peak Hour									
			2020 WITHOUT PROJECT				2020 WITH PROJECT				PROJECT	SIGNIFICANT
Freeway Route	Location	Direction	Demand	Capacity	D/C [1]	LOS [2]	Demand	Capacity	D/C [1]	LOS [2]	INCREASE IN D/C	PROJECT IMPACTS
I-5	at Lemoran Avenue	NB	12,235	8,000	1.53	F(3)	12,235	8,000	1.53	F(3)	0.000	No
		SB	8,548	8,000	1.07	F(0)	8,548	8,000	1.07	F(0)	0.000	No
I-5	Ferris Avenue	NB	11,010	8,000	1.38	F(2)	11,064	8,000	1.38	F(2)	0.007	No
		SB	7,143	8,000	0.89	D	7,217	8,000	0.90	D	0.009	No
I-105	e/o Bellflower Boulevard	WB	11,198	9,000	1.24	F(0)	11,309	9,000	1.26	F(1)	0.012	No
		EB	6,935	9,000	0.77	D	7,001	9,000	0.78	D	0.007	No
I-105	w/o I-710 Fwy	WB	11,132	9,000	1.24	F(0)	11,179	9,000	1.24	F(0)	0.005	No
		EB	7,576	9,000	0.84	D	7,660	9,000	0.85	D	0.009	No
I-605	s/o Alondra Boulevard	NB	13,446	11,000	1.22	F(0)	13,557	11,000	1.23	F(0)	0.010	No
		SB	10,625	11,000	0.97	E	10,691	11,000	0.97	E	0.006	No
I-605	n/o Telegraph Road	NB	8,316	9,000	0.92	D	8,358	9,000	0.93	D	0.005	No
		SB	12,080	9,000	1.34	F(1)	12,183	9,000	1.35	F(2)	0.011	No
I-710	n/o Firestone Boulevard	NB	11,129	8,000	1.39	F(2)	11,137	8,000	1.39	F(2)	0.001	No
		SB	8,802	8,000	1.10	F(0)	8,806	8,000	1.10	F(0)	0.000	No

CMP FREEWAY MONITORING STATIONS - OPERATING CONDITIONS--FUTURE 2020 PM PEAK HOUR

			PM Peak Hour									
			2020 WITHOUT PROJECT				2020 WITH PROJECT				PROJECT	SIGNIFICANT
Freeway Route	Location	Direction	Demand	Capacity	D/C [1]	LOS [2]	Demand	Capacity	D/C [1]	LOS [2]	INCREASE IN D/C	PROJECT IMPACTS
I-5	at Lemoran Avenue	NB	8,933	8,000	1.12	F(0)	8,933	8,000	1.12	F(0)	0.000	No
		SB	12,593	8,000	1.57	F(3)	12,593	8,000	1.57	F(3)	0.000	No
I-5	Ferris Avenue	NB	8,753	8,000	1.09	F(0)	8,874	8,000	1.11	F(0)	0.015	No
		SB	12,231	8,000	1.53	F(3)	12,331	8,000	1.54	F(3)	0.013	No
I-105	e/o Bellflower Boulevard	WB	7,153	9,000	0.79	D	7,289	9,000	0.81	D	0.015	No
		EB	13,351	9,000	1.48	F(3)	13,500	9,000	1.50	F(3)	0.017	No
I-105	w/o I-710 Fwy	WB	8,016	9,000	0.89	D	8,127	9,000	0.90	D	0.012	No
		EB	8,167	9,000	0.91	D	8,243	9,000	0.92	D	0.008	No
I-605	s/o Alondra Boulevard	NB	10,046	11,000	0.91	D	10,173	11,000	0.92	D	0.012	No
		SB	13,850	11,000	1.26	F(1)	13,999	11,000	1.27	F(1)	0.014	No
I-605	n/o Telegraph Road	NB	11,536	9,000	1.28	F(1)	11,659	9,000	1.30	F(1)	0.014	No
		SB	13,289	9,000	1.48	F(3)	13,391	9,000	1.49	F(3)	0.011	No
I-710	n/o Firestone Boulevard	NB	12,390	8,000	1.55	F(3)	12,402	8,000	1.55	F(3)	0.001	No
		SB	8,976	8,000	1.12	F(0)	8,981	8,000	1.12	F(0)	0.001	No

[1] Demand-to-Capacity ratio (D/C) calculated based on a capacity of 2,000 vehicles per lane per hour applied to through lanes. A capacity of 1,000 vehicles per lane per hour in each direction is added for HOV lanes.
[2] Freeway mainline Levels of Service is based on the following D/C scale:

D/C Ratio	LOS
> 0.00 - 0.35	A
> 0.35 - 0.54	B
> 0.54 - 0.77	C
> 0.77 - 0.93	D
> 0.93 - 1.00	E
> 1.00 - 1.25	F(0)
> 1.25 - 1.35	F(1)
> 1.35 - 1.45	F(2)
> 1.45	F(3)

- Access Plan A – Access Plan A involves limited right-turn in and right-turn out access at the intersection of Lakewood Boulevard/Central Plaza Drive. This access plan is assumed in the Future with Project analysis included in Chapter IV of the DEIR Traffic Study for the Tierra Luna Specific Plan Project.

- Access Plan B – Access Plan B involves changes to Access Plan A at the intersections of Lakewood Boulevard/Central Plaza Drive and Lakewood Boulevard/Alameda Street. In this access scheme, the existing signal at the Lakewood Boulevard/Alameda Street intersection would be removed, left turning traffic would be diverted and the intersection would be re-configured to operate as a right-turn in and right-turn out limited access stop-controlled intersection. The intersection of Lakewood Boulevard/Central Plaza Drive will be controlled by a traffic signal to provide full access under this alternative Access Plan B.

- Access Plan C – Under Access Plan C, the intersection of Lakewood Boulevard/Central Plaza Drive will be controlled by a traffic signal to provide full access. The traffic signal would remain at the Lakewood Boulevard/Alameda Street intersection. A central back-to-back left-turn lane would be provided along Lakewood Boulevard for northbound and southbound left turns at both intersections.

The ability of the project's access points (intersections) to accommodate the anticipated traffic levels was evaluated for all access network scenarios.

Using the updated traffic volumes illustrated in Figures 9 through 11, the access intersection locations were analyzed and evaluated. Table 7 summarizes and compares the LOS at each of the project access points under all three access plans. As indicated in the table, all of the access points are projected to operate at acceptable LOS D or better under updated Future (2020) with Project Conditions.

Under all three scenarios, the intersection of Lakewood Boulevard/Stewart and Gray Road would be significantly impacted during the PM peak hour. The proposed improvements, however, at this intersection would fully mitigate the project-related impact at this location under all access scenarios.

The LOS worksheets are included in the Appendix to this technical memorandum.

ALTERNATIVES ANALYSIS UPDATE

The alternatives analysis was updated using the future traffic volumes with the inclusion of the Kaiser Project. The trip generation associated with each alternative remained the same as those

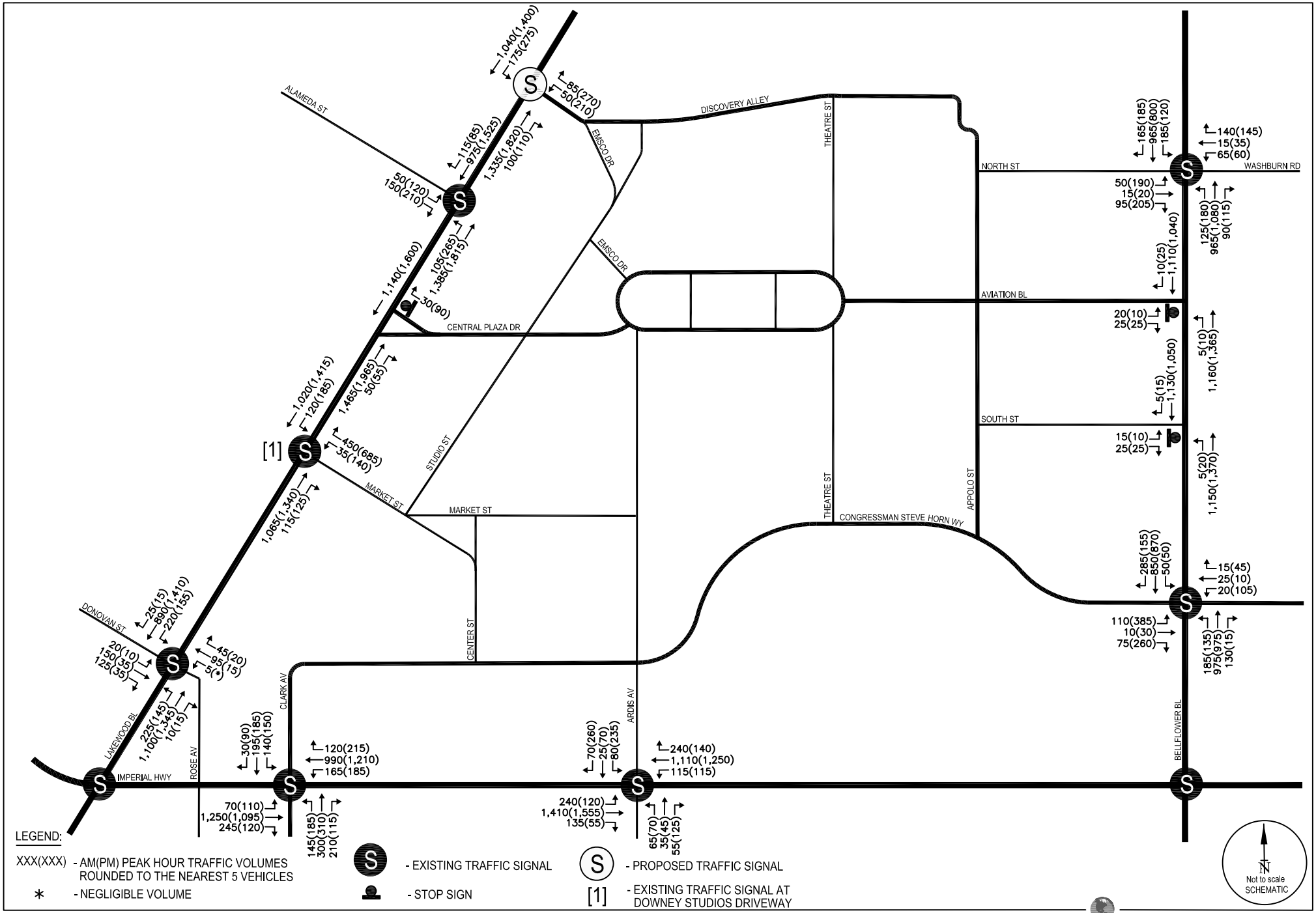


FIGURE 9
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES
ACCESS LOCATIONS - ACCESS PLAN A

RAJU Associates, Inc.

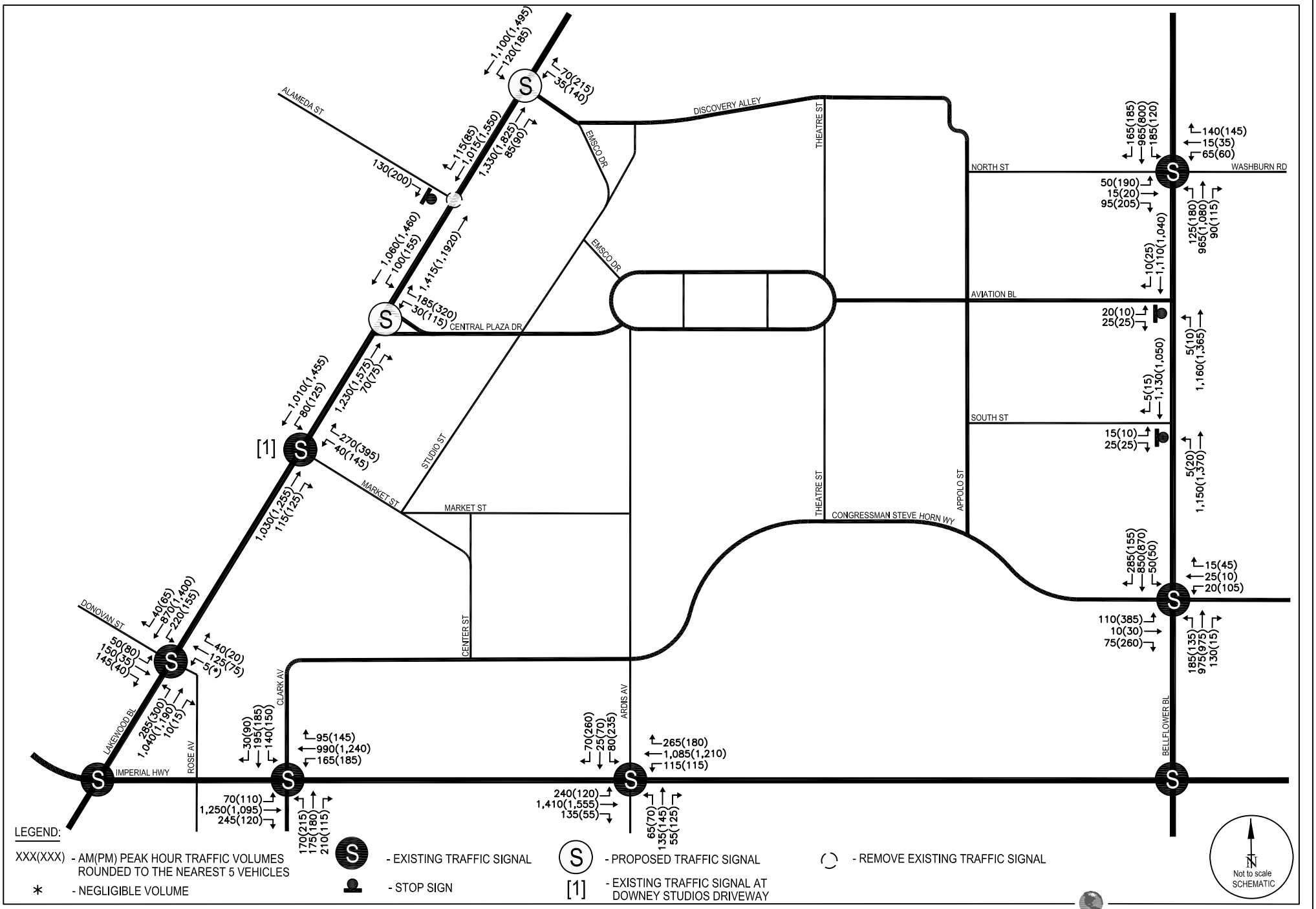


FIGURE 10
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES
ACCESS LOCATIONS - ACCESS PLAN B

RAJU Associates, Inc.

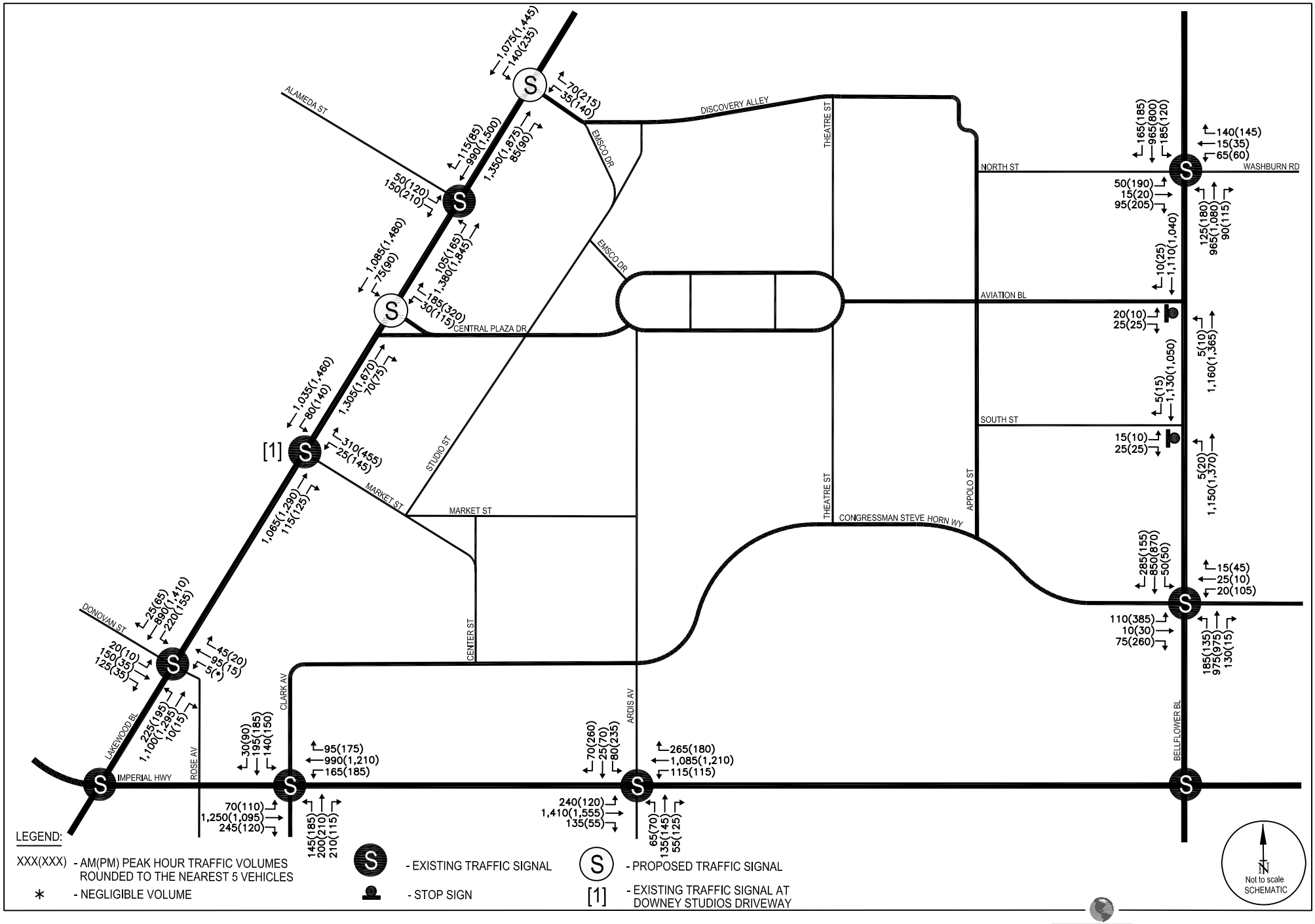


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FIGURE 11
FUTURE (2020) WITH PROJECT PEAK HOUR TRAFFIC VOLUMES
ACCESS LOCATIONS - ACCESS PLAN C

TABLE 7
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - ACCESS LOCATIONS

					Access Plan A				Access Plan B				Access Plan C			
Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	LOS	Future (2020) with Project V/C or Delay	LOS	Project Increase in V/C	Significant Impact	Future (2020) with Project V/C or Delay	LOS	Project Increase in V/C	Significant Impact	Future (2020) with Project V/C or Delay	LOS	Project Increase in V/C	Significant Impact
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.869	D	0.066	No	0.869	D	0.066	No	0.869	D	0.066	No
		PM	0.895	D	1.017	F	0.122	Yes	1.017	F	0.122	Yes	1.017	F	0.122	Yes
					With Mitigation				**With Mitigation**				**With Mitigation**			
		AM			0.818	D	0.015	No	0.818	D	0.015	No	0.818	D	0.015	No
		PM			0.953	E	0.058	No	0.982	E	0.087	No	0.982	E	0.087	No
18	Lakewood Boulevard & Landing Center Driveway	AM	0.414	A	0.449	A	0.035	No	0.445	A	0.031	No	0.449	A	0.035	No
		PM	0.610	B	0.732	C	0.122	No	0.722	C	0.112	No	0.732	C	0.122	No
-	Lakewood Boulevard & Discovery Alley	AM	n/a	-	0.543	A	-	No	0.490	A	-	No	0.509	A	-	No
		PM	n/a	-	0.806	D	-	No	0.702	C	-	No	0.743	C	-	No
19	Lakewood Boulevard & Alameda Street	AM	0.382	A	0.424	A	0.042	No	12.5 sec [1]	B	-	No	0.428	A	0.046	No
		PM	0.563	A	0.676	B	0.113	No	17.9 sec [1]	C	-	No	0.608	B	0.045	No
-	Lakewood Boulevard & Central Plaza Drive	AM	n/a	-	12.5 sec [1]	B	-	No	0.486	A	-	No	0.501	A	-	No
		PM	n/a	-	16.7 sec [1]	C	-	No	0.644	B	-	No	0.663	B	-	No
-	Lakewood Boulevard & Market Street	AM	n/a	-	0.628	B	-	No	0.507	A	-	No	0.539	A	-	No
		PM	n/a	-	0.832	D	-	No	0.635	B	-	No	0.679	B	-	No
76	Lakewood Boulevard & Donovan Street-Rose Avenue	AM	0.605	B	0.655	B	0.050	No	0.686	B	0.081	No	0.655	B	0.050	No
		PM	0.481	A	0.538	A	0.057	No	0.706	C	0.225	No	0.581	A	0.100	No
26	Bellflower Boulevard & Washburn Road-North Street	AM	0.563	A	0.684	B	0.121	No	0.684	B	0.121	No	0.684	B	0.121	No
		PM	0.541	A	0.843	D	0.302	No	0.843	D	0.302	No	0.843	D	0.302	No
-	Bellflower Boulevard & Aviation Boulevard	AM	n/a	-	34.2 sec [1]	D	-	No	34.2 sec [1]	D	-	No	34.2 sec [1]	D	-	No
		PM	n/a	-	24.3 sec [1]	C	-	No	24.3 sec [1]	C	-	No	24.3 sec [1]	C	-	No
-	Bellflower Boulevard & South Street	AM	n/a	-	32.1 sec [1]	D	-	No	32.1 sec [1]	D	-	No	32.1 sec [1]	D	-	No
		PM	n/a	-	25.4 sec [1]	D	-	No	25.4 sec [1]	D	-	No	25.4 sec [1]	D	-	No
25	Bellflower Boulevard & Congressman Steve Horn Way	AM	0.506	A	0.571	A	0.065	No	0.571	A	0.065	No	0.571	A	0.065	No
		PM	0.573	A	0.726	C	0.153	No	0.726	C	0.153	No	0.726	C	0.153	No
23	Ardis Avenue & Imperial Highway	AM	0.600	A	0.638	B	0.038	No	0.700	B	0.100	No	0.700	B	0.100	No
		PM	0.708	C	0.762	C	0.054	No	0.825	D	0.117	No	0.825	D	0.117	No
22	Clark Avenue & Imperial Highway	AM	0.726	C	0.760	C	0.034	No	0.732	C	0.006	No	0.732	C	0.006	No
		PM	0.630	B	0.696	B	0.066	No	0.688	B	0.058	No	0.669	B	0.039	No

[1] Unsignalized intersections - stop-controlled on minor approach.

described in the DEIR document. To summarize, five alternatives have been analyzed in this study. They include the following:

- Alternative A – No-Build Alternative
- Alternative B – Existing Specific Plan Build Out Alternative
- Alternative C – Reduced Density Alternative (25% Reduction)
- Alternative D – Reduced Site Alternative
- Alternative E – All Commercial Alternative

Alternative A – No Build

The no-build alternative assumes there would be no change to the existing conditions and use of the project site. The volumes and traffic conditions for this alternative are equivalent to the updated Future 2020 without Project Condition scenario. Roadway network assumptions would also be similar to those in Future 2020 without Project Conditions scenario. This alternative will result in no traffic impacts.

Alternative B – Existing Specific Plan Build-Out

Table 8 summarizes the AM and PM peak hour traffic impacts of this alternative. It can be observed from this table that this alternative produces traffic impacts at 2 and 3 of the analysis locations in the AM and PM peak hours, respectively, compared to 2 and 4 of the locations impacted by the Proposed Project during the same respective peak hours. On an overall basis, this alternative would adversely impact traffic to a lesser degree than the Proposed Project. No significant differences in travel patterns outside the project area would be expected between this alternative and the Proposed Project.

Analysis of the transportation system operating conditions in the future with the project alternative reveals the following system performance characteristics in relation to those with the Proposed Project:

- The average volume to capacity (V/C) ratio (or demand to capacity ratio) of the system would be 0.771 and 0.851 during AM and PM peak hours, respectively, compared to the average V/C ratio of 0.771 and 0.867 respectively, during the same peak hours for the Proposed Project.

- Approximately 14 and 33 of the 105 analyzed intersection locations are projected to operate at unacceptable levels of service (LOS E or F) during AM and PM peak hours, respectively, compared to 13 and 37 locations operating at unacceptable LOS E or F with the Proposed Project during the same time period.

TABLE 8
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
City of Downey								
23	Ardis Avenue & Imperial Highway	AM	0.600	A	0.639	B	0.039	No
		PM	0.708	C	0.736	C	0.028	No
33	Bellflower Boulevard & I-105 Eastbound Ramps	AM	0.704	C	0.762	C	0.058	No
		PM	0.780	C	0.841	D	0.061	No
32	Bellflower Boulevard & I-105 Westbound Ramps	AM	0.762	C	0.816	D	0.054	No
		PM	0.730	C	0.773	C	0.043	No
34	Bellflower Boulevard & Foster Road	AM	0.770	C	0.782	C	0.012	No
		PM	0.677	B	0.688	B	0.011	No
24	Bellflower Boulevard & Imperial Highway	AM	1.244	F	1.330	F	0.086	**Yes**
		PM	1.313	F	1.383	F	0.070	**Yes**
25	Bellflower Boulevard & Congressman Steve Horn Way	AM	0.506	A	0.573	A	0.067	No
		PM	0.573	A	0.651	B	0.078	No
27	Bellflower Boulevard & Stewart and Gray Road	AM	0.786	C	0.924	E	0.138	No
		PM	0.793	C	0.863	D	0.070	No
26	Bellflower Boulevard & Washburn Road	AM	0.563	A	0.688	B	0.125	No
		PM	0.541	A	0.695	B	0.154	No
73	Brookshire Avenue & Firestone Boulevard	AM	0.621	B	0.632	B	0.011	No
		PM	0.809	D	0.825	D	0.016	No
72	Brookshire Avenue & Florence Avenue	AM	0.658	B	0.662	B	0.004	No
		PM	0.779	C	0.781	C	0.002	No
74	Brookshire Avenue & Imperial Highway	AM	0.767	C	0.772	C	0.005	No
		PM	0.770	C	0.777	C	0.007	No
31	Clark Avenue & Foster Road	AM	0.703	C	0.713	C	0.010	No
		PM	0.548	A	0.566	A	0.018	No
22	Clark Avenue & Imperial Highway	AM	0.726	C	0.761	C	0.035	No
		PM	0.630	B	0.664	B	0.034	No

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CHEROKEE DRIVE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	88	0	0.000	N-S(1):	0.412
	TH	2.00	1,161	3,200	0.390 *	N-S(2):	0.415 *
	LT	0.00	0	0	0.000	E-W(1):	0.010
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.033 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.448
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,319	3,200	0.412		
	LT	1.00	40	1,600	0.025 *		
Eastbound	RT	1.00	56	1,600	0.010	ICU:	0.548
	TH	0.00	0	0	0.000		
	LT	1.00	53	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	110	0	0.000	N-S(1):	0.457
	TH	2.00	1,521	3,200	0.510 *	N-S(2):	0.515 *
	LT	0.00	0	0	0.000	E-W(1):	0.060
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.074 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.589
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,461	3,200	0.457		
	LT	1.00	8	1,600	0.005 *		
Eastbound	RT	1.00	104	1,600	0.060	ICU:	0.689
	TH	0.00	0	0	0.000		
	LT	1.00	118	1,600	0.074 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ERICKSON AVENUE
East/West Street: IMPERIAL HIGHWAY EASTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.093 *
	TH	2.00	226	3,200	0.071	N-S(2):	0.071
	LT	1.00	52	1,600	0.033 *	E-W(1):	0.093 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.014
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.186
Northbound	RT	0.00	40	0	0.000	Lost Time:	0.100
	TH	2.00	152	3,200	0.060 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	139	0	0.000	ICU:	0.286
	TH	1.00	9	1,600	0.093 *		
	LT	1.00	22	1,600	0.014	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.125 *
	TH	2.00	169	3,200	0.053	N-S(2):	0.053
	LT	1.00	85	1,600	0.053 *	E-W(1):	0.031 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.004
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.156
Northbound	RT	0.00	103	0	0.000	Lost Time:	0.100
	TH	2.00	126	3,200	0.072 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	41	0	0.000	ICU:	0.256
	TH	1.00	8	1,600	0.031 *		
	LT	1.00	7	1,600	0.004	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ERICKSON AVENUE
East/West Street: IMPERIAL HIGHWAY WESTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.040
	TH	2.00	34	3,200	0.013 *	N-S(2):	0.050 *
	LT	0.00	0	0	0.000	E-W(1):	0.158 *
Westbound	RT	0.00	66	0	0.000	E-W(2):	0.049
	TH	1.00	12	1,600	0.049		
	LT	1.00	252	1,600	0.158 *	V/C:	0.208
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	128	3,200	0.040		
	LT	1.00	59	1,600	0.037 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.308
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	30	0	0.000	N-S(1):	0.026
	TH	2.00	154	3,200	0.058 *	N-S(2):	0.087 *
	LT	0.00	0	0	0.000	E-W(1):	0.054 *
Westbound	RT	0.00	13	0	0.000	E-W(2):	0.014
	TH	1.00	10	1,600	0.014		
	LT	1.00	87	1,600	0.054 *	V/C:	0.141
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	1.06	44	1,690	0.026		
	LT	1.94	81	2,799	0.029 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.241
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-710 SOUTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	662	3,200	0.207 *	N-S(1):	0.150
	TH	0.00	0	0	0.000	N-S(2):	0.207 *
	LT	2.00	431	2,880	0.150	E-W(1):	0.557 *
Westbound	RT	1.00	716	1,600	0.000	E-W(2):	0.510
	TH	2.00	1,632	3,200	0.510		
	LT	0.00	0	0	0.000 *	V/C:	0.764
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	868	0	0.000	ICU:	0.864
	TH	3.00	1,806	4,800	0.557 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	492	3,200	0.154	N-S(1):	0.234 *
	TH	0.00	0	0	0.000	N-S(2):	0.154
	LT	2.00	673	2,880	0.234 *	E-W(1):	0.592
Westbound	RT	1.00	370	1,600	0.000	E-W(2):	0.780 *
	TH	2.00	2,496	3,200	0.780 *		
	LT	0.00	0	0	0.000	V/C:	1.014
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	611	0	0.000	ICU:	1.114
	TH	3.00	2,230	4,800	0.592		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-710 NORTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.136
	TH	0.00	0	0	0.000 *	N-S(2):	0.210 *
	LT	0.00	0	0	0.000	E-W(1):	0.362
Westbound	RT	1.00	565	1,600	0.000	E-W(2):	0.515 *
	TH	2.00	1,648	3,200	0.515 *		
	LT	0.00	0	0	0.000	V/C:	0.725
Northbound	RT	2.00	434	3,200	0.136	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	2.00	605	2,880	0.210 *		
Eastbound	RT	1.00	615	1,600	0.195	ICU:	0.825
	TH	3.00	1,737	4,800	0.362		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.184
	TH	0.00	0	0	0.000 *	N-S(2):	0.320 *
	LT	0.00	0	0	0.000	E-W(1):	0.519
Westbound	RT	1.00	373	1,600	0.000	E-W(2):	0.605 *
	TH	2.00	1,936	3,200	0.605 *		
	LT	0.00	0	0	0.000	V/C:	0.925
Northbound	RT	2.00	589	3,200	0.184	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	2.00	921	2,880	0.320 *		
Eastbound	RT	1.00	407	1,600	0.000	ICU:	1.025
	TH	3.00	2,492	4,800	0.519		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: GARFIELD AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	344	1,600	0.067	N-S(1):	0.208 *
	TH	2.00	450	3,200	0.141	N-S(2):	0.159
	LT	2.00	115	2,880	0.040 *	E-W(1):	0.272
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.386 *
	TH	3.00	1,086	4,800	0.238 *		
	LT	1.00	88	1,600	0.055	V/C:	0.594
Northbound	RT	0.00	125	0	0.000	Lost Time:	0.100
	TH	2.00	412	3,200	0.168 *		
	LT	1.00	28	1,600	0.018		
Eastbound	RT	0.00	40	0	0.000	ICU:	0.694
	TH	3.00	1,002	4,800	0.217		
	LT	1.00	237	1,600	0.148 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	336	1,600	0.063	N-S(1):	0.236 *
	TH	2.00	500	3,200	0.156	N-S(2):	0.214
	LT	2.00	146	2,880	0.051 *	E-W(1):	0.388
Westbound	RT	0.00	69	0	0.000	E-W(2):	0.399 *
	TH	3.00	1,140	4,800	0.252 *		
	LT	1.00	173	1,600	0.108	V/C:	0.635
Northbound	RT	0.00	165	0	0.000	Lost Time:	0.100
	TH	2.00	428	3,200	0.185 *		
	LT	1.00	92	1,600	0.058		
Eastbound	RT	0.00	53	0	0.000	ICU:	0.735
	TH	3.00	1,292	4,800	0.280		
	LT	1.00	235	1,600	0.147 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: GARFIELD AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	388	1,600	0.044	N-S(1):	0.261
	TH	2.00	617	3,200	0.193 *	N-S(2):	0.444 *
	LT	2.00	180	2,880	0.063	E-W(1):	0.198
Westbound	RT	1.00	94	1,600	0.003	E-W(2):	0.410 *
	TH	3.00	914	4,800	0.190 *		
	LT	2.00	54	2,880	0.019	V/C:	0.854
Northbound	RT	0.00	28	0	0.000	Lost Time:	0.100
	TH	2.00	604	3,200	0.198		
	LT	2.00	723	2,880	0.251 *		
Eastbound	RT	1.00	410	1,600	0.030	ICU:	0.954
	TH	3.00	861	4,800	0.179		
	LT	2.00	635	2,880	0.220 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	367	1,600	0.018	N-S(1):	0.338
	TH	2.00	1,372	3,200	0.429 *	N-S(2):	0.617 *
	LT	2.00	255	2,880	0.089	E-W(1):	0.392
Westbound	RT	1.00	227	1,600	0.062	E-W(2):	0.556 *
	TH	3.00	1,539	4,800	0.321 *		
	LT	2.00	200	2,880	0.069	V/C:	1.173
Northbound	RT	0.00	100	0	0.000	Lost Time:	0.100
	TH	2.00	697	3,200	0.249		
	LT	2.00	541	2,880	0.188 *		
Eastbound	RT	1.00	477	1,600	0.129	ICU:	1.273
	TH	3.00	1,549	4,800	0.323		
	LT	2.00	676	2,880	0.235 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-105 EASTBOUND RAMPS/SOMERSET RANCH ROAD SOUTH

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.359 *
	TH	2.00	816	3,200	0.255	N-S(2):	0.255
	LT	2.00	265	2,880	0.092 *	E-W(1):	0.280 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.234
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.639
Northbound	RT	1.00	321	1,600	0.201	Lost Time:	0.100
	TH	2.00	854	3,200	0.267 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	172	0	0.000	ICU:	0.739
	TH	2.00	724	3,200	0.280 *		
	LT	1.00	374	1,600	0.234	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.404 *
	TH	2.00	1,142	3,200	0.357	N-S(2):	0.357
	LT	2.00	167	2,880	0.058 *	E-W(1):	0.288
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.326 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.730
Northbound	RT	1.00	246	1,600	0.154	Lost Time:	0.100
	TH	2.00	1,106	3,200	0.346 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	237	0	0.000	ICU:	0.830
	TH	2.00	686	3,200	0.288		
	LT	1.00	522	1,600	0.326 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-105 WESTBOUND RAMPS/SOMERSET RANCH ROAD NORTH

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	609	1,600	0.381 *	N-S(1):	0.288
	TH	2.00	885	3,200	0.277	N-S(2):	0.486 *
	LT	0.00	0	0	0.000	E-W(1):	0.156
Westbound	RT	1.00	456	1,600	0.285	E-W(2):	0.289 *
	TH	1.00	463	1,600	0.289 *		
	LT	1.00	249	1,600	0.156	V/C:	0.775
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	920	3,200	0.288		
	LT	2.00	301	2,880	0.105 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.875
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	672	1,600	0.420 *	N-S(1):	0.434
	TH	2.00	1,094	3,200	0.342	N-S(2):	0.502 *
	LT	0.00	0	0	0.000	E-W(1):	0.146
Westbound	RT	1.00	462	1,600	0.289 *	E-W(2):	0.289 *
	TH	1.00	422	1,600	0.264		
	LT	1.00	233	1,600	0.146	V/C:	0.791
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,388	3,200	0.434		
	LT	2.00	235	2,880	0.082 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.891
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	179	0	0.000	N-S(1):	0.325
	TH	2.00	643	3,200	0.257 *	N-S(2):	0.338 *
	LT	1.00	110	1,600	0.069	E-W(1):	0.291
Westbound	RT	0.00	122	0	0.000	E-W(2):	0.452 *
	TH	2.00	837	3,200	0.300 *		
	LT	1.00	87	1,600	0.054	V/C:	0.790
Northbound	RT	0.00	48	0	0.000	Lost Time:	0.100
	TH	2.00	772	3,200	0.256		
	LT	1.00	130	1,600	0.081 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.890
	TH	2.00	691	3,200	0.237		
	LT	1.00	243	1,600	0.152 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	109	0	0.000	N-S(1):	0.372
	TH	2.00	855	3,200	0.301 *	N-S(2):	0.417 *
	LT	1.00	85	1,600	0.053	E-W(1):	0.399 *
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.319
	TH	2.00	571	3,200	0.211		
	LT	1.00	122	1,600	0.076 *	V/C:	0.816
Northbound	RT	0.00	72	0	0.000	Lost Time:	0.100
	TH	2.00	948	3,200	0.319		
	LT	1.00	186	1,600	0.116 *		
Eastbound	RT	0.00	190	0	0.000	ICU:	0.916
	TH	2.00	842	3,200	0.323 *		
	LT	1.00	173	1,600	0.108	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	268	0	0.000	N-S(1):	0.338
	TH	2.00	725	3,200	0.310 *	N-S(2):	0.429 *
	LT	1.00	104	1,600	0.065	E-W(1):	0.251 *
Westbound	RT	1.00	66	1,600	0.000	E-W(2):	0.250
	TH	2.00	595	3,200	0.186		
	LT	1.00	161	1,600	0.101 *	V/C:	0.680
Northbound	RT	0.00	238	0	0.000	Lost Time:	0.100
	TH	2.00	635	3,200	0.273		
	LT	1.00	191	1,600	0.119 *		
Eastbound	RT	1.00	35	1,600	0.000	ICU:	0.780
	TH	2.00	481	3,200	0.150 *		
	LT	1.00	103	1,600	0.064	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	224	0	0.000	N-S(1):	0.373 *
	TH	2.00	686	3,200	0.284	N-S(2):	0.372
	LT	1.00	123	1,600	0.077 *	E-W(1):	0.399 *
Westbound	RT	1.00	143	1,600	0.013	E-W(2):	0.364
	TH	2.00	616	3,200	0.193		
	LT	1.00	140	1,600	0.088 *	V/C:	0.772
Northbound	RT	0.00	188	0	0.000	Lost Time:	0.100
	TH	2.00	758	3,200	0.296 *		
	LT	1.00	140	1,600	0.088		
Eastbound	RT	1.00	136	1,600	0.000	ICU:	0.872
	TH	2.00	994	3,200	0.311 *		
	LT	1.00	273	1,600	0.171	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	85	0	0.000	N-S(1):	0.342 *
	TH	2.00	565	3,200	0.203	N-S(2):	0.329
	LT	1.00	154	1,600	0.096 *	E-W(1):	0.259
Westbound	RT	0.00	210	0	0.000	E-W(2):	0.479 *
	TH	2.00	1,028	3,200	0.387 *		
	LT	1.00	153	1,600	0.096	V/C:	0.821
Northbound	RT	0.00	125	0	0.000	Lost Time:	0.100
	TH	2.00	661	3,200	0.246 *		
	LT	1.00	202	1,600	0.126		
Eastbound	RT	0.00	125	0	0.000	ICU:	0.921
	TH	2.00	397	3,200	0.163		
	LT	1.00	147	1,600	0.092 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	55	0	0.000	N-S(1):	0.276 *
	TH	2.00	545	3,200	0.188	N-S(2):	0.271
	LT	1.00	120	1,600	0.075 *	E-W(1):	0.446 *
Westbound	RT	0.00	126	0	0.000	E-W(2):	0.339
	TH	2.00	663	3,200	0.247		
	LT	1.00	175	1,600	0.109 *	V/C:	0.722
Northbound	RT	0.00	106	0	0.000	Lost Time:	0.100
	TH	2.00	537	3,200	0.201 *		
	LT	1.00	132	1,600	0.083		
Eastbound	RT	0.00	166	0	0.000	ICU:	0.822
	TH	2.00	913	3,200	0.337 *		
	LT	1.00	147	1,600	0.092	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	319	0	0.000	N-S(1):	0.288
	TH	2.00	551	3,200	0.272 *	N-S(2):	0.356 *
	LT	1.00	53	1,600	0.033	E-W(1):	0.224
Westbound	RT	0.00	86	0	0.000	E-W(2):	0.330 *
	TH	2.00	627	3,200	0.223 *		
	LT	1.00	49	1,600	0.031	V/C:	0.686
Northbound	RT	0.00	101	0	0.000	Lost Time:	0.100
	TH	2.00	715	3,200	0.255		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.786
	TH	2.00	548	3,200	0.193		
	LT	1.00	171	1,600	0.107 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	135	0	0.000	N-S(1):	0.327 *
	TH	2.00	576	3,200	0.222	N-S(2):	0.320
	LT	1.00	126	1,600	0.079 *	E-W(1):	0.282
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.364 *
	TH	2.00	506	3,200	0.173 *		
	LT	1.00	86	1,600	0.054	V/C:	0.691
Northbound	RT	0.00	75	0	0.000	Lost Time:	0.100
	TH	2.00	717	3,200	0.248 *		
	LT	1.00	157	1,600	0.098		
Eastbound	RT	0.00	68	0	0.000	ICU:	0.791
	TH	2.00	662	3,200	0.228		
	LT	1.00	306	1,600	0.191 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	38	0	0.000	N-S(1):	0.665 *
	TH	2.00	562	3,200	0.188	N-S(2):	0.259
	LT	1.00	212	1,600	0.133 *	E-W(1):	0.247 *
Westbound	RT	1.00	142	1,600	0.000	E-W(2):	0.197
	TH	2.00	372	3,200	0.116		
	LT	1.00	200	1,600	0.125 *	V/C:	0.912
Northbound	RT	1.00	165	1,600	0.000	Lost Time:	0.100
	TH	1.00	851	1,600	0.532 *		
	LT	1.00	113	1,600	0.071		
Eastbound	RT	1.00	181	1,600	0.043	ICU:	1.012
	TH	2.00	391	3,200	0.122 *		
	LT	1.00	130	1,600	0.081	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.569 *
	TH	2.00	554	3,200	0.192	N-S(2):	0.273
	LT	1.00	272	1,600	0.170 *	E-W(1):	0.417 *
Westbound	RT	1.00	210	1,600	0.000	E-W(2):	0.312
	TH	2.00	797	3,200	0.249		
	LT	1.00	173	1,600	0.108 *	V/C:	0.986
Northbound	RT	1.00	158	1,600	0.000	Lost Time:	0.100
	TH	1.00	638	1,600	0.399 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	1.00	135	1,600	0.004	ICU:	1.086
	TH	2.00	989	3,200	0.309 *		
	LT	1.00	101	1,600	0.063	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	186	1,600	0.041	N-S(1):	0.387
	TH	2.00	900	3,200	0.281 *	N-S(2):	0.390 *
	LT	1.00	119	1,600	0.074	E-W(1):	0.248 *
Westbound	RT	1.00	86	1,600	0.000	E-W(2):	0.225
	TH	2.00	480	3,200	0.150		
	LT	1.00	145	1,600	0.091 *	V/C:	0.638
Northbound	RT	1.00	136	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,000	3,200	0.313		
	LT	1.00	175	1,600	0.109 *		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.738
	TH	2.00	386	3,200	0.157 *		
	LT	1.00	120	1,600	0.075	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	128	1,600	0.000	N-S(1):	0.479
	TH	2.00	1,319	3,200	0.412 *	N-S(2):	0.559 *
	LT	1.00	211	1,600	0.132	E-W(1):	0.396 *
Westbound	RT	1.00	170	1,600	0.000	E-W(2):	0.290
	TH	2.00	613	3,200	0.192		
	LT	1.00	114	1,600	0.071 *	V/C:	0.955
Northbound	RT	1.00	194	1,600	0.050	Lost Time:	0.100
	TH	2.00	1,111	3,200	0.347		
	LT	1.00	235	1,600	0.147 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	1.055
	TH	2.00	856	3,200	0.325 *		
	LT	1.00	156	1,600	0.098	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	172	0	0.000	N-S(1):	0.496 *
	TH	2.00	956	3,200	0.353	N-S(2):	0.439
	LT	1.00	122	1,600	0.076 *	E-W(1):	0.315
Westbound	RT	0.00	111	0	0.000	E-W(2):	0.333 *
	TH	2.00	441	3,200	0.173 *		
	LT	1.00	241	1,600	0.151	V/C:	0.829
Northbound	RT	0.00	259	0	0.000	Lost Time:	0.100
	TH	2.00	1,085	3,200	0.420 *		
	LT	1.00	137	1,600	0.086		
Eastbound	RT	0.00	125	0	0.000	ICU:	0.929
	TH	2.00	399	3,200	0.164		
	LT	1.00	256	1,600	0.160 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	193	0	0.000	N-S(1):	0.548 *
	TH	2.00	1,136	3,200	0.415	N-S(2):	0.496
	LT	1.00	210	1,600	0.131 *	E-W(1):	0.310 *
Westbound	RT	0.00	139	0	0.000	E-W(2):	0.264
	TH	2.00	286	3,200	0.133		
	LT	1.00	151	1,600	0.094 *	V/C:	0.858
Northbound	RT	0.00	210	0	0.000	Lost Time:	0.100
	TH	2.00	1,123	3,200	0.417 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	0.00	164	0	0.000	ICU:	0.958
	TH	2.00	527	3,200	0.216 *		
	LT	1.00	209	1,600	0.131	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PIONEER BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	441	1,600	0.053	N-S(1):	0.395 *
	TH	2.00	519	3,200	0.162	N-S(2):	0.186
	LT	2.00	625	2,880	0.217 *	E-W(1):	0.362
Westbound	RT	1.00	59	1,600	0.000	E-W(2):	0.557 *
	TH	3.00	1,601	4,800	0.334 *		
	LT	1.00	95	1,600	0.059	V/C:	0.952
Northbound	RT	1.00	126	1,600	0.019	Lost Time:	0.100
	TH	2.00	568	3,200	0.178 *		
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	88	1,600	0.031	ICU:	1.052
	TH	3.00	1,455	4,800	0.303		
	LT	1.00	356	1,600	0.223 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	361	1,600	0.041	N-S(1):	0.326 *
	TH	2.00	683	3,200	0.213	N-S(2):	0.286
	LT	2.00	406	2,880	0.141 *	E-W(1):	0.428
Westbound	RT	1.00	56	1,600	0.000	E-W(2):	0.517 *
	TH	3.00	1,597	4,800	0.333 *		
	LT	1.00	135	1,600	0.084	V/C:	0.843
Northbound	RT	1.00	185	1,600	0.031	Lost Time:	0.100
	TH	2.00	591	3,200	0.185 *		
	LT	1.00	117	1,600	0.073		
Eastbound	RT	1.00	71	1,600	0.000	ICU:	0.943
	TH	3.00	1,651	4,800	0.344		
	LT	1.00	295	1,600	0.184 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FIRESTONE BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.309 *
	TH	2.06	469	3,298	0.142	N-S(2):	0.000
	LT	1.94	441	2,791	0.158 *	E-W(1):	0.368 *
Westbound	RT	1.00	391	1,600	0.102	E-W(2):	0.268
	TH	3.00	1,288	4,800	0.268		
	LT	1.00	6	1,600	0.004 *	V/C:	0.677
Northbound	RT	0.00	38	0	0.000	Lost Time:	0.100
	TH	2.65	536	4,237	0.135		
	LT	1.35	293	1,947	0.151 *		
Eastbound	RT	0.00	303	0	0.000	ICU:	0.777
	TH	3.00	1,443	4,800	0.364 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	1	0	0.000	N-S(1):	0.370 *
	TH	2.06	562	3,303	0.170	N-S(2):	0.000
	LT	1.94	527	2,787	0.189 *	E-W(1):	0.373 *
Westbound	RT	1.00	467	1,600	0.122	E-W(2):	0.306
	TH	3.00	1,468	4,800	0.306		
	LT	1.00	11	1,600	0.007 *	V/C:	0.743
Northbound	RT	0.00	6	0	0.000	Lost Time:	0.100
	TH	2.48	640	3,960	0.163		
	LT	1.52	398	2,196	0.181 *		
Eastbound	RT	0.00	437	0	0.000	ICU:	0.843
	TH	3.00	1,319	4,800	0.366 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	265	1,600	0.067	N-S(1):	0.280
	TH	2.00	431	3,200	0.135 *	N-S(2):	0.368 *
	LT	1.00	153	1,600	0.096	E-W(1):	0.324
Westbound	RT	0.00	105	0	0.000	E-W(2):	0.373 *
	TH	3.00	1,210	4,800	0.274 *		
	LT	1.00	137	1,600	0.086	V/C:	0.741
Northbound	RT	1.00	148	1,600	0.007	Lost Time:	0.100
	TH	2.00	589	3,200	0.184		
	LT	1.00	373	1,600	0.233 *		
Eastbound	RT	1.00	151	1,600	0.000	ICU:	0.841
	TH	2.00	762	3,200	0.238		
	LT	1.00	158	1,600	0.099 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	116	1,600	0.000	N-S(1):	0.282
	TH	2.00	659	3,200	0.206 *	N-S(2):	0.434 *
	LT	1.00	163	1,600	0.102	E-W(1):	0.444 *
Westbound	RT	0.00	73	0	0.000	E-W(2):	0.362
	TH	3.00	1,169	4,800	0.259		
	LT	1.00	146	1,600	0.091 *	V/C:	0.878
Northbound	RT	1.00	184	1,600	0.024	Lost Time:	0.100
	TH	2.00	575	3,200	0.180		
	LT	1.00	364	1,600	0.228 *		
Eastbound	RT	1.00	275	1,600	0.000	ICU:	0.978
	TH	2.00	1,128	3,200	0.353 *		
	LT	1.00	165	1,600	0.103	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: I-105 EASTBOUND OFF WESTBOUND ON RAMP

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	275	0	0.000	N-S(1):	0.198
	TH	2.00	460	3,200	0.230 *	N-S(2):	0.425 *
	LT	0.00	0	0	0.000	E-W(1):	0.068
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.351 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.776
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	632	3,200	0.198		
	LT	1.00	312	1,600	0.195 *		
Eastbound	RT	1.00	421	1,600	0.068	ICU:	0.876
	TH	0.00	0	0	0.000		
	LT	2.00	1,012	2,880	0.351 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	206	0	0.000	N-S(1):	0.229
	TH	2.00	555	3,200	0.238 *	N-S(2):	0.406 *
	LT	0.00	0	0	0.000	E-W(1):	0.324
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.335 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.741
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	734	3,200	0.229		
	LT	1.00	268	1,600	0.168 *		
Eastbound	RT	1.00	787	1,600	0.324	ICU:	0.841
	TH	0.00	0	0	0.000		
	LT	2.00	966	2,880	0.335 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	165	1,600	0.049	N-S(1):	0.382 *
	TH	2.00	358	3,200	0.112	N-S(2):	0.262
	LT	1.00	70	1,600	0.044 *	E-W(1):	0.347
Westbound	RT	0.00	35	0	0.000	E-W(2):	0.401 *
	TH	3.00	1,629	4,800	0.347 *		
	LT	1.00	237	1,600	0.148	V/C:	0.783
Northbound	RT	1.00	778	1,600	0.338 *	Lost Time:	0.100
	TH	2.00	871	3,200	0.272		
	LT	1.00	240	1,600	0.150		
Eastbound	RT	1.00	249	1,600	0.006	ICU:	0.883
	TH	3.00	954	4,800	0.199		
	LT	1.00	87	1,600	0.054 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	130	1,600	0.000	N-S(1):	0.318 *
	TH	2.00	459	3,200	0.143	N-S(2):	0.287
	LT	1.00	110	1,600	0.069 *	E-W(1):	0.426 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.418
	TH	3.00	1,502	4,800	0.325		
	LT	1.00	221	1,600	0.138 *	V/C:	0.744
Northbound	RT	1.00	620	1,600	0.249 *	Lost Time:	0.100
	TH	2.00	735	3,200	0.230		
	LT	1.00	230	1,600	0.144		
Eastbound	RT	1.00	216	1,600	0.000	ICU:	0.844
	TH	3.00	1,384	4,800	0.288 *		
	LT	1.00	148	1,600	0.093	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	294	1,600	0.058	N-S(1):	0.264 *
	TH	2.00	343	3,200	0.107	N-S(2):	0.207
	LT	1.00	113	1,600	0.071 *	E-W(1):	0.240
Westbound	RT	1.00	269	1,600	0.098	E-W(2):	0.467 *
	TH	2.00	1,090	3,200	0.341 *		
	LT	1.00	62	1,600	0.039	V/C:	0.731
Northbound	RT	1.00	60	1,600	0.000	Lost Time:	0.100
	TH	2.00	616	3,200	0.193 *		
	LT	1.00	160	1,600	0.100		
Eastbound	RT	1.00	91	1,600	0.000	ICU:	0.831
	TH	2.00	643	3,200	0.201		
	LT	1.00	202	1,600	0.126 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	275	1,600	0.000	N-S(1):	0.298 *
	TH	2.00	473	3,200	0.148	N-S(2):	0.229
	LT	1.00	143	1,600	0.089 *	E-W(1):	0.302
Westbound	RT	1.00	206	1,600	0.039	E-W(2):	0.501 *
	TH	2.00	954	3,200	0.298 *		
	LT	1.00	58	1,600	0.036	V/C:	0.799
Northbound	RT	1.00	42	1,600	0.000	Lost Time:	0.100
	TH	2.00	668	3,200	0.209 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	1.00	113	1,600	0.000	ICU:	0.899
	TH	2.00	851	3,200	0.266		
	LT	1.00	324	1,600	0.203 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 NORTHBOUND OFF-RAMP/I-105 WESTBOUND ON-RAMP
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.124
	TH	0.00	0	0	0.000 *	N-S(2):	0.234 *
	LT	0.00	0	0	0.000	E-W(1):	0.384 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.358
	TH	3.00	1,716	4,800	0.358		
	LT	2.00	359	2,880	0.125 *	V/C:	0.618
Northbound	RT	1.00	378	1,600	0.124	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	1.00	63	1,600	0.000	ICU:	0.718
	TH	2.00	829	3,200	0.259 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.265 *
	TH	0.00	0	0	0.000	N-S(2):	0.234
	LT	0.00	0	0	0.000 *	E-W(1):	0.534 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.300
	TH	3.00	1,438	4,800	0.300		
	LT	2.00	263	2,880	0.091 *	V/C:	0.799
Northbound	RT	1.00	556	1,600	0.265 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	375	1,600	0.234		
Eastbound	RT	1.00	54	1,600	0.000	ICU:	0.899
	TH	2.00	1,419	3,200	0.443 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FLATBUSH AVENUE/I-605 SOUTHBOUND OFF-RAMP
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.02	292	1,630	0.153	N-S(1):	0.209 *
	TH	0.01	2	11	0.179	N-S(2):	0.000
	LT	1.97	566	2,843	0.199 *	E-W(1):	0.449 *
Westbound	RT	1.00	26	1,600	0.000	E-W(2):	0.404
	TH	2.00	1,206	3,200	0.377		
	LT	1.00	13	1,600	0.008 *	V/C:	0.658
Northbound	RT	0.00	10	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,600	0.010 *		
	LT	0.00	6	1,600	0.004		
Eastbound	RT	0.00	3	0	0.000	ICU:	0.758
	TH	2.00	1,408	3,200	0.441 *		
	LT	1.00	43	1,600	0.027	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	303	1,600	0.146	N-S(1):	0.280 *
	TH	0.03	12	50	0.238	N-S(2):	0.000
	LT	1.97	751	2,835	0.265 *	E-W(1):	0.508 *
Westbound	RT	1.00	97	1,600	0.000	E-W(2):	0.357
	TH	2.00	1,006	3,200	0.314		
	LT	1.00	11	1,600	0.007 *	V/C:	0.788
Northbound	RT	0.00	15	0	0.000	Lost Time:	0.100
	TH	1.00	2	1,600	0.015 *		
	LT	0.00	7	1,600	0.004		
Eastbound	RT	0.00	16	0	0.000	ICU:	0.888
	TH	2.00	1,588	3,200	0.501 *		
	LT	1.00	69	1,600	0.043	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: HOXIE AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	49	1,600	0.006	N-S(1):	0.238 *
	TH	0.92	36	1,477	0.024	N-S(2):	0.000
	LT	1.08	42	1,551	0.027 *	E-W(1):	0.446 *
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.398
	TH	3.00	1,766	4,800	0.374		
	LT	1.00	251	1,600	0.157 *	V/C:	0.684
Northbound	RT	1.56	476	2,503	0.090	Lost Time:	0.100
	TH	0.34	102	536	0.190		
	LT	1.10	335	1,585	0.211 *		
Eastbound	RT	0.00	388	0	0.000	ICU:	0.784
	TH	3.00	1,000	4,800	0.289 *		
	LT	1.00	39	1,600	0.024	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	253	1,600	0.031	N-S(1):	0.359 *
	TH	1.00	83	1,600	0.052 *	N-S(2):	0.000
	LT	1.00	72	1,600	0.045	E-W(1):	0.559 *
Westbound	RT	0.00	149	0	0.000	E-W(2):	0.465
	TH	3.00	1,467	4,800	0.337		
	LT	1.00	250	1,600	0.156 *	V/C:	0.918
Northbound	RT	1.04	461	1,668	0.127	Lost Time:	0.100
	TH	0.43	190	687	0.276		
	LT	1.53	676	2,201	0.307 *		
Eastbound	RT	0.00	582	0	0.000	ICU:	1.018
	TH	3.00	1,351	4,800	0.403 *		
	LT	1.00	204	1,600	0.128	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS/FLATBUSH AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.38	447	2,201	0.105	N-S(1):	0.221 *
	TH	0.62	1	999	0.203 *	N-S(2):	0.000
	LT	0.00	202	1,600	0.126	E-W(1):	0.278
Westbound	RT	1.44	774	2,309	0.248	E-W(2):	0.470 *
	TH	2.56	1,371	4,091	0.335 *		
	LT	1.00	4	1,600	0.003	V/C:	0.691
Northbound	RT	0.00	18	0	0.000	Lost Time:	0.100
	TH	1.00	5	1,600	0.018 *		
	LT	0.00	5	1,600	0.003		
Eastbound	RT	0.00	2	0	0.000	ICU:	0.791
	TH	3.00	1,319	4,800	0.275		
	LT	1.00	216	1,600	0.135 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.08	191	1,727	0.000	N-S(1):	0.129 *
	TH	0.92	0	1,473	0.111 *	N-S(2):	0.000
	LT	0.00	163	1,600	0.102	E-W(1):	0.463
Westbound	RT	1.49	882	2,377	0.303	E-W(2):	0.610 *
	TH	2.51	1,493	4,023	0.371 *		
	LT	1.00	33	1,600	0.021	V/C:	0.739
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	1.00	8	1,600	0.018 *		
	LT	0.00	4	1,600	0.003		
Eastbound	RT	0.00	17	0	0.000	ICU:	0.839
	TH	3.00	2,106	4,800	0.442		
	LT	1.00	382	1,600	0.239 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 NORTHBOUND RAMPS/HOXIE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	620	1,600	0.241 *	N-S(1):	0.302 *
	TH	1.00	13	1,600	0.008	N-S(2):	0.000
	LT	2.00	176	2,880	0.061	E-W(1):	0.254
Westbound	RT	1.00	161	1,600	0.046	E-W(2):	0.535 *
	TH	2.00	1,189	3,200	0.372 *		
	LT	1.00	72	1,600	0.045	V/C:	0.837
Northbound	RT	0.00	97	1,600	0.061 *	Lost Time:	0.100
	TH	2.00	82	1,600	0.051		
	LT	1.00	38	1,600	0.024		
Eastbound	RT	0.00	66	0	0.000	ICU:	0.937
	TH	2.00	602	3,200	0.209		
	LT	2.00	470	2,880	0.163 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	529	1,600	0.121 *	N-S(1):	0.242 *
	TH	1.00	59	1,600	0.037	N-S(2):	0.000
	LT	2.00	185	2,880	0.064	E-W(1):	0.359
Westbound	RT	1.00	164	1,600	0.045	E-W(2):	0.593 *
	TH	2.00	1,152	3,200	0.360 *		
	LT	1.00	154	1,600	0.096	V/C:	0.835
Northbound	RT	0.00	170	0	0.000	Lost Time:	0.100
	TH	2.00	176	3,200	0.108		
	LT	1.00	194	1,600	0.121 *		
Eastbound	RT	0.00	251	0	0.000	ICU:	0.935
	TH	2.00	592	3,200	0.263		
	LT	2.00	672	2,880	0.233 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	603	3,200	0.188 *	N-S(1):	0.079
	TH	0.00	0	0	0.000	N-S(2):	0.188 *
	LT	1.00	127	1,600	0.079	E-W(1):	0.600 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.543
	TH	2.00	1,736	3,200	0.543		
	LT	1.00	321	1,600	0.201 *	V/C:	0.788
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	1.00	626	1,600	0.391	ICU:	0.888
	TH	2.00	1,278	3,200	0.399 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	518	3,200	0.162	N-S(1):	0.173 *
	TH	0.00	0	0	0.000	N-S(2):	0.162
	LT	1.00	277	1,600	0.173 *	E-W(1):	0.771 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.591
	TH	2.00	1,890	3,200	0.591		
	LT	1.00	177	1,600	0.111 *	V/C:	0.944
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	903	1,600	0.564	ICU:	1.044
	TH	2.00	2,113	3,200	0.660 *		
	LT	0.00	0	0	0.000	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DONOVAN STREET/ROSE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.369 *
	TH	3.00	889	4,800	0.191	N-S(2):	0.333
	LT	1.00	220	1,600	0.138 *	E-W(1):	0.186 *
Westbound	RT	0.00	44	0	0.000	E-W(2):	0.101
	TH	1.00	94	1,600	0.089		
	LT	0.00	4	1,600	0.003 *	V/C:	0.555
Northbound	RT	0.00	9	0	0.000	Lost Time:	0.100
	TH	3.00	1,100	4,800	0.231 *		
	LT	1.00	227	1,600	0.142		
Eastbound	RT	0.00	124	0	0.000	ICU:	0.655
	TH	1.00	149	1,600	0.183 *		
	LT	0.00	19	1,600	0.012	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	17	0	0.000	N-S(1):	0.379
	TH	3.00	1,409	4,800	0.297 *	N-S(2):	0.388 *
	LT	1.00	154	1,600	0.096	E-W(1):	0.050 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.029
	TH	1.00	16	1,600	0.023		
	LT	0.00	1	1,600	0.001 *	V/C:	0.438
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	3.00	1,343	4,800	0.283		
	LT	1.00	146	1,600	0.091 *		
Eastbound	RT	0.00	34	0	0.000	ICU:	0.538
	TH	1.00	35	1,600	0.049 *		
	LT	0.00	10	1,600	0.006	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CLETA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	50	0	0.000	N-S(1):	0.184
	TH	3.00	872	4,800	0.192 *	N-S(2):	0.345 *
	LT	1.00	4	1,600	0.003	E-W(1):	0.004
Westbound	RT	0.00	12	0	0.000	E-W(2):	0.065 *
	TH	1.00	7	1,600	0.016 *		
	LT	0.00	7	1,600	0.004	V/C:	0.410
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	3.00	863	4,800	0.181		
	LT	1.00	244	1,600	0.153 *		
Eastbound	RT	1.00	135	1,600	0.000	ICU:	0.510
	TH	0.00	0	0	0.000		
	LT	1.00	79	1,600	0.049 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	48	0	0.000	N-S(1):	0.300
	TH	3.00	1,182	4,800	0.256 *	N-S(2):	0.316 *
	LT	1.00	14	1,600	0.009	E-W(1):	0.034
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.072 *
	TH	1.00	3	1,600	0.004 *		
	LT	0.00	3	1,600	0.002	V/C:	0.388
Northbound	RT	0.00	5	0	0.000	Lost Time:	0.100
	TH	3.00	1,393	4,800	0.291		
	LT	1.00	96	1,600	0.060 *		
Eastbound	RT	1.00	147	1,600	0.032	ICU:	0.488
	TH	0.00	0	0	0.000		
	LT	1.00	109	1,600	0.068 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	126	0	0.000	N-S(1):	0.287 *
	TH	2.00	256	3,200	0.119	N-S(2):	0.167
	LT	1.00	282	1,600	0.176 *	E-W(1):	0.322
Westbound	RT	0.00	179	0	0.000	E-W(2):	0.385 *
	TH	3.00	1,232	4,800	0.294 *		
	LT	1.00	101	1,600	0.063	V/C:	0.672
Northbound	RT	0.00	34	0	0.000	Lost Time:	0.100
	TH	2.00	321	3,200	0.111 *		
	LT	1.00	77	1,600	0.048		
Eastbound	RT	0.00	26	0	0.000	ICU:	0.772
	TH	3.00	1,216	4,800	0.259		
	LT	1.00	146	1,600	0.091 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	144	0	0.000	N-S(1):	0.223 *
	TH	2.00	299	3,200	0.138	N-S(2):	0.166
	LT	1.00	214	1,600	0.134 *	E-W(1):	0.403
Westbound	RT	0.00	137	0	0.000	E-W(2):	0.460 *
	TH	3.00	1,526	4,800	0.346 *		
	LT	1.00	118	1,600	0.074	V/C:	0.683
Northbound	RT	0.00	39	0	0.000	Lost Time:	0.100
	TH	2.00	246	3,200	0.089 *		
	LT	1.00	44	1,600	0.028		
Eastbound	RT	0.00	38	0	0.000	ICU:	0.783
	TH	3.00	1,539	4,800	0.329		
	LT	1.00	182	1,600	0.114 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	55	0	0.000	N-S(1):	0.214
	TH	2.00	508	3,200	0.176 *	N-S(2):	0.227 *
	LT	1.00	121	1,600	0.076	E-W(1):	0.271
Westbound	RT	1.00	197	1,600	0.048	E-W(2):	0.305 *
	TH	3.00	1,039	4,800	0.216 *		
	LT	1.00	161	1,600	0.101	V/C:	0.532
Northbound	RT	0.00	68	0	0.000	Lost Time:	0.100
	TH	2.00	375	3,200	0.138		
	LT	1.00	82	1,600	0.051 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.632
	TH	3.00	746	4,800	0.170		
	LT	1.00	142	1,600	0.089 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.350 *
	TH	2.00	554	3,200	0.193	N-S(2):	0.284
	LT	1.00	185	1,600	0.116 *	E-W(1):	0.389
Westbound	RT	1.00	204	1,600	0.012	E-W(2):	0.391 *
	TH	3.00	1,449	4,800	0.302 *		
	LT	1.00	125	1,600	0.078	V/C:	0.741
Northbound	RT	0.00	122	0	0.000	Lost Time:	0.100
	TH	2.00	626	3,200	0.234 *		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.841
	TH	3.00	1,421	4,800	0.311		
	LT	1.00	142	1,600	0.089 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.147
	TH	2.00	232	3,200	0.092 *	N-S(2):	0.160 *
	LT	1.00	40	1,600	0.025	E-W(1):	0.402 *
Westbound	RT	0.00	64	0	0.000	E-W(2):	0.321
	TH	3.00	1,255	4,800	0.275		
	LT	1.00	161	1,600	0.101 *	V/C:	0.562
Northbound	RT	0.00	73	0	0.000	Lost Time:	0.100
	TH	2.00	317	3,200	0.122		
	LT	1.00	109	1,600	0.068 *		
Eastbound	RT	0.00	109	0	0.000	ICU:	0.662
	TH	3.00	1,338	4,800	0.301 *		
	LT	1.00	73	1,600	0.046	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.172
	TH	2.00	263	3,200	0.101 *	N-S(2):	0.210 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.473 *
Westbound	RT	0.00	89	0	0.000	E-W(2):	0.324
	TH	3.00	1,258	4,800	0.281		
	LT	1.00	186	1,600	0.116 *	V/C:	0.683
Northbound	RT	0.00	143	0	0.000	Lost Time:	0.100
	TH	2.00	319	3,200	0.144		
	LT	1.00	174	1,600	0.109 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.783
	TH	3.00	1,598	4,800	0.357 *		
	LT	1.00	69	1,600	0.043	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	335	1,600	0.209 *	N-S(1):	0.223 *
	TH	2.00	78	1,600	0.049	N-S(2):	0.000
	LT	1.00	317	1,600	0.198	E-W(1):	0.211
Westbound	RT	0.00	297	0	0.000	E-W(2):	0.454 *
	TH	3.00	956	4,800	0.261 *		
	LT	1.00	46	1,600	0.029	V/C:	0.677
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	32	3,200	0.014 *		
	LT	1.00	20	1,600	0.013		
Eastbound	RT	1.00	97	1,600	0.048	ICU:	0.777
	TH	3.00	872	4,800	0.182		
	LT	1.00	308	1,600	0.193 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	249	1,600	0.156	N-S(1):	0.211 *
	TH	2.00	21	1,600	0.013	N-S(2):	0.000
	LT	1.00	280	1,600	0.175 *	E-W(1):	0.285
Westbound	RT	0.00	265	0	0.000	E-W(2):	0.472 *
	TH	3.00	1,011	4,800	0.266 *		
	LT	1.00	12	1,600	0.008	V/C:	0.683
Northbound	RT	0.00	35	0	0.000	Lost Time:	0.100
	TH	1.56	45	2,494	0.032		
	LT	1.44	74	2,076	0.036 *		
Eastbound	RT	1.00	19	1,600	0.000	ICU:	0.783
	TH	3.00	1,328	4,800	0.277		
	LT	1.00	329	1,600	0.206 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	102	0	0.000	N-S(1):	0.299
	TH	2.00	560	3,200	0.207 *	N-S(2):	0.303 *
	LT	1.00	114	1,600	0.071	E-W(1):	0.350 *
Westbound	RT	1.00	255	1,600	0.088	E-W(2):	0.336
	TH	2.00	836	3,200	0.261		
	LT	1.00	275	1,600	0.172 *	V/C:	0.653
Northbound	RT	0.00	199	0	0.000	Lost Time:	0.100
	TH	2.00	532	3,200	0.228		
	LT	1.00	154	1,600	0.096 *		
Eastbound	RT	1.00	191	1,600	0.023	ICU:	0.753
	TH	2.00	568	3,200	0.178 *		
	LT	1.00	120	1,600	0.075	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000	N-S(1):	0.324 *
	TH	2.00	369	3,200	0.141	N-S(2):	0.207
	LT	1.00	190	1,600	0.119 *	E-W(1):	0.331 *
Westbound	RT	1.00	196	1,600	0.004	E-W(2):	0.237
	TH	2.00	627	3,200	0.196		
	LT	1.00	243	1,600	0.152 *	V/C:	0.655
Northbound	RT	0.00	203	0	0.000	Lost Time:	0.100
	TH	2.00	454	3,200	0.205 *		
	LT	1.00	106	1,600	0.066		
Eastbound	RT	1.00	146	1,600	0.025	ICU:	0.755
	TH	2.00	574	3,200	0.179 *		
	LT	1.00	65	1,600	0.041	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	202	0	0.000	N-S(1):	0.251
	TH	2.00	397	3,200	0.187 *	N-S(2):	0.263 *
	LT	1.00	114	1,600	0.071	E-W(1):	0.309
Westbound	RT	1.00	176	1,600	0.039	E-W(2):	0.361 *
	TH	2.00	927	3,200	0.290 *		
	LT	1.00	115	1,600	0.072	V/C:	0.624
Northbound	RT	0.00	136	0	0.000	Lost Time:	0.100
	TH	2.00	440	3,200	0.180		
	LT	1.00	122	1,600	0.076 *		
Eastbound	RT	1.00	50	1,600	0.000	ICU:	0.724
	TH	2.00	757	3,200	0.237		
	LT	1.00	113	1,600	0.071 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	192	0	0.000	N-S(1):	0.253
	TH	2.00	689	3,200	0.275 *	N-S(2):	0.359 *
	LT	1.00	160	1,600	0.100	E-W(1):	0.422
Westbound	RT	1.00	73	1,600	0.000	E-W(2):	0.524 *
	TH	2.00	1,256	3,200	0.393 *		
	LT	1.00	139	1,600	0.087	V/C:	0.883
Northbound	RT	0.00	104	0	0.000	Lost Time:	0.100
	TH	2.00	384	3,200	0.153		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	1.00	78	1,600	0.000	ICU:	0.983
	TH	2.00	1,071	3,200	0.335		
	LT	1.00	209	1,600	0.131 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL - TECUM ROAD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	29	0	0.000	N-S(1):	0.281 *
	TH	2.00	108	3,200	0.056 *	N-S(2):	0.000
	LT	0.00	42	1,600	0.026	E-W(1):	0.480 *
Westbound	RT	0.00	36	0	0.000	E-W(2):	0.375
	TH	3.00	1,720	4,800	0.366		
	LT	1.00	319	1,600	0.199 *	V/C:	0.761
Northbound	RT	1.00	245	1,600	0.000	Lost Time:	0.100
	TH	0.20	65	320	0.203		
	LT	1.80	584	2,592	0.225 *		
Eastbound	RT	0.00	115	0	0.000	ICU:	0.861
	TH	3.00	1,235	4,800	0.281 *		
	LT	1.00	14	1,600	0.009	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.267 *
	TH	2.00	139	3,200	0.075 *	N-S(2):	0.000
	LT	0.00	68	1,600	0.043	E-W(1):	0.621 *
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.348
	TH	3.00	1,522	4,800	0.328		
	LT	1.00	293	1,600	0.183 *	V/C:	0.888
Northbound	RT	1.00	269	1,600	0.000	Lost Time:	0.100
	TH	0.55	153	887	0.173		
	LT	1.45	399	2,082	0.192 *		
Eastbound	RT	0.00	327	0	0.000	ICU:	0.988
	TH	3.00	1,775	4,800	0.438 *		
	LT	1.00	32	1,600	0.020	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	176	1,600	0.048 *	N-S(1):	0.017
	TH	0.00	0	0	0.000	N-S(2):	0.048 *
	LT	0.00	0	0	0.000	E-W(1):	0.240
Westbound	RT	0.00	196	0	0.000	E-W(2):	0.348 *
	TH	3.00	1,176	4,800	0.286 *		
	LT	0.00	0	0	0.000	V/C:	0.396
Northbound	RT	1.00	27	1,600	0.017	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	1.00	19	1,600	0.012	ICU:	0.496
	TH	3.00	1,150	4,800	0.240		
	LT	1.00	99	1,600	0.062 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	141	1,600	0.005	N-S(1):	0.047 *
	TH	0.00	0	0	0.000	N-S(2):	0.005
	LT	0.00	0	0	0.000 *	E-W(1):	0.323
Westbound	RT	0.00	263	0	0.000	E-W(2):	0.384 *
	TH	3.00	1,183	4,800	0.301 *		
	LT	0.00	0	0	0.000	V/C:	0.431
Northbound	RT	1.00	75	1,600	0.047 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	7	1,600	0.004	ICU:	0.531
	TH	3.00	1,548	4,800	0.323		
	LT	1.00	133	1,600	0.083 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	43	0	0.000	N-S(1):	0.268 *
	TH	1.00	166	1,600	0.211	N-S(2):	0.258
	LT	0.00	128	1,600	0.080 *	E-W(1):	0.225 *
Westbound	RT	0.00	75	0	0.000	E-W(2):	0.221
	TH	2.00	589	3,200	0.208		
	LT	1.00	40	1,600	0.025 *	V/C:	0.493
Northbound	RT	0.00	54	0	0.000	Lost Time:	0.100
	TH	1.00	171	1,600	0.188 *		
	LT	0.00	75	1,600	0.047		
Eastbound	RT	0.00	40	0	0.000	ICU:	0.593
	TH	2.00	599	3,200	0.200 *		
	LT	1.00	21	1,600	0.013	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.315 *
	TH	1.00	149	1,600	0.209	N-S(2):	0.247
	LT	0.00	95	1,600	0.059 *	E-W(1):	0.284
Westbound	RT	0.00	99	0	0.000	E-W(2):	0.299 *
	TH	2.00	749	3,200	0.265 *		
	LT	1.00	65	1,600	0.041	V/C:	0.614
Northbound	RT	0.00	112	0	0.000	Lost Time:	0.100
	TH	1.00	237	1,600	0.256 *		
	LT	0.00	61	1,600	0.038		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.714
	TH	2.00	706	3,200	0.243		
	LT	1.00	55	1,600	0.034 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	63	0	0.000	N-S(1):	0.308 *
	TH	1.00	206	1,600	0.168	N-S(2):	0.269
	LT	1.00	114	1,600	0.071 *	E-W(1):	0.289 *
Westbound	RT	0.00	38	0	0.000	E-W(2):	0.275
	TH	3.00	1,125	4,800	0.242		
	LT	1.00	99	1,600	0.062 *	V/C:	0.597
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	1.00	266	1,600	0.237 *		
	LT	1.00	161	1,600	0.101		
Eastbound	RT	1.00	49	1,600	0.000	ICU:	0.697
	TH	3.00	1,089	4,800	0.227 *		
	LT	1.00	53	1,600	0.033	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	52	0	0.000	N-S(1):	0.253
	TH	1.00	251	1,600	0.189 *	N-S(2):	0.266 *
	LT	1.00	75	1,600	0.047	E-W(1):	0.386 *
Westbound	RT	0.00	74	0	0.000	E-W(2):	0.346
	TH	3.00	1,295	4,800	0.285		
	LT	1.00	167	1,600	0.104 *	V/C:	0.652
Northbound	RT	0.00	86	0	0.000	Lost Time:	0.100
	TH	1.00	244	1,600	0.206		
	LT	1.00	123	1,600	0.077 *		
Eastbound	RT	1.00	51	1,600	0.000	ICU:	0.752
	TH	3.00	1,354	4,800	0.282 *		
	LT	1.00	97	1,600	0.061	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	53	1,600	0.000	N-S(1):	0.340
	TH	2.00	933	3,200	0.292 *	N-S(2):	0.382 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.171
Westbound	RT	1.00	174	1,600	0.026	E-W(2):	0.184 *
	TH	2.00	458	3,200	0.143 *		
	LT	1.00	154	1,600	0.096	V/C:	0.566
Northbound	RT	1.00	76	1,600	0.000	Lost Time:	0.100
	TH	2.00	821	3,200	0.257		
	LT	1.00	144	1,600	0.090 *		
Eastbound	RT	1.00	55	1,600	0.000	ICU:	0.666
	TH	2.00	240	3,200	0.075		
	LT	1.00	66	1,600	0.041 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	65	1,600	0.000	N-S(1):	0.480 *
	TH	2.00	825	3,200	0.258	N-S(2):	0.345
	LT	1.00	161	1,600	0.101 *	E-W(1):	0.186 *
Westbound	RT	1.00	141	1,600	0.000	E-W(2):	0.137
	TH	2.00	279	3,200	0.087		
	LT	1.00	133	1,600	0.083 *	V/C:	0.666
Northbound	RT	1.00	116	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,213	3,200	0.379 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	1.00	129	1,600	0.000	ICU:	0.766
	TH	2.00	329	3,200	0.103 *		
	LT	1.00	80	1,600	0.050	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	225	1,600	0.068	N-S(1):	0.369 *
	TH	2.00	844	3,200	0.264 *	N-S(2):	0.369 *
	LT	1.00	221	1,600	0.138 *	E-W(1):	0.332
Westbound	RT	0.00	130	0	0.000	E-W(2):	0.352 *
	TH	3.00	1,171	4,800	0.271 *		
	LT	1.00	150	1,600	0.094	V/C:	0.721
Northbound	RT	1.00	96	1,600	0.000	Lost Time:	0.100
	TH	2.00	739	3,200	0.231 *		
	LT	2.00	302	2,880	0.105 *		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.821
	TH	3.00	1,010	4,800	0.238		
	LT	2.00	233	2,880	0.081 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	225	1,600	0.047	N-S(1):	0.445 *
	TH	2.00	785	3,200	0.245	N-S(2):	0.331
	LT	1.00	232	1,600	0.145 *	E-W(1):	0.439 *
Westbound	RT	0.00	224	0	0.000	E-W(2):	0.378
	TH	3.00	1,093	4,800	0.274		
	LT	1.00	176	1,600	0.110 *	V/C:	0.884
Northbound	RT	1.00	125	1,600	0.000	Lost Time:	0.100
	TH	2.00	960	3,200	0.300 *		
	LT	2.00	249	2,880	0.086		
Eastbound	RT	0.00	194	0	0.000	ICU:	0.984
	TH	3.00	1,386	4,800	0.329 *		
	LT	2.00	300	2,880	0.104	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.421 *
	TH	2.00	1,092	3,200	0.341	N-S(2):	0.341
	LT	1.00	56	1,600	0.035 *	E-W(1):	0.136 *
Westbound	RT	0.46	101	741	0.061	E-W(2):	0.061
	TH	0.00	0	0	0.000		
	LT	0.54	117	859	0.136 *	V/C:	0.557
Northbound	RT	0.00	81	0	0.000	Lost Time:	0.100
	TH	2.00	1,155	3,200	0.386 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.657
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.499 *
	TH	2.00	1,059	3,200	0.331	N-S(2):	0.331
	LT	1.00	116	1,600	0.073 *	E-W(1):	0.119 *
Westbound	RT	0.57	108	905	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.43	83	695	0.119 *	V/C:	0.618
Northbound	RT	0.00	88	0	0.000	Lost Time:	0.100
	TH	2.00	1,275	3,200	0.426 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.718
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	161	0	0.000	N-S(1):	0.411 *
	TH	2.00	861	3,200	0.319	N-S(2):	0.392
	LT	1.00	158	1,600	0.099 *	E-W(1):	0.322
Westbound	RT	0.00	181	0	0.000	E-W(2):	0.354 *
	TH	2.00	556	3,200	0.230 *		
	LT	1.00	138	1,600	0.086	V/C:	0.765
Northbound	RT	0.00	81	0	0.000	Lost Time:	0.100
	TH	2.00	917	3,200	0.312 *		
	LT	1.00	117	1,600	0.073		
Eastbound	RT	0.00	97	0	0.000	ICU:	0.865
	TH	2.00	657	3,200	0.236		
	LT	1.00	199	1,600	0.124 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	137	0	0.000	N-S(1):	0.472
	TH	2.00	1,155	3,200	0.404 *	N-S(2):	0.488 *
	LT	1.00	210	1,600	0.131	E-W(1):	0.360 *
Westbound	RT	0.00	107	0	0.000	E-W(2):	0.348
	TH	2.00	816	3,200	0.288		
	LT	1.00	148	1,600	0.093 *	V/C:	0.848
Northbound	RT	0.00	115	0	0.000	Lost Time:	0.100
	TH	2.00	975	3,200	0.341		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	0.00	68	0	0.000	ICU:	0.948
	TH	2.00	785	3,200	0.267 *		
	LT	1.00	96	1,600	0.060	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	175	1,600	0.000	N-S(1):	0.394
	TH	2.00	1,003	3,200	0.313 *	N-S(2):	0.406 *
	LT	1.00	137	1,600	0.086	E-W(1):	0.339
Westbound	RT	0.00	186	0	0.000	E-W(2):	0.392 *
	TH	3.00	1,009	4,800	0.249 *		
	LT	1.00	131	1,600	0.082	V/C:	0.798
Northbound	RT	1.00	104	1,600	0.000	Lost Time:	0.100
	TH	2.00	985	3,200	0.308		
	LT	1.00	148	1,600	0.093 *		
Eastbound	RT	1.00	147	1,600	0.000	ICU:	0.898
	TH	2.00	823	3,200	0.257		
	LT	1.00	228	1,600	0.143 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	223	1,600	0.000	N-S(1):	0.421 *
	TH	2.00	945	3,200	0.295	N-S(2):	0.382
	LT	1.00	199	1,600	0.124 *	E-W(1):	0.512 *
Westbound	RT	0.00	172	0	0.000	E-W(2):	0.468
	TH	3.00	1,244	4,800	0.295		
	LT	1.00	210	1,600	0.131 *	V/C:	0.933
Northbound	RT	1.00	158	1,600	0.000	Lost Time:	0.100
	TH	2.00	951	3,200	0.297 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	1.00	144	1,600	0.003	ICU:	1.033
	TH	2.00	1,220	3,200	0.381 *		
	LT	1.00	277	1,600	0.173	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	425	1,600	0.078	N-S(1):	0.303
	TH	2.00	755	3,200	0.236 *	N-S(2):	0.337 *
	LT	2.00	153	2,880	0.053	E-W(1):	0.388
Westbound	RT	0.00	115	0	0.000	E-W(2):	0.512 *
	TH	3.00	1,442	4,800	0.324 *		
	LT	1.00	133	1,600	0.083	V/C:	0.849
Northbound	RT	1.00	102	1,600	0.000	Lost Time:	0.100
	TH	2.00	800	3,200	0.250		
	LT	2.00	292	2,880	0.101 *		
Eastbound	RT	0.00	289	0	0.000	ICU:	0.949
	TH	3.00	1,173	4,800	0.305		
	LT	1.00	300	1,600	0.188 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	193	1,600	0.000	N-S(1):	0.401
	TH	2.00	1,019	3,200	0.318 *	N-S(2):	0.419 *
	LT	2.00	305	2,880	0.106	E-W(1):	0.527
Westbound	RT	0.00	52	0	0.000	E-W(2):	0.562 *
	TH	3.00	1,435	4,800	0.310 *		
	LT	1.00	243	1,600	0.152	V/C:	0.981
Northbound	RT	1.00	110	1,600	0.000	Lost Time:	0.100
	TH	2.00	945	3,200	0.295		
	LT	2.00	292	2,880	0.101 *		
Eastbound	RT	0.00	317	0	0.000	ICU:	1.081
	TH	3.00	1,485	4,800	0.375		
	LT	1.00	403	1,600	0.252 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-5 SOUTHBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.678 *
	TH	2.00	1,247	3,200	0.390	N-S(2):	0.390
	LT	1.00	187	1,600	0.117 *	E-W(1):	0.121 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.038
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.799
Northbound	RT	1.00	529	1,600	0.331	Lost Time:	0.100
	TH	2.00	1,794	3,200	0.561 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	194	1,600	0.121 *	ICU:	0.899
	TH	0.00	0	0	0.000		
	LT	1.00	61	1,600	0.038	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.701 *
	TH	2.00	2,066	3,200	0.646	N-S(2):	0.646
	LT	1.00	290	1,600	0.181 *	E-W(1):	0.308 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.076
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	1.009
Northbound	RT	1.00	266	1,600	0.166	Lost Time:	0.100
	TH	2.00	1,664	3,200	0.520 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	492	1,600	0.308 *	ICU:	1.109
	TH	0.00	0	0	0.000		
	LT	1.00	122	1,600	0.076	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-5 NORTHBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.621 *
	TH	2.00	1,372	3,200	0.429	N-S(2):	0.429
	LT	1.00	294	1,600	0.184 *	E-W(1):	0.039 *
Westbound	RT	1.00	44	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	62	1,600	0.039 *	V/C:	0.660
Northbound	RT	1.00	761	1,600	0.437 *	Lost Time:	0.100
	TH	2.00	1,160	3,200	0.363		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.760
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.584 *
	TH	2.00	1,762	3,200	0.551	N-S(2):	0.551
	LT	1.00	143	1,600	0.089 *	E-W(1):	0.363 *
Westbound	RT	1.00	222	1,600	0.049	E-W(2):	0.049
	TH	0.00	0	0	0.000		
	LT	1.00	581	1,600	0.363 *	V/C:	0.947
Northbound	RT	1.00	282	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,583	3,200	0.495 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.047
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: TELEGRAPH ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.264
	TH	2.00	854	3,200	0.285 *	N-S(2):	0.374 *
	LT	1.00	135	1,600	0.084	E-W(1):	0.372 *
Westbound	RT	0.00	127	0	0.000	E-W(2):	0.276
	TH	3.00	1,107	4,800	0.257		
	LT	1.00	345	1,600	0.216 *	V/C:	0.746
Northbound	RT	1.00	182	1,600	0.000	Lost Time:	0.100
	TH	2.00	577	3,200	0.180		
	LT	1.00	143	1,600	0.089 *		
Eastbound	RT	0.00	249	1,600	0.156 *	ICU:	0.846
	TH	3.00	478	3,200	0.149		
	LT	1.00	30	1,600	0.019	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	46	0	0.000	N-S(1):	0.350
	TH	2.00	984	3,200	0.322 *	N-S(2):	0.406 *
	LT	1.00	126	1,600	0.079	E-W(1):	0.362 *
Westbound	RT	0.00	106	0	0.000	E-W(2):	0.162
	TH	3.00	478	4,800	0.122		
	LT	1.00	161	1,600	0.101 *	V/C:	0.768
Northbound	RT	1.00	328	1,600	0.104	Lost Time:	0.100
	TH	2.00	868	3,200	0.271		
	LT	1.00	134	1,600	0.084 *		
Eastbound	RT	0.00	382	0	0.000	ICU:	0.868
	TH	3.00	872	4,800	0.261 *		
	LT	1.00	64	1,600	0.040	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.187 *
	TH	2.00	234	3,200	0.099	N-S(2):	0.178
	LT	1.00	120	1,600	0.075 *	E-W(1):	0.172
Westbound	RT	0.00	105	0	0.000	E-W(2):	0.231 *
	TH	2.00	527	3,200	0.198 *		
	LT	1.00	45	1,600	0.028	V/C:	0.418
Northbound	RT	0.00	30	0	0.000	Lost Time:	0.100
	TH	2.00	329	3,200	0.112 *		
	LT	1.00	126	1,600	0.079		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.518
	TH	2.00	397	3,200	0.144		
	LT	1.00	53	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	40	0	0.000	N-S(1):	0.234 *
	TH	2.00	312	3,200	0.110	N-S(2):	0.179
	LT	1.00	133	1,600	0.083 *	E-W(1):	0.222 *
Westbound	RT	0.00	102	0	0.000	E-W(2):	0.180
	TH	2.00	406	3,200	0.159		
	LT	1.00	49	1,600	0.031 *	V/C:	0.456
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	431	3,200	0.151 *		
	LT	1.00	110	1,600	0.069		
Eastbound	RT	0.00	72	0	0.000	ICU:	0.556
	TH	2.00	539	3,200	0.191 *		
	LT	1.00	34	1,600	0.021	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	134	0	0.000	N-S(1):	0.280 *
	TH	2.00	414	3,200	0.171	N-S(2):	0.239
	LT	1.00	102	1,600	0.064 *	E-W(1):	0.293
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.356 *
	TH	3.00	1,286	4,800	0.290 *		
	LT	1.00	55	1,600	0.034	V/C:	0.636
Northbound	RT	0.00	137	0	0.000	Lost Time:	0.100
	TH	2.00	554	3,200	0.216 *		
	LT	1.00	109	1,600	0.068		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.736
	TH	3.00	1,200	4,800	0.259		
	LT	1.00	106	1,600	0.066 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	80	0	0.000	N-S(1):	0.196 *
	TH	2.00	297	3,200	0.118	N-S(2):	0.172
	LT	1.00	54	1,600	0.034 *	E-W(1):	0.341 *
Westbound	RT	0.00	148	0	0.000	E-W(2):	0.340
	TH	3.00	1,215	4,800	0.284		
	LT	1.00	89	1,600	0.056 *	V/C:	0.537
Northbound	RT	0.00	109	0	0.000	Lost Time:	0.100
	TH	2.00	410	3,200	0.162 *		
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.637
	TH	3.00	1,303	4,800	0.285 *		
	LT	1.00	89	1,600	0.056	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.196 *
	TH	2.00	402	3,200	0.143	N-S(2):	0.160
	LT	1.00	45	1,600	0.028 *	E-W(1):	0.132 *
Westbound	RT	1.00	52	1,600	0.004	E-W(2):	0.131
	TH	1.00	121	1,600	0.094		
	LT	0.00	29	1,600	0.018 *	V/C:	0.328
Northbound	RT	0.00	23	0	0.000	Lost Time:	0.100
	TH	2.00	516	3,200	0.168 *		
	LT	1.00	27	1,600	0.017		
Eastbound	RT	1.00	49	1,600	0.014	ICU:	0.428
	TH	1.00	124	1,600	0.114 *		
	LT	0.00	59	1,600	0.037	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.191
	TH	2.00	575	3,200	0.200 *	N-S(2):	0.231 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.137
Westbound	RT	1.00	39	1,600	0.000	E-W(2):	0.151 *
	TH	1.00	161	1,600	0.120 *		
	LT	0.00	31	1,600	0.019	V/C:	0.382
Northbound	RT	0.00	37	0	0.000	Lost Time:	0.100
	TH	2.00	486	3,200	0.163		
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	1.00	49	1,600	0.000	ICU:	0.482
	TH	1.00	139	1,600	0.118		
	LT	0.00	49	1,600	0.031 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.251 *
	TH	2.00	374	3,200	0.153	N-S(2):	0.212
	LT	1.00	133	1,600	0.083 *	E-W(1):	0.260 *
Westbound	RT	0.00	120	0	0.000	E-W(2):	0.255
	TH	2.00	494	3,200	0.192		
	LT	1.00	75	1,600	0.047 *	V/C:	0.511
Northbound	RT	0.00	71	0	0.000	Lost Time:	0.100
	TH	2.00	465	3,200	0.168 *		
	LT	1.00	95	1,600	0.059		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.611
	TH	2.00	626	3,200	0.213 *		
	LT	1.00	101	1,600	0.063	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.274 *
	TH	2.00	494	3,200	0.191	N-S(2):	0.255
	LT	1.00	184	1,600	0.115 *	E-W(1):	0.373
Westbound	RT	0.00	159	0	0.000	E-W(2):	0.425 *
	TH	2.00	970	3,200	0.353 *		
	LT	1.00	118	1,600	0.074	V/C:	0.699
Northbound	RT	0.00	80	0	0.000	Lost Time:	0.100
	TH	2.00	430	3,200	0.159 *		
	LT	1.00	103	1,600	0.064		
Eastbound	RT	0.00	91	0	0.000	ICU:	0.799
	TH	2.00	866	3,200	0.299		
	LT	1.00	115	1,600	0.072 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	30	0	0.000	N-S(1):	0.201
	TH	2.00	278	3,200	0.096 *	N-S(2):	0.202 *
	LT	1.00	118	1,600	0.074	E-W(1):	0.320 *
Westbound	RT	0.00	65	0	0.000	E-W(2):	0.256
	TH	3.00	1,064	4,800	0.235		
	LT	1.00	102	1,600	0.064 *	V/C:	0.522
Northbound	RT	1.00	121	1,600	0.012	Lost Time:	0.100
	TH	1.00	203	1,600	0.127		
	LT	1.00	169	1,600	0.106 *		
Eastbound	RT	1.00	77	1,600	0.000	ICU:	0.622
	TH	2.00	819	3,200	0.256 *		
	LT	1.00	33	1,600	0.021	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	48	0	0.000	N-S(1):	0.288 *
	TH	2.00	380	3,200	0.134	N-S(2):	0.222
	LT	1.00	163	1,600	0.102 *	E-W(1):	0.446 *
Westbound	RT	0.00	93	0	0.000	E-W(2):	0.339
	TH	3.00	1,312	4,800	0.293		
	LT	1.00	119	1,600	0.074 *	V/C:	0.734
Northbound	RT	1.00	168	1,600	0.031	Lost Time:	0.100
	TH	1.00	297	1,600	0.186 *		
	LT	1.00	140	1,600	0.088		
Eastbound	RT	1.00	124	1,600	0.000	ICU:	0.834
	TH	2.00	1,191	3,200	0.372 *		
	LT	1.00	73	1,600	0.046	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	95	0	0.000	N-S(1):	0.167
	TH	2.00	305	3,200	0.125 *	N-S(2):	0.236 *
	LT	1.00	24	1,600	0.015	E-W(1):	0.342 *
Westbound	RT	0.00	49	0	0.000	E-W(2):	0.342 *
	TH	3.00	1,348	4,800	0.291 *		
	LT	1.00	83	1,600	0.052 *	V/C:	0.578
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	2.00	346	3,200	0.152		
	LT	1.00	177	1,600	0.111 *		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.678
	TH	3.00	1,320	4,800	0.290 *		
	LT	1.00	81	1,600	0.051 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.144
	TH	2.00	196	3,200	0.083 *	N-S(2):	0.168 *
	LT	1.00	29	1,600	0.018	E-W(1):	0.417 *
Westbound	RT	0.00	37	0	0.000	E-W(2):	0.326
	TH	3.00	1,363	4,800	0.292		
	LT	1.00	82	1,600	0.051 *	V/C:	0.585
Northbound	RT	0.00	126	0	0.000	Lost Time:	0.100
	TH	2.00	277	3,200	0.126		
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.00	127	0	0.000	ICU:	0.685
	TH	3.00	1,632	4,800	0.366 *		
	LT	1.00	55	1,600	0.034	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.226 *
	TH	1.00	9	1,600	0.009 *	N-S(2):	0.000
	LT	1.00	4	1,600	0.003	E-W(1):	0.430
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.528 *
	TH	2.00	1,654	3,200	0.520 *		
	LT	2.00	241	2,880	0.084	V/C:	0.754
Northbound	RT	2.00	711	3,200	0.185	Lost Time:	0.100
	TH	0.05	17	87	0.196		
	LT	1.95	609	2,802	0.217 *		
Eastbound	RT	1.00	479	1,600	0.104	ICU:	0.854
	TH	2.00	1,107	3,200	0.346		
	LT	1.00	12	1,600	0.008 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	5	0	0.000	N-S(1):	0.245 *
	TH	1.00	14	1,600	0.012 *	N-S(2):	0.000
	LT	1.00	17	1,600	0.011	E-W(1):	0.455
Westbound	RT	0.00	5	0	0.000	E-W(2):	0.502 *
	TH	2.00	1,592	3,200	0.499 *		
	LT	2.00	245	2,880	0.085	V/C:	0.747
Northbound	RT	2.00	868	3,200	0.233 *	Lost Time:	0.100
	TH	0.08	16	131	0.122		
	LT	1.92	375	2,762	0.136		
Eastbound	RT	1.00	550	1,600	0.222	ICU:	0.847
	TH	2.00	1,185	3,200	0.370		
	LT	1.00	5	1,600	0.003 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS/LITTLE LAKE ROAD
East/West Street: FIRESTONE BOULEVARD
FLORENCE AVENUE
Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	214	0	0.000	N-S(1):	0.133
	TH	1.00	52	1,600	0.166 *	N-S(2):	0.190 *
	LT	2.00	382	2,880	0.133	E-W(1):	0.512 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.337
	TH	2.00	1,078	3,200	0.337		
	LT	2.00	763	2,880	0.265 *	V/C:	0.702
Northbound	RT	0.31	12	492	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.69	27	1,108	0.024 *		
Eastbound	RT	0.00	281	0	0.000	ICU:	0.802
	TH	3.00	904	4,800	0.247 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	217	0	0.000	N-S(1):	0.167
	TH	1.00	161	1,600	0.236 *	N-S(2):	0.257 *
	LT	2.00	482	2,880	0.167	E-W(1):	0.601 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.299
	TH	2.00	957	3,200	0.299		
	LT	2.00	824	2,880	0.286 *	V/C:	0.858
Northbound	RT	0.41	14	659	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.59	20	941	0.021 *		
Eastbound	RT	0.00	336	0	0.000	ICU:	0.958
	TH	3.00	1,176	4,800	0.315 *		
	LT	0.00	0	0	0.000	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STEWART AND GRAY ROAD-NEWVILLE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	16	0	0.000	N-S(1):	0.084 *
	TH	1.00	27	1,600	0.027	N-S(2):	0.027
	LT	1.00	102	1,600	0.064 *	E-W(1):	0.460 *
Westbound	RT	0.00	26	0	0.000	E-W(2):	0.354
	TH	3.00	1,675	4,800	0.354		
	LT	2.00	679	2,880	0.236 *	V/C:	0.544
Northbound	RT	2.00	743	3,200	0.020 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	24	0	0.000	ICU:	0.644
	TH	3.00	1,052	4,800	0.224 *		
	LT	0.00	0	0	0.000	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.164 *
	TH	1.00	18	1,600	0.033	N-S(2):	0.033
	LT	1.00	101	1,600	0.063 *	E-W(1):	0.664 *
Westbound	RT	0.00	50	0	0.000	E-W(2):	0.320
	TH	3.00	1,488	4,800	0.320		
	LT	2.00	849	2,880	0.295 *	V/C:	0.828
Northbound	RT	2.00	1,173	3,200	0.101 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	24	0	0.000	ICU:	0.928
	TH	3.00	1,746	4,800	0.369 *		
	LT	0.00	0	0	0.000	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	33	1,600	0.000	N-S(1):	0.320 *
	TH	2.00	475	3,200	0.148	N-S(2):	0.211
	LT	1.00	108	1,600	0.068 *	E-W(1):	0.090
Westbound	RT	0.00	34	0	0.000	E-W(2):	0.091 *
	TH	2.00	121	3,200	0.048 *		
	LT	1.00	40	1,600	0.025	V/C:	0.411
Northbound	RT	0.00	28	0	0.000	Lost Time:	0.100
	TH	2.00	777	3,200	0.252 *		
	LT	1.00	101	1,600	0.063		
Eastbound	RT	0.00	98	0	0.000	ICU:	0.511
	TH	2.00	110	3,200	0.065		
	LT	1.00	69	1,600	0.043 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	102	1,600	0.000	N-S(1):	0.278
	TH	2.00	734	3,200	0.229 *	N-S(2):	0.308 *
	LT	1.00	48	1,600	0.030	E-W(1):	0.160 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.154
	TH	2.00	76	3,200	0.030		
	LT	1.00	49	1,600	0.031 *	V/C:	0.468
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	2.00	737	3,200	0.248		
	LT	1.00	126	1,600	0.079 *		
Eastbound	RT	0.00	206	1,600	0.129 *	ICU:	0.568
	TH	2.00	154	1,600	0.096		
	LT	1.00	199	1,600	0.124	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	158	1,600	0.012	N-S(1):	0.254
	TH	2.00	426	3,200	0.133 *	N-S(2):	0.269 *
	LT	1.00	166	1,600	0.104	E-W(1):	0.274
Westbound	RT	0.00	187	0	0.000	E-W(2):	0.404 *
	TH	3.00	1,333	4,800	0.317 *		
	LT	1.00	136	1,600	0.085	V/C:	0.673
Northbound	RT	1.00	299	1,600	0.102	Lost Time:	0.100
	TH	2.00	481	3,200	0.150		
	LT	1.00	217	1,600	0.136 *		
Eastbound	RT	0.00	142	0	0.000	ICU:	0.773
	TH	3.00	765	4,800	0.189		
	LT	1.00	139	1,600	0.087 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	205	1,600	0.024	N-S(1):	0.240 *
	TH	2.00	423	3,200	0.132	N-S(2):	0.237
	LT	1.00	188	1,600	0.118 *	E-W(1):	0.517 *
Westbound	RT	0.00	174	0	0.000	E-W(2):	0.315
	TH	3.00	837	4,800	0.211		
	LT	1.00	220	1,600	0.138 *	V/C:	0.757
Northbound	RT	1.00	323	1,600	0.064	Lost Time:	0.100
	TH	2.00	391	3,200	0.122 *		
	LT	1.00	168	1,600	0.105		
Eastbound	RT	0.00	188	0	0.000	ICU:	0.857
	TH	3.00	1,629	4,800	0.379 *		
	LT	1.00	166	1,600	0.104	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: WASHBURN ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	133	1,600	0.024	N-S(1):	0.226 *
	TH	2.00	593	3,200	0.185	N-S(2):	0.224
	LT	1.00	34	1,600	0.021 *	E-W(1):	0.135 *
Westbound	RT	1.00	21	1,600	0.000	E-W(2):	0.106
	TH	1.00	30	1,600	0.047		
	LT	0.00	45	1,600	0.028 *	V/C:	0.361
Northbound	RT	1.00	84	1,600	0.024	Lost Time:	0.100
	TH	2.00	657	3,200	0.205 *		
	LT	1.00	62	1,600	0.039		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.461
	TH	1.00	41	1,600	0.107 *		
	LT	1.00	94	1,600	0.059	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	79	1,600	0.008	N-S(1):	0.215
	TH	2.00	644	3,200	0.201 *	N-S(2):	0.244 *
	LT	1.00	37	1,600	0.023	E-W(1):	0.167 *
Westbound	RT	1.00	62	1,600	0.016	E-W(2):	0.141
	TH	1.00	41	1,600	0.099		
	LT	0.00	118	1,600	0.074 *	V/C:	0.411
Northbound	RT	1.00	67	1,600	0.000	Lost Time:	0.100
	TH	2.00	614	3,200	0.192		
	LT	1.00	68	1,600	0.043 *		
Eastbound	RT	0.00	108	0	0.000	ICU:	0.511
	TH	1.00	41	1,600	0.093 *		
	LT	1.00	67	1,600	0.042	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	117	1,600	0.031	N-S(1):	0.219 *
	TH	2.00	339	3,200	0.106	N-S(2):	0.198
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.234 *
Westbound	RT	0.00	82	0	0.000	E-W(2):	0.232
	TH	2.00	527	3,200	0.190		
	LT	1.00	101	1,600	0.063 *	V/C:	0.453
Northbound	RT	0.00	94	0	0.000	Lost Time:	0.100
	TH	2.00	537	3,200	0.197 *		
	LT	1.00	147	1,600	0.092		
Eastbound	RT	1.00	241	1,600	0.059	ICU:	0.553
	TH	2.00	547	3,200	0.171 *		
	LT	1.00	67	1,600	0.042	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	140	1,600	0.000	N-S(1):	0.196
	TH	2.00	399	3,200	0.125 *	N-S(2):	0.214 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.311
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.403 *
	TH	2.00	796	3,200	0.281 *		
	LT	1.00	149	1,600	0.093	V/C:	0.617
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	2.00	396	3,200	0.168		
	LT	1.00	142	1,600	0.089 *		
Eastbound	RT	1.00	312	1,600	0.106	ICU:	0.717
	TH	2.00	698	3,200	0.218		
	LT	1.00	195	1,600	0.122 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FIRESTONE BOULEVARD
East/West Street: WOODRUFF AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	2	0	0.000	N-S(1):	0.161
	TH	1.00	0	1,600	0.002 *	N-S(2):	0.180 *
	LT	0.00	1	1,600	0.001	E-W(1):	0.338 *
Westbound	RT	0.00	5	0	0.000	E-W(2):	0.277
	TH	3.00	1,317	4,800	0.275		
	LT	1.00	243	1,600	0.152 *	V/C:	0.518
Northbound	RT	1.00	293	1,600	0.031	Lost Time:	0.100
	TH	0.00	1	6	0.160		
	LT	2.00	512	2,874	0.178 *		
Eastbound	RT	1.00	376	1,600	0.075	ICU:	0.618
	TH	3.00	894	4,800	0.186 *		
	LT	1.00	3	1,600	0.002	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.128
	TH	1.00	1	1,600	0.038 *	N-S(2):	0.178 *
	LT	0.00	3	1,600	0.002	E-W(1):	0.394 *
Westbound	RT	0.00	38	0	0.000	E-W(2):	0.235
	TH	3.00	997	4,800	0.216		
	LT	1.00	262	1,600	0.164 *	V/C:	0.572
Northbound	RT	1.00	259	1,600	0.000	Lost Time:	0.100
	TH	0.09	19	150	0.126		
	LT	1.91	385	2,745	0.140 *		
Eastbound	RT	1.00	382	1,600	0.113	ICU:	0.672
	TH	3.00	1,106	4,800	0.230 *		
	LT	1.00	31	1,600	0.019	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	215	1,600	0.076	N-S(1):	0.411
	TH	3.00	888	4,800	0.185 *	N-S(2):	0.464 *
	LT	1.00	240	1,600	0.150	E-W(1):	0.206
Westbound	RT	1.00	321	1,600	0.051	E-W(2):	0.324 *
	TH	3.00	1,243	4,800	0.259 *		
	LT	2.00	130	2,880	0.045	V/C:	0.788
Northbound	RT	1.00	157	1,600	0.058	Lost Time:	0.100
	TH	3.00	1,253	4,800	0.261		
	LT	1.00	446	1,600	0.279 *		
Eastbound	RT	1.00	263	1,600	0.000	ICU:	0.888
	TH	3.00	775	4,800	0.161		
	LT	2.00	188	2,880	0.065 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	262	1,600	0.062	N-S(1):	0.447
	TH	3.00	865	4,800	0.180 *	N-S(2):	0.549 *
	LT	1.00	255	1,600	0.159	E-W(1):	0.348 *
Westbound	RT	1.00	240	1,600	0.000	E-W(2):	0.344
	TH	3.00	1,107	4,800	0.231		
	LT	2.00	233	2,880	0.081 *	V/C:	0.897
Northbound	RT	1.00	276	1,600	0.100	Lost Time:	0.100
	TH	3.00	1,383	4,800	0.288		
	LT	1.00	591	1,600	0.369 *		
Eastbound	RT	1.00	334	1,600	0.000	ICU:	0.997
	TH	3.00	1,281	4,800	0.267 *		
	LT	2.00	325	2,880	0.113	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: 5TH STREET/CECILIA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.509 *
	TH	2.00	1,210	3,200	0.393	N-S(2):	0.442
	LT	1.00	153	1,600	0.096 *	E-W(1):	0.264 *
Westbound	RT	1.00	102	1,600	0.000	E-W(2):	0.203
	TH	1.00	282	1,600	0.176		
	LT	1.00	217	1,600	0.136 *	V/C:	0.773
Northbound	RT	1.00	184	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,320	3,200	0.413 *		
	LT	1.00	79	1,600	0.049		
Eastbound	RT	0.00	154	0	0.000	ICU:	0.873
	TH	2.00	257	3,200	0.128 *		
	LT	1.00	43	1,600	0.027	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	50	0	0.000	N-S(1):	0.700 *
	TH	2.00	1,405	3,200	0.455	N-S(2):	0.542
	LT	1.00	259	1,600	0.162 *	E-W(1):	0.199 *
Westbound	RT	1.00	193	1,600	0.000	E-W(2):	0.180
	TH	1.00	246	1,600	0.154		
	LT	1.00	82	1,600	0.051 *	V/C:	0.899
Northbound	RT	1.00	122	1,600	0.025	Lost Time:	0.100
	TH	2.00	1,720	3,200	0.538 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	0.00	90	0	0.000	ICU:	0.999
	TH	2.00	385	3,200	0.148 *		
	LT	1.00	42	1,600	0.026	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	146	0	0.000	N-S(1):	0.348
	TH	3.00	971	4,800	0.233 *	N-S(2):	0.379 *
	LT	1.00	142	1,600	0.089	E-W(1):	0.294
Westbound	RT	0.00	305	0	0.000	E-W(2):	0.421 *
	TH	3.00	1,154	4,800	0.304 *		
	LT	1.00	152	1,600	0.095	V/C:	0.800
Northbound	RT	0.00	191	0	0.000	Lost Time:	0.100
	TH	3.00	1,054	4,800	0.259		
	LT	1.00	233	1,600	0.146 *		
Eastbound	RT	0.00	188	0	0.000	ICU:	0.900
	TH	3.00	765	4,800	0.199		
	LT	1.00	187	1,600	0.117 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	197	0	0.000	N-S(1):	0.470
	TH	3.00	1,099	4,800	0.270 *	N-S(2):	0.496 *
	LT	1.00	205	1,600	0.128	E-W(1):	0.394 *
Westbound	RT	0.00	203	0	0.000	E-W(2):	0.365
	TH	3.00	978	4,800	0.246		
	LT	1.00	175	1,600	0.109 *	V/C:	0.890
Northbound	RT	0.00	238	0	0.000	Lost Time:	0.100
	TH	3.00	1,405	4,800	0.342		
	LT	1.00	361	1,600	0.226 *		
Eastbound	RT	0.00	366	0	0.000	ICU:	0.990
	TH	3.00	1,002	4,800	0.285 *		
	LT	1.00	191	1,600	0.119	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: GALLATIN ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	233	0	0.000	N-S(1):	0.562 *
	TH	2.00	1,095	3,200	0.415	N-S(2):	0.462
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.172
Westbound	RT	0.00	207	0	0.000	E-W(2):	0.449 *
	TH	1.00	154	1,600	0.226 *		
	LT	1.00	127	1,600	0.079	V/C:	1.011
Northbound	RT	0.00	104	0	0.000	Lost Time:	0.100
	TH	2.00	1,428	3,200	0.479 *		
	LT	1.00	75	1,600	0.047		
Eastbound	RT	1.00	87	1,600	0.008	ICU:	1.111
	TH	1.00	149	1,600	0.093		
	LT	1.00	356	1,600	0.223 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	271	0	0.000	N-S(1):	0.672 *
	TH	2.00	1,405	3,200	0.524	N-S(2):	0.570
	LT	1.00	238	1,600	0.149 *	E-W(1):	0.171
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.358 *
	TH	1.00	116	1,600	0.137 *		
	LT	1.00	101	1,600	0.063	V/C:	1.030
Northbound	RT	0.00	95	0	0.000	Lost Time:	0.100
	TH	2.00	1,577	3,200	0.523 *		
	LT	1.00	73	1,600	0.046		
Eastbound	RT	1.00	75	1,600	0.001	ICU:	1.130
	TH	1.00	172	1,600	0.108		
	LT	1.00	354	1,600	0.221 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: I-5 SOUTHBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	275	1,600	0.092	N-S(1):	0.346 *
	TH	3.00	975	4,800	0.203	N-S(2):	0.203
	LT	0.00	0	0	0.000 *	E-W(1):	0.307 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.089
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.653
Northbound	RT	1.00	298	1,600	0.186	Lost Time:	0.100
	TH	3.00	1,663	4,800	0.346 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	491	1,600	0.307 *	ICU:	0.753
	TH	0.00	0	0	0.000		
	LT	2.00	257	2,880	0.089	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	215	1,600	0.000	N-S(1):	0.372 *
	TH	3.00	1,409	4,800	0.294	N-S(2):	0.294
	LT	0.00	0	0	0.000 *	E-W(1):	0.343 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.199
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.715
Northbound	RT	1.00	215	1,600	0.134	Lost Time:	0.100
	TH	3.00	1,785	4,800	0.372 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	549	1,600	0.343 *	ICU:	0.815
	TH	0.00	0	0	0.000		
	LT	2.00	574	2,880	0.199	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: VISTA DEL ROSA STREET/I-5 NORTHBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	6	1,600	0.000	N-S(1):	0.392 *
	TH	3.00	1,330	4,800	0.277	N-S(2):	0.330
	LT	0.00	0	0	0.000 *	E-W(1):	0.253 *
Westbound	RT	0.00	155	0	0.000	E-W(2):	0.000
	TH	0.93	19	1,481	0.118		
	LT	1.07	202	1,547	0.131 *	V/C:	0.645
Northbound	RT	0.00	54	0	0.000	Lost Time:	0.100
	TH	2.00	1,201	3,200	0.392 *		
	LT	1.00	84	1,600	0.053		
Eastbound	RT	1.00	279	1,600	0.122 *	ICU:	0.745
	TH	0.00	0	0	0.000		
	LT	1.00	6	1,600	0.004	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	113	1,600	0.054	N-S(1):	0.615 *
	TH	3.00	1,340	4,800	0.279	N-S(2):	0.328
	LT	0.00	0	0	0.000 *	E-W(1):	0.250 *
Westbound	RT	0.00	270	0	0.000	E-W(2):	0.000
	TH	1.00	63	1,600	0.208 *		
	LT	1.00	261	1,600	0.163	V/C:	0.865
Northbound	RT	0.00	359	0	0.000	Lost Time:	0.100
	TH	2.00	1,609	3,200	0.615 *		
	LT	1.00	79	1,600	0.049		
Eastbound	RT	1.00	146	1,600	0.042 *	ICU:	0.965
	TH	0.00	0	0	0.000		
	LT	1.00	27	1,600	0.017	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ROSEMEAD BOULEVARD
East/West Street: TELEGRAPH ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	125	0	0.000	N-S(1):	0.421
	TH	2.00	822	3,200	0.296 *	N-S(2):	0.478 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.470 *
Westbound	RT	0.00	115	0	0.000	E-W(2):	0.391
	TH	3.00	1,505	4,800	0.338		
	LT	1.00	505	1,600	0.316 *	V/C:	0.948
Northbound	RT	0.00	451	0	0.000	Lost Time:	0.100
	TH	2.00	631	3,200	0.338		
	LT	1.00	291	1,600	0.182 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	1.048
	TH	3.00	624	4,800	0.154 *		
	LT	1.00	85	1,600	0.053	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	74	0	0.000	N-S(1):	0.554 *
	TH	2.00	841	3,200	0.286	N-S(2):	0.397
	LT	1.00	160	1,600	0.100 *	E-W(1):	0.575 *
Westbound	RT	0.00	167	0	0.000	E-W(2):	0.275
	TH	3.00	727	4,800	0.186		
	LT	1.00	419	1,600	0.262 *	V/C:	1.129
Northbound	RT	0.00	512	0	0.000	Lost Time:	0.100
	TH	2.00	942	3,200	0.454 *		
	LT	1.00	177	1,600	0.111		
Eastbound	RT	0.00	290	0	0.000	ICU:	1.229
	TH	3.00	1,210	4,800	0.313 *		
	LT	1.00	143	1,600	0.089	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	110	0	0.000	N-S(1):	0.428 *
	TH	2.00	624	3,200	0.229	N-S(2):	0.281
	LT	1.00	108	1,600	0.068 *	E-W(1):	0.254 *
Westbound	RT	0.00	179	0	0.000	E-W(2):	0.218
	TH	2.00	293	3,200	0.148		
	LT	1.00	169	1,600	0.106 *	V/C:	0.682
Northbound	RT	0.00	110	0	0.000	Lost Time:	0.100
	TH	2.00	1,042	3,200	0.360 *		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	0.00	228	0	0.000	ICU:	0.782
	TH	2.00	246	3,200	0.148 *		
	LT	1.00	112	1,600	0.070	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	192	0	0.000	N-S(1):	0.402 *
	TH	2.00	944	3,200	0.355	N-S(2):	0.394
	LT	1.00	249	1,600	0.156 *	E-W(1):	0.193
Westbound	RT	0.00	121	0	0.000	E-W(2):	0.196 *
	TH	2.00	245	3,200	0.114 *		
	LT	1.00	54	1,600	0.034	V/C:	0.598
Northbound	RT	0.00	101	0	0.000	Lost Time:	0.100
	TH	2.00	686	3,200	0.246 *		
	LT	1.00	62	1,600	0.039		
Eastbound	RT	0.00	103	0	0.000	ICU:	0.698
	TH	2.00	406	3,200	0.159		
	LT	1.00	131	1,600	0.082 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: I-105 EASTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.434 *
	TH	2.00	656	3,200	0.205	N-S(2):	0.205
	LT	1.00	253	1,600	0.158 *	E-W(1):	0.203
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.226 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.660
Northbound	RT	0.00	165	0	0.000	Lost Time:	0.100
	TH	3.00	1,158	4,800	0.276 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	295	1,600	0.184	ICU:	0.760
	TH	0.02	7	34	0.203		
	LT	1.98	644	2,849	0.226 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.594 *
	TH	2.00	976	3,200	0.305	N-S(2):	0.305
	LT	1.00	633	1,600	0.396 *	E-W(1):	0.186
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.206 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.800
Northbound	RT	0.00	157	0	0.000	Lost Time:	0.100
	TH	3.00	793	4,800	0.198 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.59	474	2,551	0.186	ICU:	0.900
	TH	0.01	3	16	0.186		
	LT	1.40	415	2,010	0.206 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: I-105 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	310	0	0.000	N-S(1):	0.438 *
	TH	3.00	709	4,800	0.212	N-S(2):	0.418
	LT	0.00	0	0	0.000 *	E-W(1):	0.111
Westbound	RT	2.00	884	3,200	0.276 *	E-W(2):	0.276 *
	TH	0.00	0	0	0.000		
	LT	1.00	178	1,600	0.111	V/C:	0.714
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,400	3,200	0.438 *		
	LT	1.00	329	1,600	0.206		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.814
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	610	0	0.000	N-S(1):	0.296
	TH	3.00	1,354	4,800	0.409 *	N-S(2):	0.553 *
	LT	0.00	0	0	0.000	E-W(1):	0.161 *
Westbound	RT	1.96	453	3,133	0.145	E-W(2):	0.145
	TH	0.00	0	0	0.000		
	LT	1.04	241	1,500	0.161 *	V/C:	0.714
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	948	3,200	0.296		
	LT	1.00	231	1,600	0.144 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.814
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	36	0	0.000	N-S(1):	0.281 *
	TH	2.00	282	3,200	0.099	N-S(2):	0.192
	LT	1.00	180	1,600	0.113 *	E-W(1):	0.291
Westbound	RT	0.00	246	0	0.000	E-W(2):	0.334 *
	TH	2.00	587	3,200	0.308 *		
	LT	0.00	151	1,600	0.094	V/C:	0.615
Northbound	RT	0.00	118	0	0.000	Lost Time:	0.100
	TH	2.00	419	3,200	0.168 *		
	LT	1.00	149	1,600	0.093		
Eastbound	RT	0.00	92	0	0.000	ICU:	0.715
	TH	2.00	496	3,200	0.197		
	LT	0.00	42	1,600	0.026 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	35	0	0.000	N-S(1):	0.165
	TH	2.00	405	3,200	0.138 *	N-S(2):	0.216 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.254 *
Westbound	RT	0.00	65	0	0.000	E-W(2):	0.168
	TH	2.00	314	3,200	0.154		
	LT	0.00	114	1,600	0.071 *	V/C:	0.470
Northbound	RT	0.00	64	0	0.000	Lost Time:	0.100
	TH	2.00	344	3,200	0.128		
	LT	1.00	125	1,600	0.078 *		
Eastbound	RT	0.00	132	0	0.000	ICU:	0.570
	TH	2.00	430	3,200	0.183 *		
	LT	0.00	23	1,600	0.014	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	132	1,600	0.000	N-S(1):	0.430 *
	TH	2.00	842	3,200	0.263	N-S(2):	0.315
	LT	1.00	198	1,600	0.124 *	E-W(1):	0.189
Westbound	RT	0.00	165	0	0.000	E-W(2):	0.305 *
	TH	2.00	535	3,200	0.219 *		
	LT	1.00	150	1,600	0.094	V/C:	0.735
Northbound	RT	0.00	143	0	0.000	Lost Time:	0.100
	TH	2.00	836	3,200	0.306 *		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	1.00	71	1,600	0.000	ICU:	0.835
	TH	2.00	303	3,200	0.095		
	LT	1.00	138	1,600	0.086 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	231	1,600	0.032	N-S(1):	0.492 *
	TH	2.00	1,049	3,200	0.328	N-S(2):	0.431
	LT	1.00	258	1,600	0.161 *	E-W(1):	0.310
Westbound	RT	0.00	193	0	0.000	E-W(2):	0.330 *
	TH	2.00	500	3,200	0.217 *		
	LT	1.00	194	1,600	0.121	V/C:	0.822
Northbound	RT	0.00	160	0	0.000	Lost Time:	0.100
	TH	2.00	898	3,200	0.331 *		
	LT	1.00	164	1,600	0.103		
Eastbound	RT	1.00	82	1,600	0.000	ICU:	0.922
	TH	2.00	604	3,200	0.189		
	LT	1.00	180	1,600	0.113 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	123	0	0.000	N-S(1):	0.353
	TH	2.00	1,006	3,200	0.353 *	N-S(2):	0.506 *
	LT	1.00	89	1,600	0.056	E-W(1):	0.292
Westbound	RT	0.00	126	0	0.000	E-W(2):	0.317 *
	TH	2.00	526	3,200	0.204 *		
	LT	1.00	60	1,600	0.038	V/C:	0.823
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	897	3,200	0.297		
	LT	1.00	244	1,600	0.153 *		
Eastbound	RT	0.00	218	0	0.000	ICU:	0.923
	TH	2.00	594	3,200	0.254		
	LT	1.00	181	1,600	0.113 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	301	0	0.000	N-S(1):	0.432
	TH	2.00	1,310	3,200	0.503 *	N-S(2):	0.621 *
	LT	1.00	146	1,600	0.091	E-W(1):	0.249
Westbound	RT	0.00	79	0	0.000	E-W(2):	0.254 *
	TH	2.00	330	3,200	0.128 *		
	LT	1.00	56	1,600	0.035	V/C:	0.875
Northbound	RT	0.00	63	0	0.000	Lost Time:	0.100
	TH	2.00	1,027	3,200	0.341		
	LT	1.00	188	1,600	0.118 *		
Eastbound	RT	0.00	173	0	0.000	ICU:	0.975
	TH	2.00	511	3,200	0.214		
	LT	1.00	201	1,600	0.126 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: I-105 WESTBOUND ON-RAMP/ EASTBOUND OFF RAMP

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	258	3,200	0.024	N-S(1):	0.211
	TH	2.00	689	3,200	0.215 *	N-S(2):	0.323 *
	LT	0.00	0	0	0.000	E-W(1):	0.335 *
Westbound	RT	0.00	335	0	0.000	E-W(2):	0.000
	TH	1.00	0	1,600	0.209		
	LT	2.00	603	2,880	0.209 *	V/C:	0.658
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	676	3,200	0.211		
	LT	2.00	312	2,880	0.108 *		
Eastbound	RT	1.00	179	1,600	0.014	ICU:	0.758
	TH	0.00	0	0	0.000		
	LT	2.00	363	2,880	0.126 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	624	3,200	0.109	N-S(1):	0.263
	TH	2.00	1,001	3,200	0.313 *	N-S(2):	0.430 *
	LT	0.00	0	0	0.000	E-W(1):	0.387 *
Westbound	RT	0.00	314	0	0.000	E-W(2):	0.000
	TH	1.00	0	1,600	0.196 *		
	LT	2.00	330	2,880	0.115	V/C:	0.817
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	843	3,200	0.263		
	LT	2.00	336	2,880	0.117 *		
Eastbound	RT	1.00	385	1,600	0.136	ICU:	0.917
	TH	0.00	0	0	0.000		
	LT	2.00	550	2,880	0.191 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	21	0	0.000	N-S(1):	0.257
	TH	2.00	559	3,200	0.181 *	N-S(2):	0.395 *
	LT	1.00	39	1,600	0.024	E-W(1):	0.424 *
Westbound	RT	0.00	29	0	0.000	E-W(2):	0.130
	TH	2.00	352	3,200	0.119		
	LT	1.00	364	1,600	0.228 *	V/C:	0.819
Northbound	RT	0.00	180	0	0.000	Lost Time:	0.100
	TH	2.00	566	3,200	0.233		
	LT	1.00	342	1,600	0.214 *		
Eastbound	RT	1.00	436	1,600	0.059	ICU:	0.919
	TH	2.00	628	3,200	0.196 *		
	LT	1.00	18	1,600	0.011	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	25	0	0.000	N-S(1):	0.303
	TH	2.00	380	3,200	0.127 *	N-S(2):	0.385 *
	LT	1.00	30	1,600	0.019	E-W(1):	0.445 *
Westbound	RT	0.00	32	0	0.000	E-W(2):	0.234
	TH	2.00	603	3,200	0.198		
	LT	1.00	362	1,600	0.226 *	V/C:	0.830
Northbound	RT	0.00	381	0	0.000	Lost Time:	0.100
	TH	2.00	528	3,200	0.284		
	LT	1.00	412	1,600	0.258 *		
Eastbound	RT	1.00	286	1,600	0.000	ICU:	0.930
	TH	2.00	702	3,200	0.219 *		
	LT	1.00	58	1,600	0.036	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: WASHBURN ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	166	1,600	0.073	N-S(1):	0.446 *
	TH	2.00	964	3,200	0.301	N-S(2):	0.379
	LT	1.00	186	1,600	0.116 *	E-W(1):	0.138 *
Westbound	RT	0.00	141	0	0.000	E-W(2):	0.128
	TH	1.00	14	1,600	0.097		
	LT	1.00	63	1,600	0.039 *	V/C:	0.584
Northbound	RT	0.00	91	0	0.000	Lost Time:	0.100
	TH	2.00	966	3,200	0.330 *		
	LT	1.00	124	1,600	0.078		
Eastbound	RT	0.00	95	0	0.000	ICU:	0.684
	TH	1.00	14	1,600	0.099 *		
	LT	0.00	50	1,600	0.031	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	184	1,600	0.000	N-S(1):	0.449 *
	TH	2.00	798	3,200	0.249	N-S(2):	0.363
	LT	1.00	121	1,600	0.076 *	E-W(1):	0.294 *
Westbound	RT	0.00	146	0	0.000	E-W(2):	0.231
	TH	1.00	34	1,600	0.113		
	LT	1.00	58	1,600	0.036 *	V/C:	0.743
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	1,081	3,200	0.373 *		
	LT	1.00	182	1,600	0.114		
Eastbound	RT	0.00	206	0	0.000	ICU:	0.843
	TH	1.00	18	1,600	0.258 *		
	LT	0.00	188	1,600	0.118	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: CONGRESSMAN STEVE HORN WAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	284	1,600	0.108	N-S(1):	0.378 *
	TH	2.00	848	3,200	0.265	N-S(2):	0.366
	LT	1.00	52	1,600	0.033 *	E-W(1):	0.016
Westbound	RT	0.00	13	0	0.000	E-W(2):	0.093 *
	TH	1.00	25	1,600	0.024 *		
	LT	1.00	18	1,600	0.011	V/C:	0.471
Northbound	RT	0.00	129	0	0.000	Lost Time:	0.100
	TH	2.00	974	3,200	0.345 *		
	LT	1.00	161	1,600	0.101		
Eastbound	RT	1.00	77	1,600	0.000	ICU:	0.571
	TH	1.00	8	1,600	0.005		
	LT	1.00	111	1,600	0.069 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	157	1,600	0.000	N-S(1):	0.341
	TH	2.00	869	3,200	0.272 *	N-S(2):	0.350 *
	LT	1.00	52	1,600	0.033	E-W(1):	0.152
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.276 *
	TH	1.00	10	1,600	0.036 *		
	LT	1.00	106	1,600	0.066	V/C:	0.626
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	973	3,200	0.308		
	LT	1.00	124	1,600	0.078 *		
Eastbound	RT	1.00	262	1,600	0.086	ICU:	0.726
	TH	1.00	0	1,600	0.000		
	LT	1.00	384	1,600	0.240 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	48	1,600	0.000	N-S(1):	0.585
	TH	2.00	879	3,200	0.275 *	N-S(2):	0.657 *
	LT	1.00	174	1,600	0.109	E-W(1):	0.474
Westbound	RT	0.00	149	0	0.000	E-W(2):	0.570 *
	TH	3.00	1,805	4,800	0.407 *		
	LT	1.00	316	1,600	0.198	V/C:	1.227
Northbound	RT	1.00	190	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,522	3,200	0.476		
	LT	1.00	611	1,600	0.382 *		
Eastbound	RT	1.00	111	1,600	0.000	ICU:	1.327
	TH	3.00	1,326	4,800	0.276		
	LT	1.00	261	1,600	0.163 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	105	1,600	0.000	N-S(1):	0.671
	TH	2.00	1,383	3,200	0.432 *	N-S(2):	0.707 *
	LT	1.00	427	1,600	0.267	E-W(1):	0.643 *
Westbound	RT	0.00	120	0	0.000	E-W(2):	0.413
	TH	3.00	1,251	4,800	0.286		
	LT	1.00	375	1,600	0.234 *	V/C:	1.350
Northbound	RT	1.00	163	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,294	3,200	0.404		
	LT	1.00	440	1,600	0.275 *		
Eastbound	RT	1.00	202	1,600	0.000	ICU:	1.450
	TH	3.00	1,961	4,800	0.409 *		
	LT	1.00	203	1,600	0.127	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ARDIS AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	72	0	0.000	N-S(1):	0.107 *
	TH	1.00	23	1,600	0.059	N-S(2):	0.101
	LT	1.00	78	1,600	0.049 *	E-W(1):	0.393
Westbound	RT	0.00	239	0	0.000	E-W(2):	0.431 *
	TH	3.00	1,112	4,800	0.281 *		
	LT	1.00	114	1,600	0.071	V/C:	0.538
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	1.00	37	1,600	0.058 *		
	LT	1.00	67	1,600	0.042		
Eastbound	RT	0.00	136	0	0.000	ICU:	0.638
	TH	3.00	1,411	4,800	0.322		
	LT	1.00	240	1,600	0.150 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	261	0	0.000	N-S(1):	0.254 *
	TH	1.00	69	1,600	0.206	N-S(2):	0.249
	LT	1.00	236	1,600	0.148 *	E-W(1):	0.408 *
Westbound	RT	0.00	142	0	0.000	E-W(2):	0.365
	TH	3.00	1,252	4,800	0.290		
	LT	1.00	115	1,600	0.072 *	V/C:	0.662
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	1.00	43	1,600	0.106 *		
	LT	1.00	68	1,600	0.043		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.762
	TH	3.00	1,555	4,800	0.336 *		
	LT	1.00	120	1,600	0.075	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	29	0	0.000	N-S(1):	0.246 *
	TH	2.00	197	3,200	0.071	N-S(2):	0.162
	LT	1.00	139	1,600	0.087 *	E-W(1):	0.414 *
Westbound	RT	0.00	122	0	0.000	E-W(2):	0.276
	TH	3.00	992	4,800	0.232		
	LT	1.00	165	1,600	0.103 *	V/C:	0.660
Northbound	RT	0.00	209	0	0.000	Lost Time:	0.100
	TH	2.00	300	3,200	0.159 *		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	243	0	0.000	ICU:	0.760
	TH	3.00	1,252	4,800	0.311 *		
	LT	1.00	71	1,600	0.044	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	92	0	0.000	N-S(1):	0.227 *
	TH	2.00	184	3,200	0.086	N-S(2):	0.200
	LT	1.00	152	1,600	0.095 *	E-W(1):	0.369 *
Westbound	RT	0.00	215	0	0.000	E-W(2):	0.366
	TH	3.00	1,209	4,800	0.297		
	LT	1.00	186	1,600	0.116 *	V/C:	0.596
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	309	3,200	0.132 *		
	LT	1.00	183	1,600	0.114		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.696
	TH	3.00	1,095	4,800	0.253 *		
	LT	1.00	110	1,600	0.069	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	141	0	0.000	N-S(1):	0.367 *
	TH	3.00	776	4,800	0.191	N-S(2):	0.278
	LT	2.00	202	2,880	0.070 *	E-W(1):	0.299 *
Westbound	RT	0.00	117	0	0.000	E-W(2):	0.290
	TH	3.00	896	4,800	0.211		
	LT	1.00	168	1,600	0.105 *	V/C:	0.666
Northbound	RT	0.00	323	0	0.000	Lost Time:	0.100
	TH	3.00	1,103	4,800	0.297 *		
	LT	2.00	250	2,880	0.087		
Eastbound	RT	1.00	193	1,600	0.043	ICU:	0.766
	TH	3.00	930	4,800	0.194 *		
	LT	1.00	126	1,600	0.079	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	250	0	0.000	N-S(1):	0.359 *
	TH	3.00	1,046	4,800	0.270	N-S(2):	0.358
	LT	2.00	154	2,880	0.053 *	E-W(1):	0.470 *
Westbound	RT	0.00	125	0	0.000	E-W(2):	0.385
	TH	3.00	1,071	4,800	0.249		
	LT	1.00	405	1,600	0.253 *	V/C:	0.829
Northbound	RT	0.00	192	0	0.000	Lost Time:	0.100
	TH	3.00	1,277	4,800	0.306 *		
	LT	2.00	253	2,880	0.088		
Eastbound	RT	1.00	256	1,600	0.081	ICU:	0.929
	TH	3.00	1,043	4,800	0.217 *		
	LT	1.00	218	1,600	0.136	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CLARK AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.251 *
	TH	3.00	1,092	4,800	0.228	N-S(2):	0.228
	LT	0.00	0	0	0.000 *	E-W(1):	0.000
Westbound	RT	2.00	376	3,200	0.118 *	E-W(2):	0.118 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.369
Northbound	RT	0.00	14	0	0.000	Lost Time:	0.100
	TH	3.00	1,190	4,800	0.251 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.469
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.292
	TH	3.00	1,541	4,800	0.321 *	N-S(2):	0.321 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	2.00	446	3,200	0.139 *	E-W(2):	0.139 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.460
Northbound	RT	0.00	12	0	0.000	Lost Time:	0.100
	TH	3.00	1,390	4,800	0.292		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.560
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	113	0	0.000	N-S(1):	0.288
	TH	3.00	973	4,800	0.226 *	N-S(2):	0.291 *
	LT	0.00	0	0	0.000	E-W(1):	0.028
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.033 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.324
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,384	4,800	0.288		
	LT	1.00	104	1,600	0.065 *		
Eastbound	RT	1.00	149	1,600	0.028	ICU:	0.424
	TH	0.00	0	0	0.000		
	LT	1.00	52	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	86	0	0.000	N-S(1):	0.378
	TH	3.00	1,527	4,800	0.336 *	N-S(2):	0.502 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.074 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.576
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,814	4,800	0.378		
	LT	1.00	266	1,600	0.166 *		
Eastbound	RT	1.00	208	1,600	0.000	ICU:	0.676
	TH	0.00	0	0	0.000		
	LT	1.00	118	1,600	0.074 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: LANDING CENTER DRIVEWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.310 *
	TH	3.00	1,186	4,800	0.247	N-S(2):	0.268
	LT	1.00	44	1,600	0.028 *	E-W(1):	0.039 *
Westbound	RT	0.88	49	1,400	0.004	E-W(2):	0.004
	TH	0.00	0	0	0.000		
	LT	1.13	63	1,620	0.039 *	V/C:	0.349
Northbound	RT	1.00	60	1,600	0.003	Lost Time:	0.100
	TH	3.00	1,354	4,800	0.282 *		
	LT	1.00	34	1,600	0.021		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.449
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.468 *
	TH	3.00	1,206	4,800	0.251	N-S(2):	0.266
	LT	1.00	167	1,600	0.104 *	E-W(1):	0.164 *
Westbound	RT	1.00	235	1,597	0.043	E-W(2):	0.043
	TH	0.00	0	0	0.000		
	LT	1.00	236	1,443	0.164 *	V/C:	0.632
Northbound	RT	1.00	106	1,600	0.000	Lost Time:	0.100
	TH	3.00	1,745	4,800	0.364 *		
	LT	1.00	24	1,600	0.015		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.732
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.276
	TH	3.00	981	4,800	0.218 *	N-S(2):	0.377 *
	LT	1.00	130	1,600	0.081	E-W(1):	0.392 *
Westbound	RT	1.00	57	1,600	0.000	E-W(2):	0.228
	TH	2.00	598	3,200	0.187		
	LT	1.00	101	1,600	0.063 *	V/C:	0.769
Northbound	RT	1.00	70	1,600	0.000	Lost Time:	0.100
	TH	3.00	936	4,800	0.195		
	LT	1.00	255	1,600	0.159 *		
Eastbound	RT	0.00	163	0	0.000	ICU:	0.869
	TH	2.00	891	3,200	0.329 *		
	LT	1.00	65	1,600	0.041	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	96	0	0.000	N-S(1):	0.439
	TH	3.00	1,216	4,800	0.273 *	N-S(2):	0.507 *
	LT	1.00	235	1,600	0.147	E-W(1):	0.410 *
Westbound	RT	1.00	29	1,600	0.000	E-W(2):	0.346
	TH	2.00	870	3,200	0.272		
	LT	1.00	92	1,600	0.058 *	V/C:	0.917
Northbound	RT	1.00	101	1,600	0.006	Lost Time:	0.100
	TH	3.00	1,401	4,800	0.292		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	0.00	215	0	0.000	ICU:	1.017
	TH	2.00	912	3,200	0.352 *		
	LT	1.00	118	1,600	0.074	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: BELLFLOWER BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	14	0	0.000	N-S(1):	0.467 *
	TH	3.00	835	4,800	0.177	N-S(2):	0.184
	LT	1.00	496	1,600	0.310 *	E-W(1):	0.064 *
Westbound	RT	2.00	681	3,200	0.058 *	E-W(2):	0.000
	TH	1.00	3	1,600	0.003		
	LT	0.00	1	1,600	0.001	V/C:	0.531
Northbound	RT	0.00	6	0	0.000	Lost Time:	0.100
	TH	3.00	748	4,800	0.157 *		
	LT	1.00	11	1,600	0.007		
Eastbound	RT	1.00	9	1,600	0.000	ICU:	0.631
	TH	1.00	1	1,600	0.001		
	LT	1.00	10	1,600	0.006 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	8	0	0.000	N-S(1):	0.528 *
	TH	3.00	1,275	4,800	0.267	N-S(2):	0.271
	LT	1.00	420	1,600	0.263 *	E-W(1):	0.064 *
Westbound	RT	2.00	612	3,200	0.060 *	E-W(2):	0.000
	TH	1.00	2	1,600	0.003		
	LT	0.00	3	1,600	0.002	V/C:	0.592
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	3.00	1,268	4,800	0.265 *		
	LT	1.00	6	1,600	0.004		
Eastbound	RT	1.00	7	1,600	0.001	ICU:	0.692
	TH	1.00	1	1,600	0.001		
	LT	1.00	6	1,600	0.004 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.341 *
	TH	2.00	509	3,200	0.185	N-S(2):	0.268
	LT	1.00	144	1,600	0.090 *	E-W(1):	0.325 *
Westbound	RT	1.00	138	1,600	0.000	E-W(2):	0.274
	TH	2.00	593	3,200	0.185		
	LT	1.00	169	1,600	0.106 *	V/C:	0.666
Northbound	RT	0.00	176	0	0.000	Lost Time:	0.100
	TH	2.00	628	3,200	0.251 *		
	LT	1.00	132	1,600	0.083		
Eastbound	RT	0.00	111	0	0.000	ICU:	0.766
	TH	2.00	590	3,200	0.219 *		
	LT	1.00	143	1,600	0.089	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	72	0	0.000	N-S(1):	0.367 *
	TH	2.00	693	3,200	0.239	N-S(2):	0.346
	LT	1.00	161	1,600	0.101 *	E-W(1):	0.515 *
Westbound	RT	1.00	149	1,600	0.000	E-W(2):	0.363
	TH	2.00	884	3,200	0.276		
	LT	1.00	228	1,600	0.143 *	V/C:	0.882
Northbound	RT	0.00	198	0	0.000	Lost Time:	0.100
	TH	2.00	653	3,200	0.266 *		
	LT	1.00	171	1,600	0.107		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.982
	TH	2.00	1,071	3,200	0.372 *		
	LT	1.00	139	1,600	0.087	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	105	0	0.000	N-S(1):	0.260
	TH	2.00	591	3,200	0.218 *	N-S(2):	0.313 *
	LT	1.00	16	1,600	0.010	E-W(1):	0.091
Westbound	RT	0.00	73	0	0.000	E-W(2):	0.187 *
	TH	2.00	120	3,200	0.060 *		
	LT	1.00	50	1,600	0.031	V/C:	0.500
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	787	3,200	0.250		
	LT	1.00	152	1,600	0.095 *		
Eastbound	RT	0.00	96	1,600	0.060	ICU:	0.600
	TH	2.00	82	1,600	0.051		
	LT	1.00	203	1,600	0.127 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	157	0	0.000	N-S(1):	0.306
	TH	2.00	731	3,200	0.278 *	N-S(2):	0.396 *
	LT	1.00	95	1,600	0.059	E-W(1):	0.113
Westbound	RT	0.00	35	0	0.000	E-W(2):	0.142 *
	TH	2.00	99	3,200	0.042 *		
	LT	1.00	19	1,600	0.012	V/C:	0.538
Northbound	RT	0.00	16	0	0.000	Lost Time:	0.100
	TH	2.00	773	3,200	0.247		
	LT	1.00	188	1,600	0.118 *		
Eastbound	RT	0.00	161	1,600	0.101	ICU:	0.638
	TH	2.00	122	1,600	0.076		
	LT	1.00	160	1,600	0.100 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: ROSECRANS AVUNUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	91	1,600	0.003	N-S(1):	0.300 *
	TH	2.00	338	3,200	0.106	N-S(2):	0.219
	LT	1.00	158	1,600	0.099 *	E-W(1):	0.352
Westbound	RT	0.00	254	0	0.000	E-W(2):	0.447 *
	TH	2.00	1,005	3,200	0.393 *		
	LT	1.00	178	1,600	0.111	V/C:	0.747
Northbound	RT	1.00	272	1,600	0.059	Lost Time:	0.100
	TH	2.00	644	3,200	0.201 *		
	LT	1.00	180	1,600	0.113		
Eastbound	RT	0.00	110	0	0.000	ICU:	0.847
	TH	2.00	662	3,200	0.241		
	LT	1.00	86	1,600	0.054 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	104	1,600	0.000	N-S(1):	0.320 *
	TH	2.00	653	3,200	0.204	N-S(2):	0.271
	LT	1.00	244	1,600	0.153 *	E-W(1):	0.459 *
Westbound	RT	0.00	225	0	0.000	E-W(2):	0.363
	TH	2.00	701	3,200	0.289		
	LT	1.00	188	1,600	0.118 *	V/C:	0.779
Northbound	RT	1.00	258	1,600	0.044	Lost Time:	0.100
	TH	2.00	534	3,200	0.167 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.879
	TH	2.00	962	3,200	0.341 *		
	LT	1.00	118	1,600	0.074	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STATE ROUTE 91 EASTBOUND RAMPS/BEVERLY STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.453 *
	TH	2.00	643	3,200	0.201	N-S(2):	0.201
	LT	1.00	264	1,600	0.165 *	E-W(1):	0.333 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.168
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.786
Northbound	RT	1.00	375	1,600	0.234	Lost Time:	0.100
	TH	2.00	923	3,200	0.288 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	533	1,600	0.333 *	ICU:	0.886
	TH	1.00	159	1,600	0.099		
	LT	1.00	268	1,600	0.168	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.520 *
	TH	2.00	930	3,200	0.291	N-S(2):	0.291
	LT	1.00	261	1,600	0.163 *	E-W(1):	0.244 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.204
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.764
Northbound	RT	1.00	243	1,600	0.152	Lost Time:	0.100
	TH	2.00	1,142	3,200	0.357 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	391	1,600	0.244 *	ICU:	0.864
	TH	1.00	160	1,600	0.100		
	LT	1.00	327	1,600	0.204	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STATE ROUTE 91 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	287	1,600	0.179	N-S(1):	0.202
	TH	2.00	631	3,200	0.197 *	N-S(2):	0.509 *
	LT	0.00	0	0	0.000	E-W(1):	0.156
Westbound	RT	1.00	295	1,600	0.184 *	E-W(2):	0.184 *
	TH	1.00	1	1,600	0.156		
	LT	0.00	249	1,600	0.156	V/C:	0.693
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	647	3,200	0.202		
	LT	1.00	499	1,600	0.312 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.793
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	375	1,600	0.234	N-S(1):	0.269
	TH	2.00	802	3,200	0.251 *	N-S(2):	0.652 *
	LT	0.00	0	0	0.000	E-W(1):	0.244
Westbound	RT	1.00	413	1,600	0.258 *	E-W(2):	0.258 *
	TH	1.00	3	1,600	0.246		
	LT	0.00	390	1,600	0.244	V/C:	0.910
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	860	3,200	0.269		
	LT	1.00	641	1,600	0.401 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.010
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	81	0	0.000	N-S(1):	0.232 *
	TH	2.00	407	3,200	0.153	N-S(2):	0.209
	LT	1.00	86	1,600	0.054 *	E-W(1):	0.309 *
Westbound	RT	0.00	148	0	0.000	E-W(2):	0.290
	TH	2.00	634	3,200	0.244		
	LT	1.00	150	1,600	0.094 *	V/C:	0.541
Northbound	RT	0.00	129	0	0.000	Lost Time:	0.100
	TH	2.00	441	3,200	0.178 *		
	LT	1.00	89	1,600	0.056		
Eastbound	RT	0.00	112	0	0.000	ICU:	0.641
	TH	2.00	576	3,200	0.215 *		
	LT	1.00	74	1,600	0.046	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	101	0	0.000	N-S(1):	0.276
	TH	2.00	559	3,200	0.206 *	N-S(2):	0.280 *
	LT	1.00	95	1,600	0.059	E-W(1):	0.430 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.310
	TH	2.00	657	3,200	0.234		
	LT	1.00	209	1,600	0.131 *	V/C:	0.710
Northbound	RT	0.00	130	0	0.000	Lost Time:	0.100
	TH	2.00	564	3,200	0.217		
	LT	1.00	118	1,600	0.074 *		
Eastbound	RT	0.00	126	0	0.000	ICU:	0.810
	TH	2.00	832	3,200	0.299 *		
	LT	1.00	122	1,600	0.076	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.270
	TH	2.00	649	3,200	0.222 *	N-S(2):	0.294 *
	LT	1.00	67	1,600	0.042	E-W(1):	0.190
Westbound	RT	0.00	83	0	0.000	E-W(2):	0.366 *
	TH	2.00	773	3,200	0.268 *		
	LT	1.00	73	1,600	0.046	V/C:	0.660
Northbound	RT	0.00	40	0	0.000	Lost Time:	0.100
	TH	2.00	691	3,200	0.228		
	LT	1.00	115	1,600	0.072 *		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.760
	TH	2.00	415	3,200	0.144		
	LT	1.00	157	1,600	0.098 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	73	0	0.000	N-S(1):	0.290
	TH	2.00	974	3,200	0.327 *	N-S(2):	0.412 *
	LT	1.00	118	1,600	0.074	E-W(1):	0.325 *
Westbound	RT	0.00	61	0	0.000	E-W(2):	0.204
	TH	2.00	375	3,200	0.136		
	LT	1.00	62	1,600	0.039 *	V/C:	0.737
Northbound	RT	0.00	61	0	0.000	Lost Time:	0.100
	TH	2.00	629	3,200	0.216		
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.00	100	0	0.000	ICU:	0.837
	TH	2.00	815	3,200	0.286 *		
	LT	1.00	108	1,600	0.068	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.294 *
	TH	2.00	508	3,200	0.180	N-S(2):	0.217
	LT	1.00	66	1,600	0.041 *	E-W(1):	0.256
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.392 *
	TH	2.00	783	3,200	0.299 *		
	LT	1.00	141	1,600	0.088	V/C:	0.686
Northbound	RT	0.00	116	0	0.000	Lost Time:	0.100
	TH	2.00	695	3,200	0.253 *		
	LT	1.00	59	1,600	0.037		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.786
	TH	2.00	471	3,200	0.168		
	LT	1.00	149	1,600	0.093 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	110	0	0.000	N-S(1):	0.294
	TH	2.00	773	3,200	0.276 *	N-S(2):	0.310 *
	LT	1.00	139	1,600	0.087	E-W(1):	0.422 *
Westbound	RT	0.00	88	0	0.000	E-W(2):	0.310
	TH	2.00	653	3,200	0.232		
	LT	1.00	127	1,600	0.079 *	V/C:	0.732
Northbound	RT	0.00	90	0	0.000	Lost Time:	0.100
	TH	2.00	573	3,200	0.207		
	LT	1.00	55	1,600	0.034 *		
Eastbound	RT	0.00	92	0	0.000	ICU:	0.832
	TH	2.00	1,005	3,200	0.343 *		
	LT	1.00	124	1,600	0.078	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: PALM STREET-STATE ROUTE 91 EASTBOUND ON-RAMP

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.426 *
	TH	2.00	796	3,200	0.264	N-S(2):	0.275
	LT	1.00	219	1,600	0.137 *	E-W(1):	0.072 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.024
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.498
Northbound	RT	0.00	210	0	0.000	Lost Time:	0.100
	TH	2.00	697	3,200	0.289 *		
	LT	0.00	17	1,600	0.011		
Eastbound	RT	0.00	57	0	0.000	ICU:	0.598
	TH	1.00	20	1,600	0.072 *		
	LT	0.00	38	1,600	0.024	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	70	0	0.000	N-S(1):	0.468 *
	TH	2.00	1,027	3,200	0.343	N-S(2):	0.361
	LT	1.00	251	1,600	0.157 *	E-W(1):	0.084 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.044
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.552
Northbound	RT	0.00	195	0	0.000	Lost Time:	0.100
	TH	2.00	771	3,200	0.311 *		
	LT	0.00	28	1,600	0.018		
Eastbound	RT	0.00	50	0	0.000	ICU:	0.652
	TH	1.00	13	1,600	0.084 *		
	LT	0.00	71	1,600	0.044	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: STATE ROUTE 91 WESTBOUND OFF-RAMP

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.230
	TH	2.00	863	3,200	0.270 *	N-S(2):	0.270 *
	LT	0.00	0	0	0.000	E-W(1):	0.120 *
Westbound	RT	0.90	155	1,434	0.108	E-W(2):	0.108
	TH	0.00	0	0	0.000		
	LT	1.10	191	1,590	0.120 *	V/C:	0.390
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	735	3,200	0.230		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.490
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.263
	TH	2.00	1,035	3,200	0.323 *	N-S(2):	0.323 *
	LT	0.00	0	0	0.000	E-W(1):	0.214 *
Westbound	RT	0.96	295	1,532	0.193	E-W(2):	0.193
	TH	0.00	0	0	0.000		
	LT	1.04	321	1,501	0.214 *	V/C:	0.537
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	842	3,200	0.263		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.637
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	99	0	0.000	N-S(1):	0.277 *
	TH	2.00	491	3,200	0.184	N-S(2):	0.225
	LT	1.00	70	1,600	0.044 *	E-W(1):	0.254
Westbound	RT	0.00	70	0	0.000	E-W(2):	0.286 *
	TH	2.00	639	3,200	0.222 *		
	LT	1.00	125	1,600	0.078	V/C:	0.563
Northbound	RT	0.00	122	0	0.000	Lost Time:	0.100
	TH	2.00	623	3,200	0.233 *		
	LT	1.00	66	1,600	0.041		
Eastbound	RT	0.00	80	0	0.000	ICU:	0.663
	TH	2.00	484	3,200	0.176		
	LT	1.00	102	1,600	0.064 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	127	0	0.000	N-S(1):	0.310
	TH	2.00	767	3,200	0.279 *	N-S(2):	0.351 *
	LT	1.00	89	1,600	0.056	E-W(1):	0.378 *
Westbound	RT	0.00	68	0	0.000	E-W(2):	0.320
	TH	2.00	681	3,200	0.234		
	LT	1.00	116	1,600	0.073 *	V/C:	0.729
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	2.00	687	3,200	0.254		
	LT	1.00	115	1,600	0.072 *		
Eastbound	RT	0.00	170	0	0.000	ICU:	0.829
	TH	2.00	807	3,200	0.305 *		
	LT	1.00	137	1,600	0.086	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000	N-S(1):	0.285 *
	TH	2.00	476	3,200	0.175	N-S(2):	0.246
	LT	1.00	75	1,600	0.047 *	E-W(1):	0.264
Westbound	RT	0.00	61	0	0.000	E-W(2):	0.287 *
	TH	2.00	638	3,200	0.218 *		
	LT	1.00	110	1,600	0.069	V/C:	0.572
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	707	3,200	0.238 *		
	LT	1.00	114	1,600	0.071		
Eastbound	RT	0.00	79	0	0.000	ICU:	0.672
	TH	2.00	544	3,200	0.195		
	LT	1.00	110	1,600	0.069 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	95	0	0.000	N-S(1):	0.304
	TH	2.00	650	3,200	0.233 *	N-S(2):	0.311 *
	LT	1.00	126	1,600	0.079	E-W(1):	0.319 *
Westbound	RT	0.00	100	0	0.000	E-W(2):	0.229
	TH	2.00	390	3,200	0.153		
	LT	1.00	107	1,600	0.067 *	V/C:	0.630
Northbound	RT	0.00	136	0	0.000	Lost Time:	0.100
	TH	2.00	585	3,200	0.225		
	LT	1.00	125	1,600	0.078 *		
Eastbound	RT	0.00	122	0	0.000	ICU:	0.730
	TH	2.00	684	3,200	0.252 *		
	LT	1.00	121	1,600	0.076	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	51	0	0.000	N-S(1):	0.275 *
	TH	2.00	328	3,200	0.118	N-S(2):	0.182
	LT	1.00	105	1,600	0.066 *	E-W(1):	0.214 *
Westbound	RT	0.00	52	0	0.000	E-W(2):	0.214 *
	TH	3.00	721	4,800	0.161		
	LT	1.00	130	1,600	0.081 *	V/C:	0.489
Northbound	RT	0.00	138	0	0.000	Lost Time:	0.100
	TH	2.00	532	3,200	0.209 *		
	LT	1.00	102	1,600	0.064		
Eastbound	RT	0.00	81	0	0.000	ICU:	0.589
	TH	3.00	555	4,800	0.133 *		
	LT	1.00	84	1,600	0.053	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	73	0	0.000	N-S(1):	0.246
	TH	2.00	554	3,200	0.196 *	N-S(2):	0.285 *
	LT	1.00	76	1,600	0.048	E-W(1):	0.291 *
Westbound	RT	0.00	78	0	0.000	E-W(2):	0.201
	TH	3.00	605	4,800	0.142		
	LT	1.00	153	1,600	0.096 *	V/C:	0.576
Northbound	RT	0.00	160	0	0.000	Lost Time:	0.100
	TH	2.00	472	3,200	0.198		
	LT	1.00	142	1,600	0.089 *		
Eastbound	RT	0.00	142	0	0.000	ICU:	0.676
	TH	3.00	796	4,800	0.195 *		
	LT	1.00	95	1,600	0.059	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STATE ROUTE 91 EASTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	383	1,600	0.077	N-S(1):	0.370 *
	TH	2.00	942	3,200	0.294	N-S(2):	0.294
	LT	0.00	0	0	0.000 *	E-W(1):	0.162
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.180 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.550
Northbound	RT	0.00	327	0	0.000	Lost Time:	0.100
	TH	3.00	1,450	4,800	0.370 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.56	404	2,493	0.162	ICU:	0.650
	TH	0.00	0	0	0.000		
	LT	1.44	374	2,077	0.180 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	290	1,600	0.000	N-S(1):	0.425 *
	TH	2.00	1,267	3,200	0.396	N-S(2):	0.396
	LT	0.00	0	0	0.000 *	E-W(1):	0.187
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.207 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.632
Northbound	RT	0.00	262	0	0.000	Lost Time:	0.100
	TH	3.00	1,779	4,800	0.425 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.87	559	2,995	0.187	ICU:	0.732
	TH	0.00	0	0	0.000		
	LT	1.13	337	1,625	0.207 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STATE ROUTE 91 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000	N-S(1):	0.416 *
	TH	3.00	1,496	4,800	0.317	N-S(2):	0.317
	LT	1.00	30	1,600	0.019 *	E-W(1):	0.135 *
Westbound	RT	1.34	117	2,152	0.040	E-W(2):	0.056
	TH	0.00	0	0	0.000		
	LT	1.66	144	2,383	0.060 *	V/C:	0.551
Northbound	RT	1.01	641	1,613	0.343	Lost Time:	0.100
	TH	1.99	1,266	3,187	0.397 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.651
	TH	1.00	21	1,600	0.075 *		
	LT	0.00	26	1,600	0.016	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.506 *
	TH	3.00	1,484	4,800	0.314	N-S(2):	0.314
	LT	1.00	49	1,600	0.031 *	E-W(1):	0.223 *
Westbound	RT	1.40	233	2,241	0.082	E-W(2):	0.103
	TH	0.00	0	0	0.000		
	LT	1.60	266	2,303	0.116 *	V/C:	0.729
Northbound	RT	1.00	627	1,600	0.288	Lost Time:	0.100
	TH	2.00	1,521	3,200	0.475 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	103	0	0.000	ICU:	0.829
	TH	1.00	34	1,600	0.107 *		
	LT	0.00	34	1,600	0.021	LOS:	D

* = Critical Movement

FUTURE (2020) WITH PROJECT

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                      Level Of Service Computation Report
             2000 HCM 4-Way Stop Method (Base Volume Alternative)
******************************************************************************
Intersection #103 Erickson Av/Imperial Hwy EB Ramps [Future (2020) w/o Project -
******************************************************************************
Cycle (sec):        100                Critical Vol./Cap. (X):        0.156
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):         8.3
Optimal Cycle:        0                Level Of Service:                  A
******************************************************************************
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        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  1  1  0    1  0  2  0  0    1  0  0  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  126   103    85  169     0     7    8    41     0    0     0
Growth Adj:  1.00 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  126   103    85  169     0     7    8    41     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  126   103    85  169     0     7    8    41     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  126   103    85  169     0     7    8    41     0    0     0
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  126   103    85  169     0     7    8    41     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 1.10  0.90  1.00 2.00  0.00  1.00 0.16  0.84  0.00 0.00  0.00
Final Sat.:     0  809   748   635 1395     0   563  111   568     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx 0.16  0.14  0.13 0.12  xxxx  0.01 0.07  0.07  xxxx xxxx  xxxx
Crit Moves:        ****        ****                   ****
Delay/Veh:    0.0  8.4   7.6   9.1  8.5   0.0   8.8  8.0   8.0   0.0  0.0   0.0
Delay Adj:   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  8.4   7.6   9.1  8.5   0.0   8.8  8.0   8.0   0.0  0.0   0.0
LOS by Move:   *    A     A     A    A     *     A    A     A     *    *     *
ApproachDel:       8.0              8.7              8.1           xxxxxx
Delay Adj:        1.00             1.00             1.00            xxxxx
ApprAdjDel:        8.0              8.7              8.1           xxxxxx
LOS by Appr:        A                A                A                *
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #102 Erickson Av/Imperial Hwy WB Ramps [Future (2020) w/o Project -

Cycle (sec): 100 Critical Vol./Cap. (X): 0.144
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

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			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 0			0 0 1 1 0			0 0 0 0 0			1 0 0 1 0		
Volume Module:												
Base Vol:	81	44	0	0	154	30	0	0	0	87	10	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:	81	44	0	0	154	30	0	0	0	87	10	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	44	0	0	154	30	0	0	0	87	10	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	44	0	0	154	30	0	0	0	87	10	13
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.:	81	44	0	0	154	30	0	0	0	87	10	13
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.67	0.33	0.00	0.00	0.00	1.00	0.43	0.57
Final Sat.:	619	1351	0	0	1221	244	0	0	0	606	309	402
Capacity Analysis Module:												
Vol/Sat:	0.13	0.03	xxxx	xxxx	0.13	0.12	xxxx	xxxx	xxxx	0.14	0.03	0.03
Crit Moves:	****				****					****		
Delay/Veh:	9.2	8.1	0.0	0.0	8.2	8.0	0.0	0.0	0.0	9.3	7.7	7.7
Delay Adj:	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:	9.2	8.1	0.0	0.0	8.2	8.0	0.0	0.0	0.0	9.3	7.7	7.7
LOS by Move:	A	A	*	*	A	A	*	*	*	A	A	A
ApproachDel:	8.8			8.2			xxxxxx			9.0		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	8.8			8.2			xxxxxx			9.0		
LOS by Appr:	A			A			*			A		

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #67 Rives Av/Imperial Highway [Future (2020) w/o Project - PM Peak
******************************************************************************
Average Delay (sec/veh):      1.5   Worst Case Level Of Service:       B[ 15.0]
******************************************************************************
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  1    0  0  0  0  1    1  0  3  0  1    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    65     0    0   141   133 1528     7     0 1149   252
Growth Adj:  1.00 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    65     0    0   141   133 1528     7     0 1149   252
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    65     0    0   141   133 1528     7     0 1149   252
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0    65     0    0   141   133 1528     7     0 1149   252
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   509  xxxx xxxx   509  1401 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   514  xxxx xxxx   515   494 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   514  xxxx xxxx   515   494 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.13  xxxx xxxx  0.27  0.27 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx   0.4 xxxxx xxxx   1.1   1.1 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx  13.0 xxxxx xxxx  14.6  15.0 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     B     *    *     B     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:      13.0             14.6           xxxxxx           xxxxxx
ApproachLOS:        B                B                *                *
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------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #58 Paramount Bl/I-5 Southbound Ramps [Future (2020) w/o Project -
******************************************************************************
Average Delay (sec/veh):    823.6   Worst Case Level Of Service:       F[27544.2
******************************************************************************
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:           Ignore           Include          Ignore           Include
Lanes:        0  0  2  0  1    1  0  2  0  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1632   266   290 2048     0   122    0   492     0    0     0
Growth Adj:  1.00 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 1632   266   290 2048     0   122    0   492     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0 1632     0   290 2048     0   122    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1632     0   290 2048     0   122    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   6.8 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1632 xxxx xxxxx  3444 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   403 xxxx xxxxx     5 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   403 xxxx xxxxx     2 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.72 xxxx  xxxx 55.12 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx   5.5 xxxx xxxxx  17.6 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx  33.7 xxxx xxxxx 27544 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     D    *     *     F    *     *     *    *     *
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           xxxxxx
ApproachLOS:        *                *                F                *
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #103 Erickson Av/Imperial Hwy EB Ramps [Future (2020) w/o Project -

Cycle (sec): 100 Critical Vol./Cap. (X): 0.214
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 0 Level Of Service: A

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			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1	1 0		1 0 2	0 0		1 0 0	1 0		0 0 0	0 0	
Volume Module:												
Base Vol:	0	152	40	52	226	0	22	9	139	0	0	0
Growth Adj:	1.00	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	152	40	52	226	0	22	9	139	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	152	40	52	226	0	22	9	139	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	152	40	52	226	0	22	9	139	0	0	0
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	152	40	52	226	0	22	9	139	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.58	0.42	1.00	2.00	0.00	1.00	0.06	0.94	0.00	0.00	0.00
Final Sat.:	0	1078	293	597	1304	0	565	42	649	0	0	0
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.14	0.14	0.09	0.17	xxxx	0.04	0.21	0.21	xxxx	xxxx	xxxx
Crit Moves:		****			****				****			
Delay/Veh:	0.0	8.6	8.4	9.1	9.1	0.0	9.0	8.9	8.9	0.0	0.0	0.0
Delay Adj:	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	8.6	8.4	9.1	9.1	0.0	9.0	8.9	8.9	0.0	0.0	0.0
LOS by Move:	*	A	A	A	A	*	A	A	A	*	*	*
ApproachDel:		8.6			9.1			8.9			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		8.6			9.1			8.9			xxxxxx	
LOS by Appr:		A			A			A			*	

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #102 Erickson Av/Imperial Hwy WB Ramps [Future (2020) w/o Project -

Cycle (sec): 100 Critical Vol./Cap. (X): 0.399
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 0 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:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 0			0 0 1 1 0			0 0 0 0 0			1 0 0 1 0		
Volume Module:												
Base Vol:	59	128	0	0	34	6	0	0	0	252	12	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	59	128	0	0	34	6	0	0	0	252	12	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	59	128	0	0	34	6	0	0	0	252	12	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	128	0	0	34	6	0	0	0	252	12	66
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.:	59	128	0	0	34	6	0	0	0	252	12	66
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.70	0.30	0.00	0.00	0.00	1.00	0.15	0.85
Final Sat.:	573	1246	0	0	1054	190	0	0	0	632	120	657
Capacity Analysis Module:												
Vol/Sat:	0.10	0.10	xxxx	xxxx	0.03	0.03	xxxx	xxxx	xxxx	0.40	0.10	0.10
Crit Moves:	****				****					****		
Delay/Veh:	9.4	8.8	0.0	0.0	8.4	8.2	0.0	0.0	0.0	11.8	7.7	7.7
Delay Adj:	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:	9.4	8.8	0.0	0.0	8.4	8.2	0.0	0.0	0.0	11.8	7.7	7.7
LOS by Move:	A	A	*	*	A	A	*	*	*	B	A	A
ApproachDel:	9.0			8.3			xxxxxx			10.9		
Delay Adj:	1.00			1.00			xxxxx			1.00		
ApprAdjDel:	9.0			8.3			xxxxxx			10.9		
LOS by Appr:	A			A			*			B		

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #67 Rives Av/Imperial Highway [Future (2020) w/o Project - AM Peak
******************************************************************************
Average Delay (sec/veh):      1.5   Worst Case Level Of Service:       B[ 15.0]
******************************************************************************
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  1    0  0  0  0  1    1  0  3  0  1    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    24     0    0   176    99 1132    19     0 1161   191
Growth Adj:  1.00 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    24     0    0   176    99 1132    19     0 1161   191
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    24     0    0   176    99 1132    19     0 1161   191
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0    24     0    0   176    99 1132    19     0 1161   191
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   377  xxxx xxxx   483  1352 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   626  xxxx xxxx   535   516 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   626  xxxx xxxx   535   516 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.04  xxxx xxxx  0.33  0.19 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx   0.1 xxxxx xxxx   1.4   0.7 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx  11.0 xxxxx xxxx  15.0  13.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     B     *    *     B     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:      11.0             15.0           xxxxxx           xxxxxx
ApproachLOS:        B                B                *                *
```

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #58 Paramount Bl/I-5 Southbound Ramps [Future (2020) w/o Project -
******************************************************************************
Average Delay (sec/veh):     39.2   Worst Case Level Of Service:       F[2018.4]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Ignore           Include          Ignore           Include
Lanes:        0  0  2  0  1    1  0  2  0  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1786   529   187 1230     0    61    0   194     0    0     0
Growth Adj:  1.00 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 1786   529   187 1230     0    61    0   194     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0 1786     0   187 1230     0    61    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1786     0   187 1230     0    61    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   6.8 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1786 xxxx xxxxx  2497 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   352 xxxx xxxxx    25 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   352 xxxx xxxxx    14 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.53 xxxx  xxxx  4.29 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx   3.0 xxxx xxxxx   8.5 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx  26.3 xxxx xxxxx  2018 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     D    *     *     F    *     *     *    *     *
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           2018.4           xxxxxx
ApproachLOS:        *                *                F                *
```

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: 3RD STREET-STONEWOOD STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	10	0	0.000	N-S(1):	0.272 *
	TH	3.00	1,055	4,800	0.222	N-S(2):	0.244
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.032 *
Westbound	RT	1.00	12	1,600	0.000	E-W(2):	0.027
	TH	1.00	0	1,600	0.021		
	LT	0.00	33	1,600	0.021 *	V/C:	0.304
Northbound	RT	1.00	56	1,600	0.014	Lost Time:	0.100
	TH	3.00	1,201	4,800	0.250 *		
	LT	1.00	35	1,600	0.022		
Eastbound	RT	0.00	9	0	0.000	ICU:	0.404
	TH	1.00	0	1,600	0.011 *		
	LT	0.00	9	1,600	0.006	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.340 *
	TH	3.00	1,252	4,800	0.262	N-S(2):	0.306
	LT	1.00	137	1,600	0.086 *	E-W(1):	0.115 *
Westbound	RT	1.00	100	1,600	0.000	E-W(2):	0.111
	TH	1.00	4	1,600	0.107		
	LT	0.00	167	1,600	0.104 *	V/C:	0.455
Northbound	RT	1.00	223	1,600	0.035	Lost Time:	0.100
	TH	3.00	1,220	4,800	0.254 *		
	LT	1.00	71	1,600	0.044		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.555
	TH	1.00	0	1,600	0.011 *		
	LT	0.00	7	1,600	0.004	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CHEROKEE DRIVE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	88	0	0.000	N-S(1):	0.387 *
	TH	2.00	1,041	3,200	0.353	N-S(2):	0.378
	LT	0.00	0	0	0.000 *	E-W(1):	0.010
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.033 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.420
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,238	3,200	0.387 *		
	LT	1.00	40	1,600	0.025		
Eastbound	RT	1.00	56	1,600	0.010	ICU:	0.520
	TH	0.00	0	0	0.000		
	LT	1.00	53	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	110	0	0.000	N-S(1):	0.390
	TH	2.00	1,375	3,200	0.464 *	N-S(2):	0.469 *
	LT	0.00	0	0	0.000	E-W(1):	0.060
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.074 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.543
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,248	3,200	0.390		
	LT	1.00	8	1,600	0.005 *		
Eastbound	RT	1.00	104	1,600	0.060	ICU:	0.643
	TH	0.00	0	0	0.000		
	LT	1.00	118	1,600	0.074 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ERICKSON AVENUE
East/West Street: IMPERIAL HIGHWAY EASTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.093 *
	TH	2.00	226	3,200	0.071	N-S(2):	0.071
	LT	1.00	52	1,600	0.033 *	E-W(1):	0.093 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.014
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.186
Northbound	RT	0.00	40	0	0.000	Lost Time:	0.100
	TH	2.00	152	3,200	0.060 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	139	0	0.000	ICU:	0.286
	TH	1.00	9	1,600	0.093 *		
	LT	1.00	22	1,600	0.014	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.125 *
	TH	2.00	169	3,200	0.053	N-S(2):	0.053
	LT	1.00	85	1,600	0.053 *	E-W(1):	0.031 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.004
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.156
Northbound	RT	0.00	103	0	0.000	Lost Time:	0.100
	TH	2.00	126	3,200	0.072 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	41	0	0.000	ICU:	0.256
	TH	1.00	8	1,600	0.031 *		
	LT	1.00	7	1,600	0.004	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ERICKSON AVENUE
East/West Street: IMPERIAL HIGHWAY WESTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.040
	TH	2.00	34	3,200	0.013 *	N-S(2):	0.050 *
	LT	0.00	0	0	0.000	E-W(1):	0.158 *
Westbound	RT	0.00	66	0	0.000	E-W(2):	0.049
	TH	1.00	12	1,600	0.049		
	LT	1.00	252	1,600	0.158 *	V/C:	0.208
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	128	3,200	0.040		
	LT	1.00	59	1,600	0.037 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.308
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	30	0	0.000	N-S(1):	0.026
	TH	2.00	154	3,200	0.058 *	N-S(2):	0.087 *
	LT	0.00	0	0	0.000	E-W(1):	0.054 *
Westbound	RT	0.00	13	0	0.000	E-W(2):	0.014
	TH	1.00	10	1,600	0.014		
	LT	1.00	87	1,600	0.054 *	V/C:	0.141
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	1.06	44	1,690	0.026		
	LT	1.94	81	2,799	0.029 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.241
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-710 SOUTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	662	3,200	0.207 *	N-S(1):	0.149
	TH	0.00	0	0	0.000	N-S(2):	0.207 *
	LT	2.00	429	2,880	0.149	E-W(1):	0.550 *
Westbound	RT	1.00	716	1,600	0.000	E-W(2):	0.505
	TH	2.00	1,617	3,200	0.505		
	LT	0.00	0	0	0.000 *	V/C:	0.757
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	868	0	0.000	ICU:	0.857
	TH	3.00	1,774	4,800	0.550 *		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	492	3,200	0.154	N-S(1):	0.233 *
	TH	0.00	0	0	0.000	N-S(2):	0.154
	LT	2.00	672	2,880	0.233 *	E-W(1):	0.584
Westbound	RT	1.00	370	1,600	0.000	E-W(2):	0.768 *
	TH	2.00	2,456	3,200	0.768 *		
	LT	0.00	0	0	0.000	V/C:	1.001
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	611	0	0.000	ICU:	1.101
	TH	3.00	2,193	4,800	0.584		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-710 NORTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.136
	TH	0.00	0	0	0.000 *	N-S(2):	0.210 *
	LT	0.00	0	0	0.000	E-W(1):	0.355
Westbound	RT	1.00	565	1,600	0.000	E-W(2):	0.510 *
	TH	2.00	1,633	3,200	0.510 *		
	LT	0.00	0	0	0.000	V/C:	0.720
Northbound	RT	2.00	434	3,200	0.136	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	2.00	605	2,880	0.210 *		
Eastbound	RT	1.00	615	1,600	0.195	ICU:	0.820
	TH	3.00	1,703	4,800	0.355		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.184
	TH	0.00	0	0	0.000 *	N-S(2):	0.320 *
	LT	0.00	0	0	0.000	E-W(1):	0.511
Westbound	RT	1.00	373	1,600	0.000	E-W(2):	0.593 *
	TH	2.00	1,896	3,200	0.593 *		
	LT	0.00	0	0	0.000	V/C:	0.913
Northbound	RT	2.00	589	3,200	0.184	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	2.00	921	2,880	0.320 *		
Eastbound	RT	1.00	407	1,600	0.000	ICU:	1.013
	TH	3.00	2,454	4,800	0.511		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: GARFIELD AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	344	1,600	0.067	N-S(1):	0.208 *
	TH	2.00	450	3,200	0.141	N-S(2):	0.159
	LT	2.00	115	2,880	0.040 *	E-W(1):	0.268
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.382 *
	TH	3.00	1,071	4,800	0.234 *		
	LT	1.00	88	1,600	0.055	V/C:	0.590
Northbound	RT	0.00	125	0	0.000	Lost Time:	0.100
	TH	2.00	412	3,200	0.168 *		
	LT	1.00	28	1,600	0.018		
Eastbound	RT	0.00	40	0	0.000	ICU:	0.690
	TH	3.00	984	4,800	0.213		
	LT	1.00	237	1,600	0.148 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	336	1,600	0.063	N-S(1):	0.236 *
	TH	2.00	500	3,200	0.156	N-S(2):	0.214
	LT	2.00	146	2,880	0.051 *	E-W(1):	0.384
Westbound	RT	0.00	69	0	0.000	E-W(2):	0.392 *
	TH	3.00	1,106	4,800	0.245 *		
	LT	1.00	173	1,600	0.108	V/C:	0.628
Northbound	RT	0.00	165	0	0.000	Lost Time:	0.100
	TH	2.00	428	3,200	0.185 *		
	LT	1.00	92	1,600	0.058		
Eastbound	RT	0.00	53	0	0.000	ICU:	0.728
	TH	3.00	1,272	4,800	0.276		
	LT	1.00	235	1,600	0.147 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: GARFIELD AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	388	1,600	0.044	N-S(1):	0.260
	TH	2.00	607	3,200	0.190 *	N-S(2):	0.441 *
	LT	2.00	180	2,880	0.063	E-W(1):	0.192
Westbound	RT	1.00	94	1,600	0.003	E-W(2):	0.407 *
	TH	3.00	899	4,800	0.187 *		
	LT	2.00	54	2,880	0.019	V/C:	0.848
Northbound	RT	0.00	28	0	0.000	Lost Time:	0.100
	TH	2.00	601	3,200	0.197		
	LT	2.00	723	2,880	0.251 *		
Eastbound	RT	1.00	408	1,600	0.029	ICU:	0.948
	TH	3.00	828	4,800	0.173		
	LT	2.00	635	2,880	0.220 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	367	1,600	0.018	N-S(1):	0.332
	TH	2.00	1,359	3,200	0.425 *	N-S(2):	0.613 *
	LT	2.00	255	2,880	0.089	E-W(1):	0.384
Westbound	RT	1.00	227	1,600	0.062	E-W(2):	0.547 *
	TH	3.00	1,499	4,800	0.312 *		
	LT	2.00	200	2,880	0.069	V/C:	1.160
Northbound	RT	0.00	100	0	0.000	Lost Time:	0.100
	TH	2.00	679	3,200	0.243		
	LT	2.00	541	2,880	0.188 *		
Eastbound	RT	1.00	477	1,600	0.129	ICU:	1.260
	TH	3.00	1,512	4,800	0.315		
	LT	2.00	676	2,880	0.235 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-105 EASTBOUND RAMPS/SOMERSET RANCH ROAD SOUTH

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.358 *
	TH	2.00	811	3,200	0.253	N-S(2):	0.253
	LT	2.00	265	2,880	0.092 *	E-W(1):	0.280 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.234
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.638
Northbound	RT	1.00	317	1,600	0.198	Lost Time:	0.100
	TH	2.00	852	3,200	0.266 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	172	0	0.000	ICU:	0.738
	TH	2.00	724	3,200	0.280 *		
	LT	1.00	374	1,600	0.234	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.402 *
	TH	2.00	1,132	3,200	0.354	N-S(2):	0.354
	LT	2.00	167	2,880	0.058 *	E-W(1):	0.288
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.326 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.728
Northbound	RT	1.00	244	1,600	0.153	Lost Time:	0.100
	TH	2.00	1,100	3,200	0.344 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	237	0	0.000	ICU:	0.828
	TH	2.00	686	3,200	0.288		
	LT	1.00	522	1,600	0.326 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-105 WESTBOUND RAMPS/SOMERSET RANCH ROAD NORTH

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	609	1,600	0.381 *	N-S(1):	0.287
	TH	2.00	883	3,200	0.276	N-S(2):	0.486 *
	LT	0.00	0	0	0.000	E-W(1):	0.154
Westbound	RT	1.00	456	1,600	0.285	E-W(2):	0.289 *
	TH	1.00	463	1,600	0.289 *		
	LT	1.00	246	1,600	0.154	V/C:	0.775
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	918	3,200	0.287		
	LT	2.00	301	2,880	0.105 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.875
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	672	1,600	0.420 *	N-S(1):	0.432
	TH	2.00	1,088	3,200	0.340	N-S(2):	0.502 *
	LT	0.00	0	0	0.000	E-W(1):	0.143
Westbound	RT	1.00	462	1,600	0.289 *	E-W(2):	0.289 *
	TH	1.00	422	1,600	0.264		
	LT	1.00	229	1,600	0.143	V/C:	0.791
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,382	3,200	0.432		
	LT	2.00	235	2,880	0.082 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.891
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	179	0	0.000	N-S(1):	0.325
	TH	2.00	643	3,200	0.257 *	N-S(2):	0.338 *
	LT	1.00	110	1,600	0.069	E-W(1):	0.291
Westbound	RT	0.00	122	0	0.000	E-W(2):	0.452 *
	TH	2.00	837	3,200	0.300 *		
	LT	1.00	87	1,600	0.054	V/C:	0.790
Northbound	RT	0.00	48	0	0.000	Lost Time:	0.100
	TH	2.00	772	3,200	0.256		
	LT	1.00	130	1,600	0.081 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.890
	TH	2.00	691	3,200	0.237		
	LT	1.00	243	1,600	0.152 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	109	0	0.000	N-S(1):	0.372
	TH	2.00	855	3,200	0.301 *	N-S(2):	0.417 *
	LT	1.00	85	1,600	0.053	E-W(1):	0.399 *
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.319
	TH	2.00	571	3,200	0.211		
	LT	1.00	122	1,600	0.076 *	V/C:	0.816
Northbound	RT	0.00	72	0	0.000	Lost Time:	0.100
	TH	2.00	948	3,200	0.319		
	LT	1.00	186	1,600	0.116 *		
Eastbound	RT	0.00	190	0	0.000	ICU:	0.916
	TH	2.00	842	3,200	0.323 *		
	LT	1.00	173	1,600	0.108	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	266	0	0.000	N-S(1):	0.338
	TH	2.00	725	3,200	0.310 *	N-S(2):	0.429 *
	LT	1.00	104	1,600	0.065	E-W(1):	0.249 *
Westbound	RT	1.00	66	1,600	0.000	E-W(2):	0.249 *
	TH	2.00	592	3,200	0.185 *		
	LT	1.00	161	1,600	0.101 *	V/C:	0.678
Northbound	RT	0.00	238	0	0.000	Lost Time:	0.100
	TH	2.00	635	3,200	0.273		
	LT	1.00	191	1,600	0.119 *		
Eastbound	RT	1.00	35	1,600	0.000	ICU:	0.778
	TH	2.00	474	3,200	0.148 *		
	LT	1.00	103	1,600	0.064 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	223	0	0.000	N-S(1):	0.373 *
	TH	2.00	686	3,200	0.284	N-S(2):	0.372
	LT	1.00	123	1,600	0.077 *	E-W(1):	0.396 *
Westbound	RT	1.00	143	1,600	0.013	E-W(2):	0.358
	TH	2.00	603	3,200	0.188		
	LT	1.00	140	1,600	0.088 *	V/C:	0.769
Northbound	RT	0.00	188	0	0.000	Lost Time:	0.100
	TH	2.00	758	3,200	0.296 *		
	LT	1.00	140	1,600	0.088		
Eastbound	RT	1.00	136	1,600	0.000	ICU:	0.869
	TH	2.00	986	3,200	0.308 *		
	LT	1.00	272	1,600	0.170	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	85	0	0.000	N-S(1):	0.342 *
	TH	2.00	565	3,200	0.203	N-S(2):	0.329
	LT	1.00	154	1,600	0.096 *	E-W(1):	0.256
Westbound	RT	0.00	210	0	0.000	E-W(2):	0.476 *
	TH	2.00	1,019	3,200	0.384 *		
	LT	1.00	153	1,600	0.096	V/C:	0.818
Northbound	RT	0.00	125	0	0.000	Lost Time:	0.100
	TH	2.00	661	3,200	0.246 *		
	LT	1.00	202	1,600	0.126		
Eastbound	RT	0.00	125	0	0.000	ICU:	0.918
	TH	2.00	386	3,200	0.160		
	LT	1.00	147	1,600	0.092 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	55	0	0.000	N-S(1):	0.276 *
	TH	2.00	545	3,200	0.188	N-S(2):	0.271
	LT	1.00	120	1,600	0.075 *	E-W(1):	0.441 *
Westbound	RT	0.00	126	0	0.000	E-W(2):	0.331
	TH	2.00	640	3,200	0.239		
	LT	1.00	175	1,600	0.109 *	V/C:	0.717
Northbound	RT	0.00	106	0	0.000	Lost Time:	0.100
	TH	2.00	537	3,200	0.201 *		
	LT	1.00	132	1,600	0.083		
Eastbound	RT	0.00	166	0	0.000	ICU:	0.817
	TH	2.00	895	3,200	0.332 *		
	LT	1.00	147	1,600	0.092	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	319	0	0.000	N-S(1):	0.288
	TH	2.00	551	3,200	0.272 *	N-S(2):	0.356 *
	LT	1.00	53	1,600	0.033	E-W(1):	0.223
Westbound	RT	0.00	86	0	0.000	E-W(2):	0.329 *
	TH	2.00	624	3,200	0.222 *		
	LT	1.00	49	1,600	0.031	V/C:	0.685
Northbound	RT	0.00	101	0	0.000	Lost Time:	0.100
	TH	2.00	715	3,200	0.255		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.785
	TH	2.00	542	3,200	0.192		
	LT	1.00	171	1,600	0.107 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	135	0	0.000	N-S(1):	0.327 *
	TH	2.00	576	3,200	0.222	N-S(2):	0.320
	LT	1.00	126	1,600	0.079 *	E-W(1):	0.279
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.360 *
	TH	2.00	495	3,200	0.169 *		
	LT	1.00	86	1,600	0.054	V/C:	0.687
Northbound	RT	0.00	75	0	0.000	Lost Time:	0.100
	TH	2.00	717	3,200	0.248 *		
	LT	1.00	157	1,600	0.098		
Eastbound	RT	0.00	68	0	0.000	ICU:	0.787
	TH	2.00	653	3,200	0.225		
	LT	1.00	306	1,600	0.191 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	38	0	0.000	N-S(1):	0.665 *
	TH	2.00	562	3,200	0.188	N-S(2):	0.259
	LT	1.00	212	1,600	0.133 *	E-W(1):	0.242 *
Westbound	RT	1.00	142	1,600	0.000	E-W(2):	0.195
	TH	2.00	364	3,200	0.114		
	LT	1.00	200	1,600	0.125 *	V/C:	0.907
Northbound	RT	1.00	165	1,600	0.000	Lost Time:	0.100
	TH	1.00	851	1,600	0.532 *		
	LT	1.00	113	1,600	0.071		
Eastbound	RT	1.00	181	1,600	0.043	ICU:	1.007
	TH	2.00	375	3,200	0.117 *		
	LT	1.00	130	1,600	0.081	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.569 *
	TH	2.00	554	3,200	0.192	N-S(2):	0.273
	LT	1.00	272	1,600	0.170 *	E-W(1):	0.411 *
Westbound	RT	1.00	210	1,600	0.000	E-W(2):	0.302
	TH	2.00	766	3,200	0.239		
	LT	1.00	173	1,600	0.108 *	V/C:	0.980
Northbound	RT	1.00	158	1,600	0.000	Lost Time:	0.100
	TH	1.00	638	1,600	0.399 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	1.00	135	1,600	0.004	ICU:	1.080
	TH	2.00	969	3,200	0.303 *		
	LT	1.00	101	1,600	0.063	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	177	1,600	0.043	N-S(1):	0.382
	TH	2.00	891	3,200	0.278 *	N-S(2):	0.387 *
	LT	1.00	119	1,600	0.074	E-W(1):	0.248 *
Westbound	RT	1.00	86	1,600	0.000	E-W(2):	0.218
	TH	2.00	480	3,200	0.150		
	LT	1.00	145	1,600	0.091 *	V/C:	0.635
Northbound	RT	1.00	136	1,600	0.000	Lost Time:	0.100
	TH	2.00	984	3,200	0.308		
	LT	1.00	175	1,600	0.109 *		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.735
	TH	2.00	386	3,200	0.157 *		
	LT	1.00	109	1,600	0.068	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	105	1,600	0.000	N-S(1):	0.472
	TH	2.00	1,288	3,200	0.403 *	N-S(2):	0.550 *
	LT	1.00	211	1,600	0.132	E-W(1):	0.396 *
Westbound	RT	1.00	170	1,600	0.000	E-W(2):	0.278
	TH	2.00	613	3,200	0.192		
	LT	1.00	114	1,600	0.071 *	V/C:	0.946
Northbound	RT	1.00	194	1,600	0.050	Lost Time:	0.100
	TH	2.00	1,087	3,200	0.340		
	LT	1.00	235	1,600	0.147 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	1.046
	TH	2.00	856	3,200	0.325 *		
	LT	1.00	138	1,600	0.086	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	169	0	0.000	N-S(1):	0.487 *
	TH	2.00	937	3,200	0.346	N-S(2):	0.432
	LT	1.00	122	1,600	0.076 *	E-W(1):	0.315
Westbound	RT	0.00	111	0	0.000	E-W(2):	0.329 *
	TH	2.00	441	3,200	0.173 *		
	LT	1.00	241	1,600	0.151	V/C:	0.816
Northbound	RT	0.00	259	0	0.000	Lost Time:	0.100
	TH	2.00	1,057	3,200	0.411 *		
	LT	1.00	137	1,600	0.086		
Eastbound	RT	0.00	125	0	0.000	ICU:	0.916
	TH	2.00	399	3,200	0.164		
	LT	1.00	250	1,600	0.156 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	182	0	0.000	N-S(1):	0.534 *
	TH	2.00	1,081	3,200	0.395	N-S(2):	0.476
	LT	1.00	210	1,600	0.131 *	E-W(1):	0.310 *
Westbound	RT	0.00	139	0	0.000	E-W(2):	0.258
	TH	2.00	286	3,200	0.133		
	LT	1.00	151	1,600	0.094 *	V/C:	0.844
Northbound	RT	0.00	210	0	0.000	Lost Time:	0.100
	TH	2.00	1,081	3,200	0.403 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	0.00	164	0	0.000	ICU:	0.944
	TH	2.00	527	3,200	0.216 *		
	LT	1.00	200	1,600	0.125	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PIONEER BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	441	1,600	0.053	N-S(1):	0.395 *
	TH	2.00	519	3,200	0.162	N-S(2):	0.186
	LT	2.00	625	2,880	0.217 *	E-W(1):	0.352
Westbound	RT	1.00	59	1,600	0.000	E-W(2):	0.540 *
	TH	3.00	1,521	4,800	0.317 *		
	LT	1.00	95	1,600	0.059	V/C:	0.935
Northbound	RT	1.00	126	1,600	0.019	Lost Time:	0.100
	TH	2.00	568	3,200	0.178 *		
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	88	1,600	0.031	ICU:	1.035
	TH	3.00	1,406	4,800	0.293		
	LT	1.00	356	1,600	0.223 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	361	1,600	0.041	N-S(1):	0.326 *
	TH	2.00	683	3,200	0.213	N-S(2):	0.286
	LT	2.00	406	2,880	0.141 *	E-W(1):	0.405
Westbound	RT	1.00	56	1,600	0.000	E-W(2):	0.502 *
	TH	3.00	1,527	4,800	0.318 *		
	LT	1.00	135	1,600	0.084	V/C:	0.828
Northbound	RT	1.00	185	1,600	0.031	Lost Time:	0.100
	TH	2.00	591	3,200	0.185 *		
	LT	1.00	117	1,600	0.073		
Eastbound	RT	1.00	71	1,600	0.000	ICU:	0.928
	TH	3.00	1,541	4,800	0.321		
	LT	1.00	295	1,600	0.184 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FIRESTONE BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.300 *
	TH	2.12	464	3,398	0.137	N-S(2):	0.000
	LT	1.88	410	2,702	0.152 *	E-W(1):	0.363 *
Westbound	RT	1.00	346	1,600	0.080	E-W(2):	0.261
	TH	3.00	1,254	4,800	0.261		
	LT	1.00	6	1,600	0.004 *	V/C:	0.663
Northbound	RT	0.00	38	0	0.000	Lost Time:	0.100
	TH	2.66	527	4,249	0.133		
	LT	1.34	286	1,936	0.148 *		
Eastbound	RT	0.00	298	0	0.000	ICU:	0.763
	TH	3.00	1,425	4,800	0.359 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	1	0	0.000	N-S(1):	0.354 *
	TH	2.14	543	3,431	0.159	N-S(2):	0.000
	LT	1.86	470	2,672	0.176 *	E-W(1):	0.359 *
Westbound	RT	1.00	432	1,600	0.112	E-W(2):	0.299
	TH	3.00	1,433	4,800	0.299		
	LT	1.00	11	1,600	0.007 *	V/C:	0.713
Northbound	RT	0.00	6	0	0.000	Lost Time:	0.100
	TH	2.46	624	3,934	0.160		
	LT	1.54	395	2,220	0.178 *		
Eastbound	RT	0.00	425	0	0.000	ICU:	0.813
	TH	3.00	1,266	4,800	0.352 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	265	1,600	0.067	N-S(1):	0.280
	TH	2.00	431	3,200	0.135 *	N-S(2):	0.368 *
	LT	1.00	153	1,600	0.096	E-W(1):	0.323
Westbound	RT	0.00	105	0	0.000	E-W(2):	0.371 *
	TH	3.00	1,201	4,800	0.272 *		
	LT	1.00	137	1,600	0.086	V/C:	0.739
Northbound	RT	1.00	148	1,600	0.007	Lost Time:	0.100
	TH	2.00	589	3,200	0.184		
	LT	1.00	373	1,600	0.233 *		
Eastbound	RT	1.00	151	1,600	0.000	ICU:	0.839
	TH	2.00	758	3,200	0.237		
	LT	1.00	158	1,600	0.099 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	116	1,600	0.000	N-S(1):	0.282
	TH	2.00	659	3,200	0.206 *	N-S(2):	0.434 *
	LT	1.00	163	1,600	0.102	E-W(1):	0.439 *
Westbound	RT	0.00	73	0	0.000	E-W(2):	0.360
	TH	3.00	1,159	4,800	0.257		
	LT	1.00	146	1,600	0.091 *	V/C:	0.873
Northbound	RT	1.00	184	1,600	0.024	Lost Time:	0.100
	TH	2.00	575	3,200	0.180		
	LT	1.00	364	1,600	0.228 *		
Eastbound	RT	1.00	275	1,600	0.000	ICU:	0.973
	TH	2.00	1,113	3,200	0.348 *		
	LT	1.00	165	1,600	0.103	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: I-105 EASTBOUND OFF WESTBOUND ON RAMP

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	275	0	0.000	N-S(1):	0.196
	TH	2.00	459	3,200	0.229 *	N-S(2):	0.424 *
	LT	0.00	0	0	0.000	E-W(1):	0.068
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.351 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.775
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	628	3,200	0.196		
	LT	1.00	312	1,600	0.195 *		
Eastbound	RT	1.00	421	1,600	0.068	ICU:	0.875
	TH	0.00	0	0	0.000		
	LT	2.00	1,012	2,880	0.351 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	206	0	0.000	N-S(1):	0.228
	TH	2.00	542	3,200	0.234 *	N-S(2):	0.402 *
	LT	0.00	0	0	0.000	E-W(1):	0.324
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.335 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.737
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	731	3,200	0.228		
	LT	1.00	268	1,600	0.168 *		
Eastbound	RT	1.00	787	1,600	0.324	ICU:	0.837
	TH	0.00	0	0	0.000		
	LT	2.00	966	2,880	0.335 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	165	1,600	0.049	N-S(1):	0.382 *
	TH	2.00	358	3,200	0.112	N-S(2):	0.260
	LT	1.00	70	1,600	0.044 *	E-W(1):	0.342
Westbound	RT	0.00	35	0	0.000	E-W(2):	0.392 *
	TH	3.00	1,588	4,800	0.338 *		
	LT	1.00	237	1,600	0.148	V/C:	0.774
Northbound	RT	1.00	778	1,600	0.338 *	Lost Time:	0.100
	TH	2.00	871	3,200	0.272		
	LT	1.00	236	1,600	0.148		
Eastbound	RT	1.00	248	1,600	0.008	ICU:	0.874
	TH	3.00	931	4,800	0.194		
	LT	1.00	87	1,600	0.054 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	130	1,600	0.000	N-S(1):	0.318 *
	TH	2.00	459	3,200	0.143	N-S(2):	0.285
	LT	1.00	110	1,600	0.069 *	E-W(1):	0.413 *
Westbound	RT	0.00	57	0	0.000	E-W(2):	0.410
	TH	3.00	1,465	4,800	0.317		
	LT	1.00	221	1,600	0.138 *	V/C:	0.731
Northbound	RT	1.00	620	1,600	0.249 *	Lost Time:	0.100
	TH	2.00	735	3,200	0.230		
	LT	1.00	227	1,600	0.142		
Eastbound	RT	1.00	203	1,600	0.000	ICU:	0.831
	TH	3.00	1,319	4,800	0.275 *		
	LT	1.00	148	1,600	0.093	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	280	1,600	0.049	N-S(1):	0.264 *
	TH	2.00	343	3,200	0.107	N-S(2):	0.207
	LT	1.00	113	1,600	0.071 *	E-W(1):	0.228
Westbound	RT	1.00	269	1,600	0.098	E-W(2):	0.446 *
	TH	2.00	1,025	3,200	0.320 *		
	LT	1.00	62	1,600	0.039	V/C:	0.710
Northbound	RT	1.00	60	1,600	0.000	Lost Time:	0.100
	TH	2.00	616	3,200	0.193 *		
	LT	1.00	160	1,600	0.100		
Eastbound	RT	1.00	91	1,600	0.000	ICU:	0.810
	TH	2.00	604	3,200	0.189		
	LT	1.00	202	1,600	0.126 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	258	1,600	0.000	N-S(1):	0.298 *
	TH	2.00	473	3,200	0.148	N-S(2):	0.229
	LT	1.00	143	1,600	0.089 *	E-W(1):	0.274
Westbound	RT	1.00	206	1,600	0.039	E-W(2):	0.480 *
	TH	2.00	896	3,200	0.280 *		
	LT	1.00	58	1,600	0.036	V/C:	0.778
Northbound	RT	1.00	42	1,600	0.000	Lost Time:	0.100
	TH	2.00	668	3,200	0.209 *		
	LT	1.00	129	1,600	0.081		
Eastbound	RT	1.00	113	1,600	0.000	ICU:	0.878
	TH	2.00	763	3,200	0.238		
	LT	1.00	320	1,600	0.200 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 NORTHBOUND OFF-RAMP/I-105 WESTBOUND ON-RAMP
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.127
	TH	0.00	0	0	0.000 *	N-S(2):	0.234 *
	LT	0.00	0	0	0.000	E-W(1):	0.380 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.358
	TH	3.00	1,716	4,800	0.358		
	LT	2.00	350	2,880	0.122 *	V/C:	0.614
Northbound	RT	1.00	378	1,600	0.127	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	1.00	63	1,600	0.000	ICU:	0.714
	TH	2.00	825	3,200	0.258 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.268 *
	TH	0.00	0	0	0.000	N-S(2):	0.234
	LT	0.00	0	0	0.000 *	E-W(1):	0.527 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.300
	TH	3.00	1,438	4,800	0.300		
	LT	2.00	253	2,880	0.088 *	V/C:	0.795
Northbound	RT	1.00	556	1,600	0.268 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	1.00	375	1,600	0.234		
Eastbound	RT	1.00	54	1,600	0.000	ICU:	0.895
	TH	2.00	1,404	3,200	0.439 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FLATBUSH AVENUE/I-605 SOUTHBOUND OFF-RAMP
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.02	292	1,630	0.153	N-S(1):	0.209 *
	TH	0.01	2	11	0.179	N-S(2):	0.000
	LT	1.97	566	2,843	0.199 *	E-W(1):	0.448 *
Westbound	RT	1.00	26	1,600	0.000	E-W(2):	0.404
	TH	2.00	1,206	3,200	0.377		
	LT	1.00	13	1,600	0.008 *	V/C:	0.657
Northbound	RT	0.00	10	0	0.000	Lost Time:	0.100
	TH	1.00	0	1,600	0.010 *		
	LT	0.00	6	1,600	0.004		
Eastbound	RT	0.00	3	0	0.000	ICU:	0.757
	TH	2.00	1,404	3,200	0.440 *		
	LT	1.00	43	1,600	0.027	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	303	1,600	0.146	N-S(1):	0.280 *
	TH	0.03	12	50	0.238	N-S(2):	0.000
	LT	1.97	751	2,835	0.265 *	E-W(1):	0.504 *
Westbound	RT	1.00	97	1,600	0.000	E-W(2):	0.357
	TH	2.00	1,006	3,200	0.314		
	LT	1.00	11	1,600	0.007 *	V/C:	0.784
Northbound	RT	0.00	15	0	0.000	Lost Time:	0.100
	TH	1.00	2	1,600	0.015 *		
	LT	0.00	7	1,600	0.004		
Eastbound	RT	0.00	16	0	0.000	ICU:	0.884
	TH	2.00	1,573	3,200	0.497 *		
	LT	1.00	69	1,600	0.043	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: HOXIE AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	49	1,600	0.006	N-S(1):	0.238 *
	TH	0.92	36	1,477	0.024	N-S(2):	0.000
	LT	1.08	42	1,551	0.027 *	E-W(1):	0.441 *
Westbound	RT	0.00	28	0	0.000	E-W(2):	0.388
	TH	3.00	1,720	4,800	0.364		
	LT	1.00	251	1,600	0.157 *	V/C:	0.679
Northbound	RT	1.56	476	2,503	0.090	Lost Time:	0.100
	TH	0.34	102	536	0.190		
	LT	1.10	335	1,585	0.211 *		
Eastbound	RT	0.00	388	0	0.000	ICU:	0.779
	TH	3.00	976	4,800	0.284 *		
	LT	1.00	39	1,600	0.024	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	253	1,600	0.031	N-S(1):	0.359 *
	TH	1.00	83	1,600	0.052 *	N-S(2):	0.000
	LT	1.00	72	1,600	0.045	E-W(1):	0.542 *
Westbound	RT	0.00	149	0	0.000	E-W(2):	0.456
	TH	3.00	1,427	4,800	0.328		
	LT	1.00	250	1,600	0.156 *	V/C:	0.901
Northbound	RT	1.04	461	1,668	0.127	Lost Time:	0.100
	TH	0.43	190	687	0.276		
	LT	1.53	676	2,201	0.307 *		
Eastbound	RT	0.00	582	0	0.000	ICU:	1.001
	TH	3.00	1,273	4,800	0.386 *		
	LT	1.00	204	1,600	0.128	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS/FLATBUSH AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.38	447	2,201	0.105	N-S(1):	0.221 *
	TH	0.62	1	999	0.203 *	N-S(2):	0.000
	LT	0.00	202	1,600	0.126	E-W(1):	0.273
Westbound	RT	1.47	774	2,360	0.242	E-W(2):	0.463 *
	TH	2.53	1,325	4,040	0.328 *		
	LT	1.00	4	1,600	0.003	V/C:	0.684
Northbound	RT	0.00	18	0	0.000	Lost Time:	0.100
	TH	1.00	5	1,600	0.018 *		
	LT	0.00	5	1,600	0.003		
Eastbound	RT	0.00	2	0	0.000	ICU:	0.784
	TH	3.00	1,295	4,800	0.270		
	LT	1.00	216	1,600	0.135 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.08	191	1,727	0.000	N-S(1):	0.129 *
	TH	0.92	0	1,473	0.111 *	N-S(2):	0.000
	LT	0.00	163	1,600	0.102	E-W(1):	0.447
Westbound	RT	1.51	882	2,417	0.297	E-W(2):	0.604 *
	TH	2.49	1,453	3,983	0.365 *		
	LT	1.00	33	1,600	0.021	V/C:	0.733
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	1.00	8	1,600	0.018 *		
	LT	0.00	4	1,600	0.003		
Eastbound	RT	0.00	17	0	0.000	ICU:	0.833
	TH	3.00	2,028	4,800	0.426		
	LT	1.00	382	1,600	0.239 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 NORTHBOUND RAMPS/HOXIE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	620	1,600	0.254 *	N-S(1):	0.315 *
	TH	1.00	13	1,600	0.008	N-S(2):	0.000
	LT	2.00	176	2,880	0.061	E-W(1):	0.242
Westbound	RT	1.00	161	1,600	0.046	E-W(2):	0.496 *
	TH	2.00	1,110	3,200	0.347 *		
	LT	1.00	72	1,600	0.045	V/C:	0.811
Northbound	RT	0.00	97	1,600	0.061 *	Lost Time:	0.100
	TH	2.00	82	1,600	0.051		
	LT	1.00	38	1,600	0.024		
Eastbound	RT	0.00	66	0	0.000	ICU:	0.911
	TH	2.00	563	3,200	0.197		
	LT	2.00	428	2,880	0.149 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	529	1,600	0.159 *	N-S(1):	0.280 *
	TH	1.00	59	1,600	0.037	N-S(2):	0.000
	LT	2.00	185	2,880	0.064	E-W(1):	0.331
Westbound	RT	1.00	164	1,600	0.045	E-W(2):	0.528 *
	TH	2.00	1,077	3,200	0.337 *		
	LT	1.00	154	1,600	0.096	V/C:	0.808
Northbound	RT	0.00	170	0	0.000	Lost Time:	0.100
	TH	2.00	176	3,200	0.108		
	LT	1.00	194	1,600	0.121 *		
Eastbound	RT	0.00	251	0	0.000	ICU:	0.908
	TH	2.00	501	3,200	0.235		
	LT	2.00	549	2,880	0.191 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	487	3,200	0.152 *	N-S(1):	0.079
	TH	0.00	0	0	0.000	N-S(2):	0.152 *
	LT	1.00	127	1,600	0.079	E-W(1):	0.592 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.518
	TH	2.00	1,657	3,200	0.518		
	LT	1.00	321	1,600	0.201 *	V/C:	0.744
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	1.00	626	1,600	0.391 *	ICU:	0.844
	TH	2.00	1,197	3,200	0.374		
	LT	0.00	0	0	0.000	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	403	3,200	0.126	N-S(1):	0.173 *
	TH	0.00	0	0	0.000	N-S(2):	0.126
	LT	1.00	277	1,600	0.173 *	E-W(1):	0.704 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.567
	TH	2.00	1,815	3,200	0.567		
	LT	1.00	177	1,600	0.111 *	V/C:	0.877
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	903	1,600	0.564	ICU:	0.977
	TH	2.00	1,899	3,200	0.593 *		
	LT	0.00	0	0	0.000	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DONOVAN STREET/ROSE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.319 *
	TH	3.00	793	4,800	0.171	N-S(2):	0.313
	LT	1.00	220	1,600	0.138 *	E-W(1):	0.186 *
Westbound	RT	0.00	44	0	0.000	E-W(2):	0.101
	TH	1.00	94	1,600	0.089		
	LT	0.00	4	1,600	0.003 *	V/C:	0.505
Northbound	RT	0.00	9	0	0.000	Lost Time:	0.100
	TH	3.00	860	4,800	0.181 *		
	LT	1.00	227	1,600	0.142		
Eastbound	RT	0.00	124	0	0.000	ICU:	0.605
	TH	1.00	149	1,600	0.183 *		
	LT	0.00	19	1,600	0.012	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	17	0	0.000	N-S(1):	0.331 *
	TH	3.00	1,032	4,800	0.219	N-S(2):	0.310
	LT	1.00	154	1,600	0.096 *	E-W(1):	0.050 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.029
	TH	1.00	16	1,600	0.023		
	LT	0.00	1	1,600	0.001 *	V/C:	0.381
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	3.00	1,110	4,800	0.235 *		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	34	0	0.000	ICU:	0.481
	TH	1.00	35	1,600	0.049 *		
	LT	0.00	10	1,600	0.006	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CLETA STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	50	0	0.000	N-S(1):	0.155
	TH	3.00	673	4,800	0.151 *	N-S(2):	0.304 *
	LT	1.00	4	1,600	0.003	E-W(1):	0.004
Westbound	RT	0.00	12	0	0.000	E-W(2):	0.065 *
	TH	1.00	7	1,600	0.016 *		
	LT	0.00	7	1,600	0.004	V/C:	0.369
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	3.00	726	4,800	0.152		
	LT	1.00	244	1,600	0.153 *		
Eastbound	RT	1.00	135	1,600	0.000	ICU:	0.469
	TH	0.00	0	0	0.000		
	LT	1.00	79	1,600	0.049 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	48	0	0.000	N-S(1):	0.222
	TH	3.00	908	4,800	0.199 *	N-S(2):	0.259 *
	LT	1.00	14	1,600	0.009	E-W(1):	0.034
Westbound	RT	0.00	1	0	0.000	E-W(2):	0.072 *
	TH	1.00	3	1,600	0.004 *		
	LT	0.00	3	1,600	0.002	V/C:	0.331
Northbound	RT	0.00	5	0	0.000	Lost Time:	0.100
	TH	3.00	1,018	4,800	0.213		
	LT	1.00	96	1,600	0.060 *		
Eastbound	RT	1.00	147	1,600	0.032	ICU:	0.431
	TH	0.00	0	0	0.000		
	LT	1.00	109	1,600	0.068 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	126	0	0.000	N-S(1):	0.287 *
	TH	2.00	256	3,200	0.119	N-S(2):	0.167
	LT	1.00	282	1,600	0.176 *	E-W(1):	0.312
Westbound	RT	0.00	179	0	0.000	E-W(2):	0.380 *
	TH	3.00	1,207	4,800	0.289 *		
	LT	1.00	98	1,600	0.061	V/C:	0.667
Northbound	RT	0.00	33	0	0.000	Lost Time:	0.100
	TH	2.00	321	3,200	0.111 *		
	LT	1.00	77	1,600	0.048		
Eastbound	RT	0.00	26	0	0.000	ICU:	0.767
	TH	3.00	1,181	4,800	0.251		
	LT	1.00	146	1,600	0.091 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	144	0	0.000	N-S(1):	0.223 *
	TH	2.00	299	3,200	0.138	N-S(2):	0.166
	LT	1.00	214	1,600	0.134 *	E-W(1):	0.380
Westbound	RT	0.00	137	0	0.000	E-W(2):	0.447 *
	TH	3.00	1,461	4,800	0.333 *		
	LT	1.00	103	1,600	0.064	V/C:	0.670
Northbound	RT	0.00	38	0	0.000	Lost Time:	0.100
	TH	2.00	246	3,200	0.089 *		
	LT	1.00	44	1,600	0.028		
Eastbound	RT	0.00	38	0	0.000	ICU:	0.770
	TH	3.00	1,481	4,800	0.316		
	LT	1.00	182	1,600	0.114 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	55	0	0.000	N-S(1):	0.212
	TH	2.00	508	3,200	0.176 *	N-S(2):	0.227 *
	LT	1.00	119	1,600	0.074	E-W(1):	0.255
Westbound	RT	1.00	196	1,600	0.048	E-W(2):	0.294 *
	TH	3.00	985	4,800	0.205 *		
	LT	1.00	160	1,600	0.100	V/C:	0.521
Northbound	RT	0.00	66	0	0.000	Lost Time:	0.100
	TH	2.00	375	3,200	0.138		
	LT	1.00	82	1,600	0.051 *		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.621
	TH	3.00	675	4,800	0.155		
	LT	1.00	142	1,600	0.089 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.345 *
	TH	2.00	554	3,200	0.193	N-S(2):	0.284
	LT	1.00	180	1,600	0.113 *	E-W(1):	0.363
Westbound	RT	1.00	198	1,600	0.011	E-W(2):	0.364 *
	TH	3.00	1,319	4,800	0.275 *		
	LT	1.00	119	1,600	0.074	V/C:	0.709
Northbound	RT	0.00	117	0	0.000	Lost Time:	0.100
	TH	2.00	626	3,200	0.232 *		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.809
	TH	3.00	1,316	4,800	0.289		
	LT	1.00	142	1,600	0.089 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BROOKSHIRE AVENUE
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.147
	TH	2.00	232	3,200	0.092 *	N-S(2):	0.160 *
	LT	1.00	40	1,600	0.025	E-W(1):	0.398 *
Westbound	RT	0.00	64	0	0.000	E-W(2):	0.319
	TH	3.00	1,247	4,800	0.273		
	LT	1.00	161	1,600	0.101 *	V/C:	0.558
Northbound	RT	0.00	73	0	0.000	Lost Time:	0.100
	TH	2.00	317	3,200	0.122		
	LT	1.00	109	1,600	0.068 *		
Eastbound	RT	0.00	109	0	0.000	ICU:	0.658
	TH	3.00	1,318	4,800	0.297 *		
	LT	1.00	73	1,600	0.046	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	59	0	0.000	N-S(1):	0.172
	TH	2.00	263	3,200	0.101 *	N-S(2):	0.210 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.469 *
Westbound	RT	0.00	89	0	0.000	E-W(2):	0.318
	TH	3.00	1,229	4,800	0.275		
	LT	1.00	186	1,600	0.116 *	V/C:	0.679
Northbound	RT	0.00	143	0	0.000	Lost Time:	0.100
	TH	2.00	319	3,200	0.144		
	LT	1.00	174	1,600	0.109 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.779
	TH	3.00	1,578	4,800	0.353 *		
	LT	1.00	69	1,600	0.043	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	335	1,600	0.209 *	N-S(1):	0.223 *
	TH	2.00	78	1,600	0.049	N-S(2):	0.000
	LT	1.00	317	1,600	0.198	E-W(1):	0.207
Westbound	RT	0.00	297	0	0.000	E-W(2):	0.451 *
	TH	3.00	941	4,800	0.258 *		
	LT	1.00	46	1,600	0.029	V/C:	0.674
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	32	3,200	0.014 *		
	LT	1.00	20	1,600	0.013		
Eastbound	RT	1.00	97	1,600	0.048	ICU:	0.774
	TH	3.00	854	4,800	0.178		
	LT	1.00	308	1,600	0.193 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	249	1,600	0.156	N-S(1):	0.211 *
	TH	2.00	21	1,600	0.013	N-S(2):	0.000
	LT	1.00	280	1,600	0.175 *	E-W(1):	0.281
Westbound	RT	0.00	265	0	0.000	E-W(2):	0.465 *
	TH	3.00	977	4,800	0.259 *		
	LT	1.00	12	1,600	0.008	V/C:	0.676
Northbound	RT	0.00	35	0	0.000	Lost Time:	0.100
	TH	1.56	45	2,494	0.032		
	LT	1.44	74	2,076	0.036 *		
Eastbound	RT	1.00	19	1,600	0.000	ICU:	0.776
	TH	3.00	1,308	4,800	0.273		
	LT	1.00	329	1,600	0.206 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	102	0	0.000	N-S(1):	0.299
	TH	2.00	560	3,200	0.207 *	N-S(2):	0.303 *
	LT	1.00	114	1,600	0.071	E-W(1):	0.346 *
Westbound	RT	1.00	255	1,600	0.088	E-W(2):	0.335
	TH	2.00	833	3,200	0.260		
	LT	1.00	275	1,600	0.172 *	V/C:	0.649
Northbound	RT	0.00	199	0	0.000	Lost Time:	0.100
	TH	2.00	532	3,200	0.228		
	LT	1.00	154	1,600	0.096 *		
Eastbound	RT	1.00	191	1,600	0.023	ICU:	0.749
	TH	2.00	556	3,200	0.174 *		
	LT	1.00	120	1,600	0.075	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000	N-S(1):	0.324 *
	TH	2.00	369	3,200	0.141	N-S(2):	0.207
	LT	1.00	190	1,600	0.119 *	E-W(1):	0.327 *
Westbound	RT	1.00	196	1,600	0.004	E-W(2):	0.231
	TH	2.00	609	3,200	0.190		
	LT	1.00	243	1,600	0.152 *	V/C:	0.651
Northbound	RT	0.00	203	0	0.000	Lost Time:	0.100
	TH	2.00	454	3,200	0.205 *		
	LT	1.00	106	1,600	0.066		
Eastbound	RT	1.00	146	1,600	0.025	ICU:	0.751
	TH	2.00	561	3,200	0.175 *		
	LT	1.00	65	1,600	0.041	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL ROAD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	202	0	0.000	N-S(1):	0.251
	TH	2.00	397	3,200	0.187 *	N-S(2):	0.263 *
	LT	1.00	114	1,600	0.071	E-W(1):	0.298
Westbound	RT	1.00	176	1,600	0.039	E-W(2):	0.356 *
	TH	2.00	912	3,200	0.285 *		
	LT	1.00	115	1,600	0.072	V/C:	0.619
Northbound	RT	0.00	136	0	0.000	Lost Time:	0.100
	TH	2.00	440	3,200	0.180		
	LT	1.00	122	1,600	0.076 *		
Eastbound	RT	1.00	50	1,600	0.000	ICU:	0.719
	TH	2.00	724	3,200	0.226		
	LT	1.00	113	1,600	0.071 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	192	0	0.000	N-S(1):	0.253
	TH	2.00	689	3,200	0.275 *	N-S(2):	0.359 *
	LT	1.00	160	1,600	0.100	E-W(1):	0.410
Westbound	RT	1.00	73	1,600	0.000	E-W(2):	0.511 *
	TH	2.00	1,216	3,200	0.380 *		
	LT	1.00	139	1,600	0.087	V/C:	0.870
Northbound	RT	0.00	104	0	0.000	Lost Time:	0.100
	TH	2.00	384	3,200	0.153		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	1.00	78	1,600	0.000	ICU:	0.970
	TH	2.00	1,034	3,200	0.323		
	LT	1.00	209	1,600	0.131 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: OLD RIVER SCHOOL - TECUM ROAD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	29	0	0.000	N-S(1):	0.281 *
	TH	2.00	108	3,200	0.056 *	N-S(2):	0.000
	LT	0.00	42	1,600	0.026	E-W(1):	0.478 *
Westbound	RT	0.00	36	0	0.000	E-W(2):	0.374
	TH	3.00	1,715	4,800	0.365		
	LT	1.00	319	1,600	0.199 *	V/C:	0.759
Northbound	RT	1.00	245	1,600	0.000	Lost Time:	0.100
	TH	0.20	65	320	0.203		
	LT	1.80	584	2,592	0.225 *		
Eastbound	RT	0.00	115	0	0.000	ICU:	0.859
	TH	3.00	1,225	4,800	0.279 *		
	LT	1.00	14	1,600	0.009	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.267 *
	TH	2.00	139	3,200	0.075 *	N-S(2):	0.000
	LT	0.00	68	1,600	0.043	E-W(1):	0.619 *
Westbound	RT	0.00	54	0	0.000	E-W(2):	0.345
	TH	3.00	1,508	4,800	0.325		
	LT	1.00	293	1,600	0.183 *	V/C:	0.886
Northbound	RT	1.00	269	1,600	0.000	Lost Time:	0.100
	TH	0.55	153	887	0.173		
	LT	1.45	399	2,082	0.192 *		
Eastbound	RT	0.00	327	0	0.000	ICU:	0.986
	TH	3.00	1,765	4,800	0.436 *		
	LT	1.00	32	1,600	0.020	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	176	1,600	0.048 *	N-S(1):	0.015
	TH	0.00	0	0	0.000	N-S(2):	0.048 *
	LT	0.00	0	0	0.000	E-W(1):	0.236
Westbound	RT	0.00	191	0	0.000	E-W(2):	0.344 *
	TH	3.00	1,161	4,800	0.282 *		
	LT	0.00	0	0	0.000	V/C:	0.392
Northbound	RT	1.00	24	1,600	0.015	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	1.00	19	1,600	0.012	ICU:	0.492
	TH	3.00	1,132	4,800	0.236		
	LT	1.00	99	1,600	0.062 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	141	1,600	0.005	N-S(1):	0.041 *
	TH	0.00	0	0	0.000	N-S(2):	0.005
	LT	0.00	0	0	0.000 *	E-W(1):	0.318
Westbound	RT	0.00	252	0	0.000	E-W(2):	0.375 *
	TH	3.00	1,149	4,800	0.292 *		
	LT	0.00	0	0	0.000	V/C:	0.416
Northbound	RT	1.00	65	1,600	0.041 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	7	1,600	0.004	ICU:	0.516
	TH	3.00	1,528	4,800	0.318		
	LT	1.00	133	1,600	0.083 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	43	0	0.000	N-S(1):	0.268 *
	TH	1.00	166	1,600	0.211	N-S(2):	0.258
	LT	0.00	128	1,600	0.080 *	E-W(1):	0.218 *
Westbound	RT	0.00	75	0	0.000	E-W(2):	0.218 *
	TH	2.00	582	3,200	0.205 *		
	LT	1.00	40	1,600	0.025 *	V/C:	0.486
Northbound	RT	0.00	54	0	0.000	Lost Time:	0.100
	TH	1.00	171	1,600	0.188 *		
	LT	0.00	75	1,600	0.047		
Eastbound	RT	0.00	40	0	0.000	ICU:	0.586
	TH	2.00	579	3,200	0.193 *		
	LT	1.00	21	1,600	0.013 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.315 *
	TH	1.00	149	1,600	0.209	N-S(2):	0.247
	LT	0.00	95	1,600	0.059 *	E-W(1):	0.276
Westbound	RT	0.00	99	0	0.000	E-W(2):	0.288 *
	TH	2.00	714	3,200	0.254 *		
	LT	1.00	65	1,600	0.041	V/C:	0.603
Northbound	RT	0.00	112	0	0.000	Lost Time:	0.100
	TH	1.00	237	1,600	0.256 *		
	LT	0.00	61	1,600	0.038		
Eastbound	RT	0.00	71	0	0.000	ICU:	0.703
	TH	2.00	680	3,200	0.235		
	LT	1.00	55	1,600	0.034 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: RIVES AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	63	0	0.000	N-S(1):	0.308 *
	TH	1.00	206	1,600	0.168	N-S(2):	0.269
	LT	1.00	114	1,600	0.071 *	E-W(1):	0.281 *
Westbound	RT	0.00	38	0	0.000	E-W(2):	0.271
	TH	3.00	1,105	4,800	0.238		
	LT	1.00	99	1,600	0.062 *	V/C:	0.589
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	1.00	266	1,600	0.237 *		
	LT	1.00	161	1,600	0.101		
Eastbound	RT	1.00	49	1,600	0.000	ICU:	0.689
	TH	3.00	1,050	4,800	0.219 *		
	LT	1.00	53	1,600	0.033	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	52	0	0.000	N-S(1):	0.253
	TH	1.00	251	1,600	0.189 *	N-S(2):	0.266 *
	LT	1.00	75	1,600	0.047	E-W(1):	0.377 *
Westbound	RT	0.00	74	0	0.000	E-W(2):	0.336
	TH	3.00	1,244	4,800	0.275		
	LT	1.00	167	1,600	0.104 *	V/C:	0.643
Northbound	RT	0.00	86	0	0.000	Lost Time:	0.100
	TH	1.00	244	1,600	0.206		
	LT	1.00	123	1,600	0.077 *		
Eastbound	RT	1.00	51	1,600	0.000	ICU:	0.743
	TH	3.00	1,308	4,800	0.273 *		
	LT	1.00	97	1,600	0.061	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	53	1,600	0.000	N-S(1):	0.338
	TH	2.00	929	3,200	0.290 *	N-S(2):	0.380 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.171
Westbound	RT	1.00	174	1,600	0.026	E-W(2):	0.184 *
	TH	2.00	458	3,200	0.143 *		
	LT	1.00	154	1,600	0.096	V/C:	0.564
Northbound	RT	1.00	76	1,600	0.000	Lost Time:	0.100
	TH	2.00	815	3,200	0.255		
	LT	1.00	144	1,600	0.090 *		
Eastbound	RT	1.00	55	1,600	0.000	ICU:	0.664
	TH	2.00	240	3,200	0.075		
	LT	1.00	66	1,600	0.041 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	65	1,600	0.000	N-S(1):	0.476 *
	TH	2.00	810	3,200	0.253	N-S(2):	0.340
	LT	1.00	161	1,600	0.101 *	E-W(1):	0.186 *
Westbound	RT	1.00	141	1,600	0.000	E-W(2):	0.137
	TH	2.00	279	3,200	0.087		
	LT	1.00	133	1,600	0.083 *	V/C:	0.662
Northbound	RT	1.00	116	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,200	3,200	0.375 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	1.00	129	1,600	0.000	ICU:	0.762
	TH	2.00	329	3,200	0.103 *		
	LT	1.00	80	1,600	0.050	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	225	1,600	0.068	N-S(1):	0.369 *
	TH	2.00	844	3,200	0.264 *	N-S(2):	0.369 *
	LT	1.00	221	1,600	0.138 *	E-W(1):	0.324
Westbound	RT	0.00	130	0	0.000	E-W(2):	0.348 *
	TH	3.00	1,151	4,800	0.267 *		
	LT	1.00	146	1,600	0.091	V/C:	0.717
Northbound	RT	1.00	90	1,600	0.000	Lost Time:	0.100
	TH	2.00	739	3,200	0.231 *		
	LT	2.00	302	2,880	0.105 *		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.817
	TH	3.00	989	4,800	0.233		
	LT	2.00	233	2,880	0.081 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	225	1,600	0.047	N-S(1):	0.445 *
	TH	2.00	785	3,200	0.245	N-S(2):	0.331
	LT	1.00	232	1,600	0.145 *	E-W(1):	0.424 *
Westbound	RT	0.00	224	0	0.000	E-W(2):	0.369
	TH	3.00	1,048	4,800	0.265		
	LT	1.00	161	1,600	0.101 *	V/C:	0.869
Northbound	RT	1.00	112	1,600	0.000	Lost Time:	0.100
	TH	2.00	960	3,200	0.300 *		
	LT	2.00	249	2,880	0.086		
Eastbound	RT	0.00	194	0	0.000	ICU:	0.969
	TH	3.00	1,355	4,800	0.323 *		
	LT	2.00	300	2,880	0.104	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.419 *
	TH	2.00	1,092	3,200	0.341	N-S(2):	0.341
	LT	1.00	56	1,600	0.035 *	E-W(1):	0.133 *
Westbound	RT	0.47	101	759	0.059	E-W(2):	0.059
	TH	0.00	0	0	0.000		
	LT	0.53	112	841	0.133 *	V/C:	0.552
Northbound	RT	0.00	73	0	0.000	Lost Time:	0.100
	TH	2.00	1,155	3,200	0.384 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.652
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.495 *
	TH	2.00	1,059	3,200	0.331	N-S(2):	0.331
	LT	1.00	116	1,600	0.073 *	E-W(1):	0.106 *
Westbound	RT	0.64	108	1,016	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	0.36	62	584	0.106 *	V/C:	0.601
Northbound	RT	0.00	76	0	0.000	Lost Time:	0.100
	TH	2.00	1,275	3,200	0.422 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.701
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	161	0	0.000	N-S(1):	0.403 *
	TH	2.00	861	3,200	0.319	N-S(2):	0.392
	LT	1.00	146	1,600	0.091 *	E-W(1):	0.315
Westbound	RT	0.00	178	0	0.000	E-W(2):	0.351 *
	TH	2.00	549	3,200	0.227 *		
	LT	1.00	138	1,600	0.086	V/C:	0.754
Northbound	RT	0.00	81	0	0.000	Lost Time:	0.100
	TH	2.00	917	3,200	0.312 *		
	LT	1.00	117	1,600	0.073		
Eastbound	RT	0.00	97	0	0.000	ICU:	0.854
	TH	2.00	637	3,200	0.229		
	LT	1.00	199	1,600	0.124 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	137	0	0.000	N-S(1):	0.464
	TH	2.00	1,155	3,200	0.404 *	N-S(2):	0.488 *
	LT	1.00	197	1,600	0.123	E-W(1):	0.351 *
Westbound	RT	0.00	97	0	0.000	E-W(2):	0.334
	TH	2.00	781	3,200	0.274		
	LT	1.00	148	1,600	0.093 *	V/C:	0.839
Northbound	RT	0.00	115	0	0.000	Lost Time:	0.100
	TH	2.00	975	3,200	0.341		
	LT	1.00	135	1,600	0.084 *		
Eastbound	RT	0.00	68	0	0.000	ICU:	0.939
	TH	2.00	759	3,200	0.258 *		
	LT	1.00	96	1,600	0.060	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	175	1,600	0.000	N-S(1):	0.389
	TH	2.00	991	3,200	0.310 *	N-S(2):	0.403 *
	LT	1.00	131	1,600	0.082	E-W(1):	0.327
Westbound	RT	0.00	181	0	0.000	E-W(2):	0.387 *
	TH	3.00	989	4,800	0.244 *		
	LT	1.00	131	1,600	0.082	V/C:	0.790
Northbound	RT	1.00	104	1,600	0.000	Lost Time:	0.100
	TH	2.00	982	3,200	0.307		
	LT	1.00	148	1,600	0.093 *		
Eastbound	RT	1.00	147	1,600	0.000	ICU:	0.890
	TH	2.00	784	3,200	0.245		
	LT	1.00	228	1,600	0.143 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	223	1,600	0.000	N-S(1):	0.416 *
	TH	2.00	932	3,200	0.291	N-S(2):	0.378
	LT	1.00	195	1,600	0.122 *	E-W(1):	0.498 *
Westbound	RT	0.00	150	0	0.000	E-W(2):	0.453
	TH	3.00	1,193	4,800	0.280		
	LT	1.00	210	1,600	0.131 *	V/C:	0.914
Northbound	RT	1.00	158	1,600	0.000	Lost Time:	0.100
	TH	2.00	941	3,200	0.294 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	1.00	144	1,600	0.003	ICU:	1.014
	TH	2.00	1,174	3,200	0.367 *		
	LT	1.00	277	1,600	0.173	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	425	1,600	0.078	N-S(1):	0.301
	TH	2.00	738	3,200	0.231 *	N-S(2):	0.332 *
	LT	2.00	153	2,880	0.053	E-W(1):	0.386
Westbound	RT	0.00	115	0	0.000	E-W(2):	0.511 *
	TH	3.00	1,437	4,800	0.323 *		
	LT	1.00	133	1,600	0.083	V/C:	0.843
Northbound	RT	1.00	102	1,600	0.000	Lost Time:	0.100
	TH	2.00	792	3,200	0.248		
	LT	2.00	292	2,880	0.101 *		
Eastbound	RT	0.00	289	0	0.000	ICU:	0.943
	TH	3.00	1,163	4,800	0.303		
	LT	1.00	300	1,600	0.188 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	193	1,600	0.000	N-S(1):	0.391
	TH	2.00	1,001	3,200	0.313 *	N-S(2):	0.414 *
	LT	2.00	305	2,880	0.106	E-W(1):	0.525
Westbound	RT	0.00	52	0	0.000	E-W(2):	0.559 *
	TH	3.00	1,421	4,800	0.307 *		
	LT	1.00	243	1,600	0.152	V/C:	0.973
Northbound	RT	1.00	110	1,600	0.000	Lost Time:	0.100
	TH	2.00	913	3,200	0.285		
	LT	2.00	292	2,880	0.101 *		
Eastbound	RT	0.00	317	0	0.000	ICU:	1.073
	TH	3.00	1,475	4,800	0.373		
	LT	1.00	403	1,600	0.252 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-5 SOUTHBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.675 *
	TH	2.00	1,230	3,200	0.384	N-S(2):	0.384
	LT	1.00	187	1,600	0.117 *	E-W(1):	0.121 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.038
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.796
Northbound	RT	1.00	529	1,600	0.331	Lost Time:	0.100
	TH	2.00	1,786	3,200	0.558 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	194	1,600	0.121 *	ICU:	0.896
	TH	0.00	0	0	0.000		
	LT	1.00	61	1,600	0.038	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.691 *
	TH	2.00	2,048	3,200	0.640	N-S(2):	0.640
	LT	1.00	290	1,600	0.181 *	E-W(1):	0.308 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.076
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.999
Northbound	RT	1.00	266	1,600	0.166	Lost Time:	0.100
	TH	2.00	1,632	3,200	0.510 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	492	1,600	0.308 *	ICU:	1.099
	TH	0.00	0	0	0.000		
	LT	1.00	122	1,600	0.076	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: I-5 NORTHBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.621 *
	TH	2.00	1,355	3,200	0.423	N-S(2):	0.423
	LT	1.00	294	1,600	0.184 *	E-W(1):	0.039 *
Westbound	RT	1.00	44	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	62	1,600	0.039 *	V/C:	0.660
Northbound	RT	1.00	761	1,600	0.437 *	Lost Time:	0.100
	TH	2.00	1,152	3,200	0.360		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.760
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.574 *
	TH	2.00	1,744	3,200	0.545	N-S(2):	0.545
	LT	1.00	143	1,600	0.089 *	E-W(1):	0.363 *
Westbound	RT	1.00	222	1,600	0.049	E-W(2):	0.049
	TH	0.00	0	0	0.000		
	LT	1.00	581	1,600	0.363 *	V/C:	0.937
Northbound	RT	1.00	282	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,551	3,200	0.485 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.037
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: PARAMOUNT BOULEVARD
East/West Street: TELEGRAPH ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.263
	TH	2.00	843	3,200	0.281 *	N-S(2):	0.369 *
	LT	1.00	135	1,600	0.084	E-W(1):	0.368 *
Westbound	RT	0.00	127	0	0.000	E-W(2):	0.276
	TH	3.00	1,107	4,800	0.257		
	LT	1.00	345	1,600	0.216 *	V/C:	0.737
Northbound	RT	1.00	182	1,600	0.000	Lost Time:	0.100
	TH	2.00	572	3,200	0.179		
	LT	1.00	141	1,600	0.088 *		
Eastbound	RT	0.00	243	1,600	0.152 *	ICU:	0.837
	TH	3.00	478	3,200	0.149		
	LT	1.00	30	1,600	0.019	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	46	0	0.000	N-S(1):	0.345
	TH	2.00	971	3,200	0.318 *	N-S(2):	0.393 *
	LT	1.00	126	1,600	0.079	E-W(1):	0.361 *
Westbound	RT	0.00	106	0	0.000	E-W(2):	0.162
	TH	3.00	478	4,800	0.122		
	LT	1.00	161	1,600	0.101 *	V/C:	0.754
Northbound	RT	1.00	328	1,600	0.104	Lost Time:	0.100
	TH	2.00	851	3,200	0.266		
	LT	1.00	120	1,600	0.075 *		
Eastbound	RT	0.00	377	0	0.000	ICU:	0.854
	TH	3.00	872	4,800	0.260 *		
	LT	1.00	64	1,600	0.040	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.187 *
	TH	2.00	234	3,200	0.099	N-S(2):	0.178
	LT	1.00	120	1,600	0.075 *	E-W(1):	0.172
Westbound	RT	0.00	105	0	0.000	E-W(2):	0.231 *
	TH	2.00	527	3,200	0.198 *		
	LT	1.00	45	1,600	0.028	V/C:	0.418
Northbound	RT	0.00	30	0	0.000	Lost Time:	0.100
	TH	2.00	329	3,200	0.112 *		
	LT	1.00	126	1,600	0.079		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.518
	TH	2.00	397	3,200	0.144		
	LT	1.00	53	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	40	0	0.000	N-S(1):	0.234 *
	TH	2.00	312	3,200	0.110	N-S(2):	0.179
	LT	1.00	133	1,600	0.083 *	E-W(1):	0.222 *
Westbound	RT	0.00	102	0	0.000	E-W(2):	0.180
	TH	2.00	406	3,200	0.159		
	LT	1.00	49	1,600	0.031 *	V/C:	0.456
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	431	3,200	0.151 *		
	LT	1.00	110	1,600	0.069		
Eastbound	RT	0.00	72	0	0.000	ICU:	0.556
	TH	2.00	539	3,200	0.191 *		
	LT	1.00	34	1,600	0.021	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	134	0	0.000	N-S(1):	0.277 *
	TH	2.00	414	3,200	0.171	N-S(2):	0.239
	LT	1.00	102	1,600	0.064 *	E-W(1):	0.288
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.351 *
	TH	3.00	1,262	4,800	0.285 *		
	LT	1.00	54	1,600	0.034	V/C:	0.628
Northbound	RT	0.00	129	0	0.000	Lost Time:	0.100
	TH	2.00	554	3,200	0.213 *		
	LT	1.00	109	1,600	0.068		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.728
	TH	3.00	1,173	4,800	0.254		
	LT	1.00	106	1,600	0.066 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	80	0	0.000	N-S(1):	0.192 *
	TH	2.00	297	3,200	0.118	N-S(2):	0.172
	LT	1.00	54	1,600	0.034 *	E-W(1):	0.329 *
Westbound	RT	0.00	148	0	0.000	E-W(2):	0.327
	TH	3.00	1,155	4,800	0.271		
	LT	1.00	84	1,600	0.053 *	V/C:	0.521
Northbound	RT	0.00	95	0	0.000	Lost Time:	0.100
	TH	2.00	410	3,200	0.158 *		
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.621
	TH	3.00	1,259	4,800	0.276 *		
	LT	1.00	89	1,600	0.056	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.196 *
	TH	2.00	402	3,200	0.143	N-S(2):	0.160
	LT	1.00	45	1,600	0.028 *	E-W(1):	0.125
Westbound	RT	1.00	52	1,600	0.004	E-W(2):	0.126 *
	TH	1.00	116	1,600	0.089 *		
	LT	0.00	26	1,600	0.016	V/C:	0.322
Northbound	RT	0.00	21	0	0.000	Lost Time:	0.100
	TH	2.00	516	3,200	0.168 *		
	LT	1.00	27	1,600	0.017		
Eastbound	RT	1.00	49	1,600	0.014	ICU:	0.422
	TH	1.00	116	1,600	0.109		
	LT	0.00	59	1,600	0.037 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.191
	TH	2.00	575	3,200	0.200 *	N-S(2):	0.231 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.128
Westbound	RT	1.00	39	1,600	0.000	E-W(2):	0.137 *
	TH	1.00	140	1,600	0.106 *		
	LT	0.00	29	1,600	0.018	V/C:	0.368
Northbound	RT	0.00	35	0	0.000	Lost Time:	0.100
	TH	2.00	486	3,200	0.163		
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	1.00	49	1,600	0.000	ICU:	0.468
	TH	1.00	127	1,600	0.110		
	LT	0.00	49	1,600	0.031 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.246 *
	TH	2.00	374	3,200	0.153	N-S(2):	0.212
	LT	1.00	125	1,600	0.078 *	E-W(1):	0.250 *
Westbound	RT	0.00	115	0	0.000	E-W(2):	0.250 *
	TH	2.00	484	3,200	0.187 *		
	LT	1.00	75	1,600	0.047 *	V/C:	0.496
Northbound	RT	0.00	71	0	0.000	Lost Time:	0.100
	TH	2.00	465	3,200	0.168 *		
	LT	1.00	95	1,600	0.059		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.596
	TH	2.00	594	3,200	0.203 *		
	LT	1.00	101	1,600	0.063 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.261 *
	TH	2.00	494	3,200	0.191	N-S(2):	0.255
	LT	1.00	163	1,600	0.102 *	E-W(1):	0.361
Westbound	RT	0.00	134	0	0.000	E-W(2):	0.403 *
	TH	2.00	925	3,200	0.331 *		
	LT	1.00	118	1,600	0.074	V/C:	0.664
Northbound	RT	0.00	80	0	0.000	Lost Time:	0.100
	TH	2.00	430	3,200	0.159 *		
	LT	1.00	103	1,600	0.064		
Eastbound	RT	0.00	91	0	0.000	ICU:	0.764
	TH	2.00	827	3,200	0.287		
	LT	1.00	115	1,600	0.072 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	30	0	0.000	N-S(1):	0.200
	TH	2.00	278	3,200	0.096 *	N-S(2):	0.202 *
	LT	1.00	116	1,600	0.073	E-W(1):	0.297 *
Westbound	RT	0.00	64	0	0.000	E-W(2):	0.251
	TH	3.00	1,039	4,800	0.230		
	LT	1.00	88	1,600	0.055 *	V/C:	0.499
Northbound	RT	1.00	115	1,600	0.017	Lost Time:	0.100
	TH	1.00	203	1,600	0.127		
	LT	1.00	169	1,600	0.106 *		
Eastbound	RT	1.00	77	1,600	0.000	ICU:	0.599
	TH	2.00	775	3,200	0.242 *		
	LT	1.00	33	1,600	0.021	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	48	0	0.000	N-S(1):	0.285 *
	TH	2.00	380	3,200	0.134	N-S(2):	0.222
	LT	1.00	158	1,600	0.099 *	E-W(1):	0.424 *
Westbound	RT	0.00	87	0	0.000	E-W(2):	0.322
	TH	3.00	1,239	4,800	0.276		
	LT	1.00	108	1,600	0.068 *	V/C:	0.709
Northbound	RT	1.00	153	1,600	0.028	Lost Time:	0.100
	TH	1.00	297	1,600	0.186 *		
	LT	1.00	140	1,600	0.088		
Eastbound	RT	1.00	124	1,600	0.000	ICU:	0.809
	TH	2.00	1,140	3,200	0.356 *		
	LT	1.00	73	1,600	0.046	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: DOWNEY AVENUE
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	95	0	0.000	N-S(1):	0.167
	TH	2.00	305	3,200	0.125 *	N-S(2):	0.236 *
	LT	1.00	24	1,600	0.015	E-W(1):	0.340
Westbound	RT	0.00	49	0	0.000	E-W(2):	0.341 *
	TH	3.00	1,343	4,800	0.290 *		
	LT	1.00	83	1,600	0.052	V/C:	0.577
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	2.00	346	3,200	0.152		
	LT	1.00	177	1,600	0.111 *		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.677
	TH	3.00	1,310	4,800	0.288		
	LT	1.00	81	1,600	0.051 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.144
	TH	2.00	196	3,200	0.083 *	N-S(2):	0.168 *
	LT	1.00	29	1,600	0.018	E-W(1):	0.415 *
Westbound	RT	0.00	37	0	0.000	E-W(2):	0.323
	TH	3.00	1,349	4,800	0.289		
	LT	1.00	82	1,600	0.051 *	V/C:	0.583
Northbound	RT	0.00	126	0	0.000	Lost Time:	0.100
	TH	2.00	277	3,200	0.126		
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.00	127	0	0.000	ICU:	0.683
	TH	3.00	1,622	4,800	0.364 *		
	LT	1.00	55	1,600	0.034	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STUDEBAKER ROAD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.226 *
	TH	1.00	9	1,600	0.009 *	N-S(2):	0.000
	LT	1.00	4	1,600	0.003	E-W(1):	0.428
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.524 *
	TH	2.00	1,641	3,200	0.516 *		
	LT	2.00	241	2,880	0.084	V/C:	0.750
Northbound	RT	2.00	711	3,200	0.185	Lost Time:	0.100
	TH	0.05	17	87	0.196		
	LT	1.95	609	2,802	0.217 *		
Eastbound	RT	1.00	479	1,600	0.104	ICU:	0.850
	TH	2.00	1,101	3,200	0.344		
	LT	1.00	12	1,600	0.008 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	5	0	0.000	N-S(1):	0.245 *
	TH	1.00	14	1,600	0.012 *	N-S(2):	0.000
	LT	1.00	17	1,600	0.011	E-W(1):	0.450
Westbound	RT	0.00	5	0	0.000	E-W(2):	0.498 *
	TH	2.00	1,579	3,200	0.495 *		
	LT	2.00	245	2,880	0.085	V/C:	0.743
Northbound	RT	2.00	868	3,200	0.233 *	Lost Time:	0.100
	TH	0.08	16	131	0.122		
	LT	1.92	375	2,762	0.136		
Eastbound	RT	1.00	550	1,600	0.222	ICU:	0.843
	TH	2.00	1,169	3,200	0.365		
	LT	1.00	5	1,600	0.003 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS/LITTLE LAKE ROAD
East/West Street: FIRESTONE BOULEVARD
FLORENCE AVENUE
Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	214	0	0.000	N-S(1):	0.133
	TH	1.00	52	1,600	0.166 *	N-S(2):	0.190 *
	LT	2.00	382	2,880	0.133	E-W(1):	0.506 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.337
	TH	2.00	1,078	3,200	0.337		
	LT	2.00	750	2,880	0.260 *	V/C:	0.696
Northbound	RT	0.31	12	492	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.69	27	1,108	0.024 *		
Eastbound	RT	0.00	281	0	0.000	ICU:	0.796
	TH	3.00	898	4,800	0.246 *		
	LT	0.00	0	0	0.000	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	217	0	0.000	N-S(1):	0.167
	TH	1.00	161	1,600	0.236 *	N-S(2):	0.257 *
	LT	2.00	482	2,880	0.167	E-W(1):	0.594 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.299
	TH	2.00	957	3,200	0.299		
	LT	2.00	811	2,880	0.282 *	V/C:	0.851
Northbound	RT	0.41	14	659	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.59	20	941	0.021 *		
Eastbound	RT	0.00	336	0	0.000	ICU:	0.951
	TH	3.00	1,160	4,800	0.312 *		
	LT	0.00	0	0	0.000	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: STEWART AND GRAY ROAD-NEWVILLE AVENUE
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	16	0	0.000	N-S(1):	0.120 *
	TH	1.00	27	1,600	0.027	N-S(2):	0.027
	LT	1.00	102	1,600	0.064 *	E-W(1):	0.392 *
Westbound	RT	0.00	26	0	0.000	E-W(2):	0.354
	TH	3.00	1,675	4,800	0.354		
	LT	2.00	484	2,880	0.168 *	V/C:	0.512
Northbound	RT	2.00	662	3,200	0.056 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	24	0	0.000	ICU:	0.612
	TH	3.00	1,052	4,800	0.224 *		
	LT	0.00	0	0	0.000	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	34	0	0.000	N-S(1):	0.156 *
	TH	1.00	18	1,600	0.033	N-S(2):	0.033
	LT	1.00	101	1,600	0.063 *	E-W(1):	0.598 *
Westbound	RT	0.00	50	0	0.000	E-W(2):	0.320
	TH	3.00	1,488	4,800	0.320		
	LT	2.00	660	2,880	0.229 *	V/C:	0.754
Northbound	RT	2.00	959	3,200	0.093 *	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	24	0	0.000	ICU:	0.854
	TH	3.00	1,746	4,800	0.369 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	33	1,600	0.000	N-S(1):	0.315 *
	TH	2.00	449	3,200	0.140	N-S(2):	0.203
	LT	1.00	108	1,600	0.068 *	E-W(1):	0.090
Westbound	RT	0.00	34	0	0.000	E-W(2):	0.091 *
	TH	2.00	121	3,200	0.048 *		
	LT	1.00	40	1,600	0.025	V/C:	0.406
Northbound	RT	0.00	28	0	0.000	Lost Time:	0.100
	TH	2.00	763	3,200	0.247 *		
	LT	1.00	101	1,600	0.063		
Eastbound	RT	0.00	98	0	0.000	ICU:	0.506
	TH	2.00	110	3,200	0.065		
	LT	1.00	69	1,600	0.043 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	102	1,600	0.000	N-S(1):	0.269
	TH	2.00	690	3,200	0.216 *	N-S(2):	0.295 *
	LT	1.00	48	1,600	0.030	E-W(1):	0.160 *
Westbound	RT	0.00	19	0	0.000	E-W(2):	0.154
	TH	2.00	76	3,200	0.030		
	LT	1.00	49	1,600	0.031 *	V/C:	0.455
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	2.00	709	3,200	0.239		
	LT	1.00	126	1,600	0.079 *		
Eastbound	RT	0.00	206	1,600	0.129 *	ICU:	0.555
	TH	2.00	154	1,600	0.096		
	LT	1.00	199	1,600	0.124	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	158	1,600	0.012	N-S(1):	0.254
	TH	2.00	426	3,200	0.133 *	N-S(2):	0.260 *
	LT	1.00	166	1,600	0.104	E-W(1):	0.264
Westbound	RT	0.00	187	0	0.000	E-W(2):	0.394 *
	TH	3.00	1,287	4,800	0.307 *		
	LT	1.00	136	1,600	0.085	V/C:	0.654
Northbound	RT	1.00	299	1,600	0.102	Lost Time:	0.100
	TH	2.00	481	3,200	0.150		
	LT	1.00	203	1,600	0.127 *		
Eastbound	RT	0.00	116	0	0.000	ICU:	0.754
	TH	3.00	741	4,800	0.179		
	LT	1.00	139	1,600	0.087 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	205	1,600	0.024	N-S(1):	0.240 *
	TH	2.00	423	3,200	0.132	N-S(2):	0.220
	LT	1.00	188	1,600	0.118 *	E-W(1):	0.491 *
Westbound	RT	0.00	174	0	0.000	E-W(2):	0.306
	TH	3.00	797	4,800	0.202		
	LT	1.00	220	1,600	0.138 *	V/C:	0.731
Northbound	RT	1.00	323	1,600	0.064	Lost Time:	0.100
	TH	2.00	391	3,200	0.122 *		
	LT	1.00	140	1,600	0.088		
Eastbound	RT	0.00	144	0	0.000	ICU:	0.831
	TH	3.00	1,551	4,800	0.353 *		
	LT	1.00	166	1,600	0.104	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: WASHBURN ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	133	1,600	0.024	N-S(1):	0.226 *
	TH	2.00	593	3,200	0.185	N-S(2):	0.224
	LT	1.00	34	1,600	0.021 *	E-W(1):	0.135 *
Westbound	RT	1.00	21	1,600	0.000	E-W(2):	0.106
	TH	1.00	30	1,600	0.047		
	LT	0.00	45	1,600	0.028 *	V/C:	0.361
Northbound	RT	1.00	84	1,600	0.024	Lost Time:	0.100
	TH	2.00	657	3,200	0.205 *		
	LT	1.00	62	1,600	0.039		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.461
	TH	1.00	41	1,600	0.107 *		
	LT	1.00	94	1,600	0.059	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	79	1,600	0.008	N-S(1):	0.215
	TH	2.00	644	3,200	0.201 *	N-S(2):	0.244 *
	LT	1.00	37	1,600	0.023	E-W(1):	0.167 *
Westbound	RT	1.00	62	1,600	0.016	E-W(2):	0.141
	TH	1.00	41	1,600	0.099		
	LT	0.00	118	1,600	0.074 *	V/C:	0.411
Northbound	RT	1.00	67	1,600	0.000	Lost Time:	0.100
	TH	2.00	614	3,200	0.192		
	LT	1.00	68	1,600	0.043 *		
Eastbound	RT	0.00	108	0	0.000	ICU:	0.511
	TH	1.00	41	1,600	0.093 *		
	LT	1.00	67	1,600	0.042	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	117	1,600	0.031	N-S(1):	0.219 *
	TH	2.00	339	3,200	0.106	N-S(2):	0.198
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.209 *
Westbound	RT	0.00	82	0	0.000	E-W(2):	0.171
	TH	2.00	332	3,200	0.129		
	LT	1.00	101	1,600	0.063 *	V/C:	0.428
Northbound	RT	0.00	94	0	0.000	Lost Time:	0.100
	TH	2.00	537	3,200	0.197 *		
	LT	1.00	147	1,600	0.092		
Eastbound	RT	1.00	241	1,600	0.059	ICU:	0.528
	TH	2.00	466	3,200	0.146 *		
	LT	1.00	67	1,600	0.042	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	140	1,600	0.000	N-S(1):	0.196
	TH	2.00	399	3,200	0.125 *	N-S(2):	0.214 *
	LT	1.00	45	1,600	0.028	E-W(1):	0.244
Westbound	RT	0.00	104	0	0.000	E-W(2):	0.344 *
	TH	2.00	607	3,200	0.222 *		
	LT	1.00	149	1,600	0.093	V/C:	0.558
Northbound	RT	0.00	141	0	0.000	Lost Time:	0.100
	TH	2.00	396	3,200	0.168		
	LT	1.00	142	1,600	0.089 *		
Eastbound	RT	1.00	312	1,600	0.106	ICU:	0.658
	TH	2.00	484	3,200	0.151		
	LT	1.00	195	1,600	0.122 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: FIRESTONE BOULEVARD
East/West Street: WOODRUFF AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	2	0	0.000	N-S(1):	0.161
	TH	1.00	0	1,600	0.002 *	N-S(2):	0.180 *
	LT	0.00	1	1,600	0.001	E-W(1):	0.338 *
Westbound	RT	0.00	5	0	0.000	E-W(2):	0.277
	TH	3.00	1,317	4,800	0.275		
	LT	1.00	243	1,600	0.152 *	V/C:	0.518
Northbound	RT	1.00	293	1,600	0.031	Lost Time:	0.100
	TH	0.00	1	6	0.160		
	LT	2.00	512	2,874	0.178 *		
Eastbound	RT	1.00	376	1,600	0.075	ICU:	0.618
	TH	3.00	894	4,800	0.186 *		
	LT	1.00	3	1,600	0.002	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	57	0	0.000	N-S(1):	0.128
	TH	1.00	1	1,600	0.038 *	N-S(2):	0.178 *
	LT	0.00	3	1,600	0.002	E-W(1):	0.394 *
Westbound	RT	0.00	38	0	0.000	E-W(2):	0.235
	TH	3.00	997	4,800	0.216		
	LT	1.00	262	1,600	0.164 *	V/C:	0.572
Northbound	RT	1.00	259	1,600	0.000	Lost Time:	0.100
	TH	0.09	19	150	0.126		
	LT	1.91	385	2,745	0.140 *		
Eastbound	RT	1.00	382	1,600	0.113	ICU:	0.672
	TH	3.00	1,106	4,800	0.230 *		
	LT	1.00	31	1,600	0.019	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	215	1,600	0.076	N-S(1):	0.392
	TH	3.00	754	4,800	0.157 *	N-S(2):	0.401 *
	LT	1.00	240	1,600	0.150	E-W(1):	0.206
Westbound	RT	1.00	321	1,600	0.051	E-W(2):	0.324 *
	TH	3.00	1,243	4,800	0.259 *		
	LT	2.00	130	2,880	0.045	V/C:	0.725
Northbound	RT	1.00	157	1,600	0.058	Lost Time:	0.100
	TH	3.00	1,160	4,800	0.242		
	LT	1.00	390	1,600	0.244 *		
Eastbound	RT	1.00	188	1,600	0.000	ICU:	0.825
	TH	3.00	775	4,800	0.161		
	LT	2.00	188	2,880	0.065 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	262	1,600	0.062	N-S(1):	0.397
	TH	3.00	693	4,800	0.144 *	N-S(2):	0.425 *
	LT	1.00	255	1,600	0.159	E-W(1):	0.348 *
Westbound	RT	1.00	240	1,600	0.000	E-W(2):	0.344
	TH	3.00	1,107	4,800	0.231		
	LT	2.00	233	2,880	0.081 *	V/C:	0.773
Northbound	RT	1.00	276	1,600	0.100	Lost Time:	0.100
	TH	3.00	1,141	4,800	0.238		
	LT	1.00	449	1,600	0.281 *		
Eastbound	RT	1.00	219	1,600	0.000	ICU:	0.873
	TH	3.00	1,281	4,800	0.267 *		
	LT	2.00	325	2,880	0.113	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: 5TH STREET/CECILIA STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.479 *
	TH	2.00	1,076	3,200	0.352	N-S(2):	0.401
	LT	1.00	153	1,600	0.096 *	E-W(1):	0.264 *
Westbound	RT	1.00	102	1,600	0.000	E-W(2):	0.203
	TH	1.00	282	1,600	0.176		
	LT	1.00	217	1,600	0.136 *	V/C:	0.743
Northbound	RT	1.00	184	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,227	3,200	0.383 *		
	LT	1.00	79	1,600	0.049		
Eastbound	RT	0.00	154	0	0.000	ICU:	0.843
	TH	2.00	257	3,200	0.128 *		
	LT	1.00	43	1,600	0.027	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	50	0	0.000	N-S(1):	0.624 *
	TH	2.00	1,233	3,200	0.401	N-S(2):	0.488
	LT	1.00	259	1,600	0.162 *	E-W(1):	0.199 *
Westbound	RT	1.00	193	1,600	0.000	E-W(2):	0.180
	TH	1.00	246	1,600	0.154		
	LT	1.00	82	1,600	0.051 *	V/C:	0.823
Northbound	RT	1.00	122	1,600	0.025	Lost Time:	0.100
	TH	2.00	1,478	3,200	0.462 *		
	LT	1.00	139	1,600	0.087		
Eastbound	RT	0.00	90	0	0.000	ICU:	0.923
	TH	2.00	385	3,200	0.148 *		
	LT	1.00	42	1,600	0.026	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: FLORENCE AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	146	0	0.000	N-S(1):	0.333
	TH	3.00	878	4,800	0.213 *	N-S(2):	0.354 *
	LT	1.00	142	1,600	0.089	E-W(1):	0.285
Westbound	RT	0.00	305	0	0.000	E-W(2):	0.421 *
	TH	3.00	1,154	4,800	0.304 *		
	LT	1.00	145	1,600	0.091	V/C:	0.775
Northbound	RT	0.00	181	0	0.000	Lost Time:	0.100
	TH	3.00	991	4,800	0.244		
	LT	1.00	225	1,600	0.141 *		
Eastbound	RT	0.00	168	0	0.000	ICU:	0.875
	TH	3.00	765	4,800	0.194		
	LT	1.00	187	1,600	0.117 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	197	0	0.000	N-S(1):	0.432
	TH	3.00	980	4,800	0.245 *	N-S(2):	0.453 *
	LT	1.00	205	1,600	0.128	E-W(1):	0.385 *
Westbound	RT	0.00	203	0	0.000	E-W(2):	0.365
	TH	3.00	978	4,800	0.246		
	LT	1.00	167	1,600	0.104 *	V/C:	0.838
Northbound	RT	0.00	209	0	0.000	Lost Time:	0.100
	TH	3.00	1,251	4,800	0.304		
	LT	1.00	332	1,600	0.208 *		
Eastbound	RT	0.00	346	0	0.000	ICU:	0.938
	TH	3.00	1,002	4,800	0.281 *		
	LT	1.00	191	1,600	0.119	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: GALLATIN ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	233	0	0.000	N-S(1):	0.542 *
	TH	2.00	1,002	3,200	0.386	N-S(2):	0.433
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.172
Westbound	RT	0.00	207	0	0.000	E-W(2):	0.449 *
	TH	1.00	154	1,600	0.226 *		
	LT	1.00	127	1,600	0.079	V/C:	0.991
Northbound	RT	0.00	104	0	0.000	Lost Time:	0.100
	TH	2.00	1,365	3,200	0.459 *		
	LT	1.00	75	1,600	0.047		
Eastbound	RT	1.00	87	1,600	0.008	ICU:	1.091
	TH	1.00	149	1,600	0.093		
	LT	1.00	356	1,600	0.223 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	271	0	0.000	N-S(1):	0.623 *
	TH	2.00	1,286	3,200	0.487	N-S(2):	0.533
	LT	1.00	238	1,600	0.149 *	E-W(1):	0.171
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.358 *
	TH	1.00	116	1,600	0.137 *		
	LT	1.00	101	1,600	0.063	V/C:	0.981
Northbound	RT	0.00	95	0	0.000	Lost Time:	0.100
	TH	2.00	1,423	3,200	0.474 *		
	LT	1.00	73	1,600	0.046		
Eastbound	RT	1.00	75	1,600	0.001	ICU:	1.081
	TH	1.00	172	1,600	0.108		
	LT	1.00	354	1,600	0.221 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: I-5 SOUTHBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	275	1,600	0.092	N-S(1):	0.333 *
	TH	3.00	955	4,800	0.199	N-S(2):	0.199
	LT	0.00	0	0	0.000 *	E-W(1):	0.261 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.089
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.594
Northbound	RT	1.00	298	1,600	0.186	Lost Time:	0.100
	TH	3.00	1,600	4,800	0.333 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	417	1,600	0.261 *	ICU:	0.694
	TH	0.00	0	0	0.000		
	LT	2.00	257	2,880	0.089	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	215	1,600	0.000	N-S(1):	0.340 *
	TH	3.00	1,391	4,800	0.290	N-S(2):	0.290
	LT	0.00	0	0	0.000 *	E-W(1):	0.281 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.199
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.621
Northbound	RT	1.00	215	1,600	0.134	Lost Time:	0.100
	TH	3.00	1,631	4,800	0.340 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	449	1,600	0.281 *	ICU:	0.721
	TH	0.00	0	0	0.000		
	LT	2.00	574	2,880	0.199	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: VISTA DEL ROSA STREET/I-5 NORTHBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	6	1,600	0.000	N-S(1):	0.373 *
	TH	3.00	1,310	4,800	0.273	N-S(2):	0.326
	LT	0.00	0	0	0.000 *	E-W(1):	0.253 *
Westbound	RT	0.00	155	0	0.000	E-W(2):	0.000
	TH	0.93	19	1,481	0.118		
	LT	1.07	202	1,547	0.131 *	V/C:	0.626
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,192	3,200	0.373 *		
	LT	1.00	84	1,600	0.053		
Eastbound	RT	1.00	279	1,600	0.122 *	ICU:	0.726
	TH	0.00	0	0	0.000		
	LT	1.00	6	1,600	0.004	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	113	1,600	0.054	N-S(1):	0.567 *
	TH	3.00	1,322	4,800	0.275	N-S(2):	0.324
	LT	0.00	0	0	0.000 *	E-W(1):	0.250 *
Westbound	RT	0.00	270	0	0.000	E-W(2):	0.000
	TH	1.00	63	1,600	0.208 *		
	LT	1.00	261	1,600	0.163	V/C:	0.817
Northbound	RT	0.00	238	0	0.000	Lost Time:	0.100
	TH	2.00	1,576	3,200	0.567 *		
	LT	1.00	79	1,600	0.049		
Eastbound	RT	1.00	146	1,600	0.042 *	ICU:	0.917
	TH	0.00	0	0	0.000		
	LT	1.00	27	1,600	0.017	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ROSEMEAD BOULEVARD
East/West Street: TELEGRAPH ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	125	0	0.000	N-S(1):	0.418
	TH	2.00	809	3,200	0.292 *	N-S(2):	0.474 *
	LT	1.00	133	1,600	0.083	E-W(1):	0.466 *
Westbound	RT	0.00	115	0	0.000	E-W(2):	0.391
	TH	3.00	1,505	4,800	0.338		
	LT	1.00	499	1,600	0.312 *	V/C:	0.940
Northbound	RT	0.00	448	0	0.000	Lost Time:	0.100
	TH	2.00	624	3,200	0.335		
	LT	1.00	291	1,600	0.182 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	1.040
	TH	3.00	624	4,800	0.154 *		
	LT	1.00	85	1,600	0.053	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	74	0	0.000	N-S(1):	0.544 *
	TH	2.00	828	3,200	0.282	N-S(2):	0.393
	LT	1.00	160	1,600	0.100 *	E-W(1):	0.572 *
Westbound	RT	0.00	167	0	0.000	E-W(2):	0.275
	TH	3.00	727	4,800	0.186		
	LT	1.00	414	1,600	0.259 *	V/C:	1.116
Northbound	RT	0.00	497	0	0.000	Lost Time:	0.100
	TH	2.00	925	3,200	0.444 *		
	LT	1.00	177	1,600	0.111		
Eastbound	RT	0.00	290	0	0.000	ICU:	1.216
	TH	3.00	1,210	4,800	0.313 *		
	LT	1.00	143	1,600	0.089	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	103	0	0.000	N-S(1):	0.416 *
	TH	2.00	617	3,200	0.225	N-S(2):	0.277
	LT	1.00	98	1,600	0.061 *	E-W(1):	0.254 *
Westbound	RT	0.00	164	0	0.000	E-W(2):	0.209
	TH	2.00	293	3,200	0.143		
	LT	1.00	169	1,600	0.106 *	V/C:	0.670
Northbound	RT	0.00	110	0	0.000	Lost Time:	0.100
	TH	2.00	1,027	3,200	0.355 *		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	0.00	228	0	0.000	ICU:	0.770
	TH	2.00	246	3,200	0.148 *		
	LT	1.00	106	1,600	0.066	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	176	0	0.000	N-S(1):	0.378
	TH	2.00	928	3,200	0.345 *	N-S(2):	0.384 *
	LT	1.00	218	1,600	0.136	E-W(1):	0.193 *
Westbound	RT	0.00	98	0	0.000	E-W(2):	0.180
	TH	2.00	245	3,200	0.107		
	LT	1.00	54	1,600	0.034 *	V/C:	0.577
Northbound	RT	0.00	101	0	0.000	Lost Time:	0.100
	TH	2.00	674	3,200	0.242		
	LT	1.00	62	1,600	0.039 *		
Eastbound	RT	0.00	103	0	0.000	ICU:	0.677
	TH	2.00	406	3,200	0.159 *		
	LT	1.00	117	1,600	0.073	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: I-105 EASTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.385 *
	TH	2.00	632	3,200	0.198	N-S(2):	0.198
	LT	1.00	187	1,600	0.117 *	E-W(1):	0.198
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.219 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.604
Northbound	RT	0.00	165	0	0.000	Lost Time:	0.100
	TH	3.00	1,122	4,800	0.268 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	295	1,600	0.184	ICU:	0.704
	TH	0.02	7	35	0.198		
	LT	1.98	625	2,848	0.219 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.491 *
	TH	2.00	912	3,200	0.285	N-S(2):	0.285
	LT	1.00	484	1,600	0.303 *	E-W(1):	0.170
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.189 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.680
Northbound	RT	0.00	157	0	0.000	Lost Time:	0.100
	TH	3.00	745	4,800	0.188 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.74	474	2,781	0.170	ICU:	0.780
	TH	0.01	3	18	0.170		
	LT	1.25	341	1,801	0.189 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: I-105 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	249	0	0.000	N-S(1):	0.420 *
	TH	3.00	619	4,800	0.181	N-S(2):	0.387
	LT	0.00	0	0	0.000 *	E-W(1):	0.111
Westbound	RT	2.00	773	3,200	0.242 *	E-W(2):	0.242 *
	TH	0.00	0	0	0.000		
	LT	1.00	178	1,600	0.111	V/C:	0.662
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	1,345	3,200	0.420 *		
	LT	1.00	329	1,600	0.206		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.762
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	571	1,600	0.357	N-S(1):	0.258
	TH	3.00	1,141	3,200	0.357 *	N-S(2):	0.501 *
	LT	0.00	0	0	0.000	E-W(1):	0.129 *
Westbound	RT	1.70	317	2,727	0.116	E-W(2):	0.116
	TH	0.00	0	0	0.000		
	LT	1.30	241	1,866	0.129 *	V/C:	0.630
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	826	3,200	0.258		
	LT	1.00	231	1,600	0.144 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.730
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: FOSTER ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	35	0	0.000	N-S(1):	0.271 *
	TH	2.00	264	3,200	0.093	N-S(2):	0.186
	LT	1.00	180	1,600	0.113 *	E-W(1):	0.290
Westbound	RT	0.00	246	0	0.000	E-W(2):	0.332 *
	TH	2.00	587	3,200	0.308 *		
	LT	0.00	151	1,600	0.094	V/C:	0.603
Northbound	RT	0.00	118	0	0.000	Lost Time:	0.100
	TH	2.00	389	3,200	0.158 *		
	LT	1.00	149	1,600	0.093		
Eastbound	RT	0.00	92	0	0.000	ICU:	0.703
	TH	2.00	496	3,200	0.196		
	LT	0.00	38	1,600	0.024 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	28	0	0.000	N-S(1):	0.151
	TH	2.00	350	3,200	0.118 *	N-S(2):	0.196 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.252 *
Westbound	RT	0.00	65	0	0.000	E-W(2):	0.165
	TH	2.00	314	3,200	0.154		
	LT	0.00	114	1,600	0.071 *	V/C:	0.448
Northbound	RT	0.00	64	0	0.000	Lost Time:	0.100
	TH	2.00	302	3,200	0.114		
	LT	1.00	125	1,600	0.078 *		
Eastbound	RT	0.00	132	0	0.000	ICU:	0.548
	TH	2.00	430	3,200	0.181 *		
	LT	0.00	17	1,600	0.011	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	124	1,600	0.001	N-S(1):	0.419 *
	TH	2.00	820	3,200	0.256	N-S(2):	0.308
	LT	1.00	198	1,600	0.124 *	E-W(1):	0.189
Westbound	RT	0.00	165	0	0.000	E-W(2):	0.295 *
	TH	2.00	535	3,200	0.219 *		
	LT	1.00	150	1,600	0.094	V/C:	0.714
Northbound	RT	0.00	143	0	0.000	Lost Time:	0.100
	TH	2.00	802	3,200	0.295 *		
	LT	1.00	83	1,600	0.052		
Eastbound	RT	1.00	71	1,600	0.000	ICU:	0.814
	TH	2.00	303	3,200	0.095		
	LT	1.00	122	1,600	0.076 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	200	1,600	0.025	N-S(1):	0.476 *
	TH	2.00	983	3,200	0.307	N-S(2):	0.410
	LT	1.00	258	1,600	0.161 *	E-W(1):	0.310
Westbound	RT	0.00	193	0	0.000	E-W(2):	0.317 *
	TH	2.00	500	3,200	0.217 *		
	LT	1.00	194	1,600	0.121	V/C:	0.793
Northbound	RT	0.00	160	0	0.000	Lost Time:	0.100
	TH	2.00	847	3,200	0.315 *		
	LT	1.00	164	1,600	0.103		
Eastbound	RT	1.00	82	1,600	0.000	ICU:	0.893
	TH	2.00	604	3,200	0.189		
	LT	1.00	160	1,600	0.100 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: GARDENDALE STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	122	0	0.000	N-S(1):	0.337
	TH	2.00	977	3,200	0.343 *	N-S(2):	0.496 *
	LT	1.00	89	1,600	0.056	E-W(1):	0.292
Westbound	RT	0.00	126	0	0.000	E-W(2):	0.315 *
	TH	2.00	526	3,200	0.204 *		
	LT	1.00	60	1,600	0.038	V/C:	0.811
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	847	3,200	0.281		
	LT	1.00	244	1,600	0.153 *		
Eastbound	RT	0.00	218	0	0.000	ICU:	0.911
	TH	2.00	594	3,200	0.254		
	LT	1.00	177	1,600	0.111 *	LOS:	E

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	294	0	0.000	N-S(1):	0.409
	TH	2.00	1,214	3,200	0.471 *	N-S(2):	0.589 *
	LT	1.00	146	1,600	0.091	E-W(1):	0.249
Westbound	RT	0.00	79	0	0.000	E-W(2):	0.251 *
	TH	2.00	330	3,200	0.128 *		
	LT	1.00	56	1,600	0.035	V/C:	0.840
Northbound	RT	0.00	63	0	0.000	Lost Time:	0.100
	TH	2.00	956	3,200	0.318		
	LT	1.00	188	1,600	0.118 *		
Eastbound	RT	0.00	173	0	0.000	ICU:	0.940
	TH	2.00	511	3,200	0.214		
	LT	1.00	197	1,600	0.123 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: I-105 WESTBOUND ON-RAMP/ EASTBOUND OFF RAMP

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	216	3,200	0.034	N-S(1):	0.194
	TH	2.00	659	3,200	0.206 *	N-S(2):	0.314 *
	LT	0.00	0	0	0.000	E-W(1):	0.283 *
Westbound	RT	0.00	335	0	0.000	E-W(2):	0.000
	TH	1.00	0	1,600	0.209		
	LT	2.00	603	2,880	0.209 *	V/C:	0.597
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	622	3,200	0.194		
	LT	2.00	312	2,880	0.108 *		
Eastbound	RT	1.00	179	1,600	0.014	ICU:	0.697
	TH	0.00	0	0	0.000		
	LT	2.00	212	2,880	0.074 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	429	3,200	0.064	N-S(1):	0.240
	TH	2.00	897	3,200	0.280 *	N-S(2):	0.397 *
	LT	0.00	0	0	0.000	E-W(1):	0.352 *
Westbound	RT	0.00	314	0	0.000	E-W(2):	0.000
	TH	1.00	0	1,600	0.196 *		
	LT	2.00	330	2,880	0.115	V/C:	0.749
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	768	3,200	0.240		
	LT	2.00	336	2,880	0.117 *		
Eastbound	RT	1.00	385	1,600	0.136	ICU:	0.849
	TH	0.00	0	0	0.000		
	LT	2.00	448	2,880	0.156 *	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	21	0	0.000	N-S(1):	0.222
	TH	2.00	529	3,200	0.172 *	N-S(2):	0.384 *
	LT	1.00	39	1,600	0.024	E-W(1):	0.302 *
Westbound	RT	0.00	29	0	0.000	E-W(2):	0.130
	TH	2.00	352	3,200	0.119		
	LT	1.00	169	1,600	0.106 *	V/C:	0.686
Northbound	RT	0.00	99	0	0.000	Lost Time:	0.100
	TH	2.00	535	3,200	0.198		
	LT	1.00	339	1,600	0.212 *		
Eastbound	RT	1.00	434	1,600	0.059	ICU:	0.786
	TH	2.00	628	3,200	0.196 *		
	LT	1.00	18	1,600	0.011	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	25	0	0.000	N-S(1):	0.218
	TH	2.00	326	3,200	0.110 *	N-S(2):	0.366 *
	LT	1.00	30	1,600	0.019	E-W(1):	0.327 *
Westbound	RT	0.00	32	0	0.000	E-W(2):	0.234
	TH	2.00	603	3,200	0.198		
	LT	1.00	173	1,600	0.108 *	V/C:	0.693
Northbound	RT	0.00	167	0	0.000	Lost Time:	0.100
	TH	2.00	471	3,200	0.199		
	LT	1.00	410	1,600	0.256 *		
Eastbound	RT	1.00	283	1,600	0.000	ICU:	0.793
	TH	2.00	702	3,200	0.219 *		
	LT	1.00	58	1,600	0.036	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: WASHBURN ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	0	1,600	0.000	N-S(1):	0.424 *
	TH	2.00	889	3,200	0.278	N-S(2):	0.278
	LT	1.00	186	1,600	0.116 *	E-W(1):	0.039 *
Westbound	RT	1.00	141	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	63	1,600	0.039 *	V/C:	0.463
Northbound	RT	0.00	91	0	0.000	Lost Time:	0.100
	TH	2.00	893	3,200	0.308 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.563
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	0	1,600	0.000	N-S(1):	0.405 *
	TH	2.00	690	3,200	0.216	N-S(2):	0.216
	LT	1.00	121	1,600	0.076 *	E-W(1):	0.036 *
Westbound	RT	1.00	146	1,600	0.016	E-W(2):	0.016
	TH	0.00	0	0	0.000		
	LT	1.00	58	1,600	0.036 *	V/C:	0.441
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	940	3,200	0.329 *		
	LT	1.00	0	1,600	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.541
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: CONGRESSMAN STEVE HORN WAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	227	1,600	0.096	N-S(1):	0.336 *
	TH	2.00	703	3,200	0.220	N-S(2):	0.294
	LT	1.00	52	1,600	0.033 *	E-W(1):	0.016
Westbound	RT	0.00	13	0	0.000	E-W(2):	0.070 *
	TH	1.00	25	1,600	0.024 *		
	LT	1.00	18	1,600	0.011	V/C:	0.406
Northbound	RT	0.00	129	0	0.000	Lost Time:	0.100
	TH	2.00	842	3,200	0.303 *		
	LT	1.00	118	1,600	0.074		
Eastbound	RT	1.00	38	1,600	0.000	ICU:	0.506
	TH	1.00	8	1,600	0.005		
	LT	1.00	73	1,600	0.046 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	88	1,600	0.000	N-S(1):	0.274 *
	TH	2.00	611	3,200	0.191	N-S(2):	0.220
	LT	1.00	52	1,600	0.033 *	E-W(1):	0.122
Westbound	RT	0.00	47	0	0.000	E-W(2):	0.199 *
	TH	1.00	10	1,600	0.036 *		
	LT	1.00	106	1,600	0.066	V/C:	0.473
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	759	3,200	0.241 *		
	LT	1.00	46	1,600	0.029		
Eastbound	RT	1.00	136	1,600	0.056	ICU:	0.573
	TH	1.00	28	1,600	0.018		
	LT	1.00	260	1,600	0.163 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	45	1,600	0.000	N-S(1):	0.519
	TH	2.00	747	3,200	0.233 *	N-S(2):	0.590 *
	LT	1.00	134	1,600	0.084	E-W(1):	0.467
Westbound	RT	0.00	120	0	0.000	E-W(2):	0.554 *
	TH	3.00	1,755	4,800	0.391 *		
	LT	1.00	316	1,600	0.198	V/C:	1.144
Northbound	RT	1.00	190	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,392	3,200	0.435		
	LT	1.00	571	1,600	0.357 *		
Eastbound	RT	1.00	88	1,600	0.000	ICU:	1.244
	TH	3.00	1,293	4,800	0.269		
	LT	1.00	261	1,600	0.163 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	105	1,600	0.000	N-S(1):	0.547
	TH	2.00	1,164	3,200	0.364 *	N-S(2):	0.583 *
	LT	1.00	316	1,600	0.198	E-W(1):	0.630 *
Westbound	RT	0.00	64	0	0.000	E-W(2):	0.390
	TH	3.00	1,196	4,800	0.263		
	LT	1.00	375	1,600	0.234 *	V/C:	1.213
Northbound	RT	1.00	163	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,118	3,200	0.349		
	LT	1.00	350	1,600	0.219 *		
Eastbound	RT	1.00	160	1,600	0.000	ICU:	1.313
	TH	3.00	1,902	4,800	0.396 *		
	LT	1.00	203	1,600	0.127	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ARDIS AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.084
	TH	1.00	7	1,600	0.046 *	N-S(2):	0.088 *
	LT	1.00	58	1,600	0.036	E-W(1):	0.386
Westbound	RT	0.00	184	0	0.000	E-W(2):	0.412 *
	TH	3.00	1,074	4,800	0.262 *		
	LT	1.00	114	1,600	0.071	V/C:	0.500
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	1.00	21	1,600	0.048		
	LT	1.00	67	1,600	0.042 *		
Eastbound	RT	0.00	136	0	0.000	ICU:	0.600
	TH	3.00	1,375	4,800	0.315		
	LT	1.00	240	1,600	0.150 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	236	0	0.000	N-S(1):	0.216 *
	TH	1.00	24	1,600	0.163	N-S(2):	0.206
	LT	1.00	211	1,600	0.132 *	E-W(1):	0.392 *
Westbound	RT	0.00	72	0	0.000	E-W(2):	0.335
	TH	3.00	1,177	4,800	0.260		
	LT	1.00	115	1,600	0.072 *	V/C:	0.608
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	1.00	8	1,600	0.084 *		
	LT	1.00	68	1,600	0.043		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.708
	TH	3.00	1,479	4,800	0.320 *		
	LT	1.00	120	1,600	0.075	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	14	0	0.000	N-S(1):	0.212 *
	TH	2.00	176	3,200	0.059	N-S(2):	0.150
	LT	1.00	103	1,600	0.064 *	E-W(1):	0.414 *
Westbound	RT	0.00	87	0	0.000	E-W(2):	0.267
	TH	3.00	983	4,800	0.223		
	LT	1.00	165	1,600	0.103 *	V/C:	0.626
Northbound	RT	0.00	209	0	0.000	Lost Time:	0.100
	TH	2.00	263	3,200	0.148 *		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	243	0	0.000	ICU:	0.726
	TH	3.00	1,252	4,800	0.311 *		
	LT	1.00	70	1,600	0.044	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	32	0	0.000	N-S(1):	0.161 *
	TH	2.00	106	3,200	0.043	N-S(2):	0.157
	LT	1.00	76	1,600	0.048 *	E-W(1):	0.369 *
Westbound	RT	0.00	140	0	0.000	E-W(2):	0.342
	TH	3.00	1,184	4,800	0.276		
	LT	1.00	186	1,600	0.116 *	V/C:	0.530
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	249	3,200	0.113 *		
	LT	1.00	183	1,600	0.114		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.630
	TH	3.00	1,095	4,800	0.253 *		
	LT	1.00	106	1,600	0.066	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	122	0	0.000	N-S(1):	0.324 *
	TH	3.00	719	4,800	0.175	N-S(2):	0.262
	LT	2.00	202	2,880	0.070 *	E-W(1):	0.290 *
Westbound	RT	0.00	117	0	0.000	E-W(2):	0.266
	TH	3.00	887	4,800	0.209		
	LT	1.00	153	1,600	0.096 *	V/C:	0.614
Northbound	RT	0.00	323	0	0.000	Lost Time:	0.100
	TH	3.00	898	4,800	0.254 *		
	LT	2.00	250	2,880	0.087		
Eastbound	RT	1.00	193	1,600	0.043	ICU:	0.714
	TH	3.00	929	4,800	0.194 *		
	LT	1.00	91	1,600	0.057	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	189	0	0.000	N-S(1):	0.322 *
	TH	3.00	814	4,800	0.209	N-S(2):	0.297
	LT	2.00	154	2,880	0.053 *	E-W(1):	0.428 *
Westbound	RT	0.00	125	0	0.000	E-W(2):	0.346
	TH	3.00	1,053	4,800	0.245		
	LT	1.00	338	1,600	0.211 *	V/C:	0.750
Northbound	RT	0.00	191	0	0.000	Lost Time:	0.100
	TH	3.00	1,101	4,800	0.269 *		
	LT	2.00	253	2,880	0.088		
Eastbound	RT	1.00	256	1,600	0.081	ICU:	0.850
	TH	3.00	1,041	4,800	0.217 *		
	LT	1.00	161	1,600	0.101	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CLARK AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.201
	TH	3.00	996	4,800	0.208 *	N-S(2):	0.208 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	2.00	376	3,200	0.118 *	E-W(2):	0.118 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.326
Northbound	RT	0.00	14	0	0.000	Lost Time:	0.100
	TH	3.00	950	4,800	0.201		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.426
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.244 *
	TH	3.00	1,164	4,800	0.243	N-S(2):	0.243
	LT	0.00	0	0	0.000 *	E-W(1):	0.000
Westbound	RT	2.00	446	3,200	0.139 *	E-W(2):	0.139 *
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000	V/C:	0.383
Northbound	RT	0.00	12	0	0.000	Lost Time:	0.100
	TH	3.00	1,157	4,800	0.244 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.483
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	113	0	0.000	N-S(1):	0.249 *
	TH	3.00	803	4,800	0.191	N-S(2):	0.247
	LT	0.00	0	0	0.000 *	E-W(1):	0.026
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.033 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.282
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,195	4,800	0.249 *		
	LT	1.00	89	1,600	0.056		
Eastbound	RT	1.00	130	1,600	0.026	ICU:	0.382
	TH	0.00	0	0	0.000		
	LT	1.00	52	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	86	0	0.000	N-S(1):	0.297
	TH	3.00	1,131	4,800	0.254 *	N-S(2):	0.389 *
	LT	0.00	0	0	0.000	E-W(1):	0.000
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.074 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.463
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,425	4,800	0.297		
	LT	1.00	216	1,600	0.135 *		
Eastbound	RT	1.00	169	1,600	0.000	ICU:	0.563
	TH	0.00	0	0	0.000		
	LT	1.00	118	1,600	0.074 *	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: LANDING CENTER DRIVEWAY

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.278 *
	TH	3.00	938	4,800	0.195	N-S(2):	0.216
	LT	1.00	44	1,600	0.028 *	E-W(1):	0.036 *
Westbound	RT	0.94	49	1,508	0.003	E-W(2):	0.003
	TH	0.00	0	0	0.000		
	LT	1.06	55	1,523	0.036 *	V/C:	0.314
Northbound	RT	1.00	56	1,600	0.003	Lost Time:	0.100
	TH	3.00	1,201	4,800	0.250 *		
	LT	1.00	34	1,600	0.021		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.414
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.374 *
	TH	3.00	872	4,800	0.182	N-S(2):	0.197
	LT	1.00	167	1,600	0.104 *	E-W(1):	0.136 *
Westbound	RT	1.00	235	1,600	0.043	E-W(2):	0.043
	TH	0.00	0	0	0.000		
	LT	1.00	218	1,600	0.136 *	V/C:	0.510
Northbound	RT	1.00	86	1,600	0.000	Lost Time:	0.100
	TH	3.00	1,297	4,800	0.270 *		
	LT	1.00	24	1,600	0.015		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.610
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.247
	TH	3.00	782	4,800	0.177 *	N-S(2):	0.326 *
	LT	1.00	130	1,600	0.081	E-W(1):	0.377 *
Westbound	RT	1.00	57	1,600	0.000	E-W(2):	0.228
	TH	2.00	598	3,200	0.187		
	LT	1.00	101	1,600	0.063 *	V/C:	0.703
Northbound	RT	1.00	70	1,600	0.000	Lost Time:	0.100
	TH	3.00	799	4,800	0.166		
	LT	1.00	239	1,600	0.149 *		
Eastbound	RT	0.00	114	0	0.000	ICU:	0.803
	TH	2.00	891	3,200	0.314 *		
	LT	1.00	65	1,600	0.041	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	96	0	0.000	N-S(1):	0.361
	TH	3.00	942	4,800	0.216 *	N-S(2):	0.404 *
	LT	1.00	235	1,600	0.147	E-W(1):	0.391 *
Westbound	RT	1.00	29	1,600	0.000	E-W(2):	0.346
	TH	2.00	870	3,200	0.272		
	LT	1.00	92	1,600	0.058 *	V/C:	0.795
Northbound	RT	1.00	101	1,600	0.006	Lost Time:	0.100
	TH	3.00	1,026	4,800	0.214		
	LT	1.00	301	1,600	0.188 *		
Eastbound	RT	0.00	155	0	0.000	ICU:	0.895
	TH	2.00	912	3,200	0.333 *		
	LT	1.00	118	1,600	0.074	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: BELLFLOWER BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	14	0	0.000	N-S(1):	0.432 *
	TH	3.00	636	4,800	0.135	N-S(2):	0.142
	LT	1.00	485	1,600	0.303 *	E-W(1):	0.064 *
Westbound	RT	2.00	669	3,200	0.058 *	E-W(2):	0.000
	TH	1.00	3	1,600	0.003		
	LT	0.00	1	1,600	0.001	V/C:	0.496
Northbound	RT	0.00	6	0	0.000	Lost Time:	0.100
	TH	3.00	611	4,800	0.129 *		
	LT	1.00	11	1,600	0.007		
Eastbound	RT	1.00	9	1,600	0.000	ICU:	0.596
	TH	1.00	1	1,600	0.001		
	LT	1.00	10	1,600	0.006 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	8	0	0.000	N-S(1):	0.441 *
	TH	3.00	1,001	4,800	0.210	N-S(2):	0.214
	LT	1.00	407	1,600	0.254 *	E-W(1):	0.065 *
Westbound	RT	2.00	602	3,200	0.061 *	E-W(2):	0.000
	TH	1.00	2	1,600	0.003		
	LT	0.00	3	1,600	0.002	V/C:	0.506
Northbound	RT	0.00	4	0	0.000	Lost Time:	0.100
	TH	3.00	893	4,800	0.187 *		
	LT	1.00	6	1,600	0.004		
Eastbound	RT	1.00	7	1,600	0.001	ICU:	0.606
	TH	1.00	1	1,600	0.001		
	LT	1.00	6	1,600	0.004 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.338 *
	TH	2.00	492	3,200	0.179	N-S(2):	0.262
	LT	1.00	144	1,600	0.090 *	E-W(1):	0.325 *
Westbound	RT	1.00	138	1,600	0.000	E-W(2):	0.274
	TH	2.00	593	3,200	0.185		
	LT	1.00	169	1,600	0.106 *	V/C:	0.663
Northbound	RT	0.00	176	0	0.000	Lost Time:	0.100
	TH	2.00	619	3,200	0.248 *		
	LT	1.00	132	1,600	0.083		
Eastbound	RT	0.00	111	0	0.000	ICU:	0.763
	TH	2.00	590	3,200	0.219 *		
	LT	1.00	143	1,600	0.089	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	72	0	0.000	N-S(1):	0.359 *
	TH	2.00	671	3,200	0.232	N-S(2):	0.339
	LT	1.00	161	1,600	0.101 *	E-W(1):	0.515 *
Westbound	RT	1.00	149	1,600	0.000	E-W(2):	0.363
	TH	2.00	884	3,200	0.276		
	LT	1.00	228	1,600	0.143 *	V/C:	0.874
Northbound	RT	0.00	198	0	0.000	Lost Time:	0.100
	TH	2.00	629	3,200	0.258 *		
	LT	1.00	171	1,600	0.107		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.974
	TH	2.00	1,071	3,200	0.372 *		
	LT	1.00	139	1,600	0.087	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	105	0	0.000	N-S(1):	0.254
	TH	2.00	574	3,200	0.212 *	N-S(2):	0.307 *
	LT	1.00	11	1,600	0.007	E-W(1):	0.091
Westbound	RT	0.00	68	0	0.000	E-W(2):	0.186 *
	TH	2.00	120	3,200	0.059 *		
	LT	1.00	50	1,600	0.031	V/C:	0.493
Northbound	RT	0.00	13	0	0.000	Lost Time:	0.100
	TH	2.00	778	3,200	0.247		
	LT	1.00	152	1,600	0.095 *		
Eastbound	RT	0.00	96	1,600	0.060	ICU:	0.593
	TH	2.00	82	1,600	0.051		
	LT	1.00	203	1,600	0.127 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	157	0	0.000	N-S(1):	0.294
	TH	2.00	709	3,200	0.271 *	N-S(2):	0.389 *
	LT	1.00	88	1,600	0.055	E-W(1):	0.113
Westbound	RT	0.00	30	0	0.000	E-W(2):	0.140 *
	TH	2.00	99	3,200	0.040 *		
	LT	1.00	19	1,600	0.012	V/C:	0.529
Northbound	RT	0.00	16	0	0.000	Lost Time:	0.100
	TH	2.00	749	3,200	0.239		
	LT	1.00	188	1,600	0.118 *		
Eastbound	RT	0.00	161	1,600	0.101	ICU:	0.629
	TH	2.00	122	1,600	0.076		
	LT	1.00	160	1,600	0.100 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: WOODRUFF AVENUE
East/West Street: ROSECRANS AVUNUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	91	1,600	0.003	N-S(1):	0.293 *
	TH	2.00	316	3,200	0.099	N-S(2):	0.212
	LT	1.00	154	1,600	0.096 *	E-W(1):	0.352
Westbound	RT	0.00	254	0	0.000	E-W(2):	0.447 *
	TH	2.00	1,005	3,200	0.393 *		
	LT	1.00	178	1,600	0.111	V/C:	0.740
Northbound	RT	1.00	272	1,600	0.059	Lost Time:	0.100
	TH	2.00	630	3,200	0.197 *		
	LT	1.00	180	1,600	0.113		
Eastbound	RT	0.00	110	0	0.000	ICU:	0.840
	TH	2.00	662	3,200	0.241		
	LT	1.00	86	1,600	0.054 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	104	1,600	0.000	N-S(1):	0.301 *
	TH	2.00	624	3,200	0.195	N-S(2):	0.262
	LT	1.00	229	1,600	0.143 *	E-W(1):	0.459 *
Westbound	RT	0.00	225	0	0.000	E-W(2):	0.363
	TH	2.00	701	3,200	0.289		
	LT	1.00	188	1,600	0.118 *	V/C:	0.760
Northbound	RT	1.00	258	1,600	0.044	Lost Time:	0.100
	TH	2.00	506	3,200	0.158 *		
	LT	1.00	107	1,600	0.067		
Eastbound	RT	0.00	130	0	0.000	ICU:	0.860
	TH	2.00	962	3,200	0.341 *		
	LT	1.00	118	1,600	0.074	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STATE ROUTE 91 EASTBOUND RAMPS/BEVERLY STREET

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.453 *
	TH	2.00	641	3,200	0.200	N-S(2):	0.200
	LT	1.00	264	1,600	0.165 *	E-W(1):	0.333 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.168
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.786
Northbound	RT	1.00	375	1,600	0.234	Lost Time:	0.100
	TH	2.00	920	3,200	0.288 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	533	1,600	0.333 *	ICU:	0.886
	TH	1.00	159	1,600	0.099		
	LT	1.00	268	1,600	0.168	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.520 *
	TH	2.00	930	3,200	0.291	N-S(2):	0.291
	LT	1.00	261	1,600	0.163 *	E-W(1):	0.244 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.204
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.764
Northbound	RT	1.00	243	1,600	0.152	Lost Time:	0.100
	TH	2.00	1,141	3,200	0.357 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	391	1,600	0.244 *	ICU:	0.864
	TH	1.00	160	1,600	0.100		
	LT	1.00	327	1,600	0.204	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: STATE ROUTE 91 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	287	1,600	0.179	N-S(1):	0.201
	TH	2.00	629	3,200	0.197 *	N-S(2):	0.509 *
	LT	0.00	0	0	0.000	E-W(1):	0.156
Westbound	RT	1.00	295	1,600	0.184 *	E-W(2):	0.184 *
	TH	1.00	1	1,600	0.156		
	LT	0.00	249	1,600	0.156	V/C:	0.693
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	644	3,200	0.201		
	LT	1.00	499	1,600	0.312 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.793
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	375	1,600	0.234	N-S(1):	0.268
	TH	2.00	802	3,200	0.251 *	N-S(2):	0.652 *
	LT	0.00	0	0	0.000	E-W(1):	0.244
Westbound	RT	1.00	413	1,600	0.258 *	E-W(2):	0.258 *
	TH	1.00	3	1,600	0.246		
	LT	0.00	390	1,600	0.244	V/C:	0.910
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	859	3,200	0.268		
	LT	1.00	641	1,600	0.401 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	1.010
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	81	0	0.000	N-S(1):	0.230 *
	TH	2.00	402	3,200	0.151	N-S(2):	0.207
	LT	1.00	86	1,600	0.054 *	E-W(1):	0.309 *
Westbound	RT	0.00	148	0	0.000	E-W(2):	0.290
	TH	2.00	634	3,200	0.244		
	LT	1.00	150	1,600	0.094 *	V/C:	0.539
Northbound	RT	0.00	129	0	0.000	Lost Time:	0.100
	TH	2.00	435	3,200	0.176 *		
	LT	1.00	89	1,600	0.056		
Eastbound	RT	0.00	112	0	0.000	ICU:	0.639
	TH	2.00	576	3,200	0.215 *		
	LT	1.00	74	1,600	0.046	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	101	0	0.000	N-S(1):	0.275
	TH	2.00	555	3,200	0.205 *	N-S(2):	0.279 *
	LT	1.00	95	1,600	0.059	E-W(1):	0.430 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.310
	TH	2.00	657	3,200	0.234		
	LT	1.00	209	1,600	0.131 *	V/C:	0.709
Northbound	RT	0.00	130	0	0.000	Lost Time:	0.100
	TH	2.00	560	3,200	0.216		
	LT	1.00	118	1,600	0.074 *		
Eastbound	RT	0.00	126	0	0.000	ICU:	0.809
	TH	2.00	832	3,200	0.299 *		
	LT	1.00	122	1,600	0.076	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	62	0	0.000	N-S(1):	0.266
	TH	2.00	642	3,200	0.220 *	N-S(2):	0.292 *
	LT	1.00	67	1,600	0.042	E-W(1):	0.190
Westbound	RT	0.00	83	0	0.000	E-W(2):	0.366 *
	TH	2.00	773	3,200	0.268 *		
	LT	1.00	73	1,600	0.046	V/C:	0.658
Northbound	RT	0.00	40	0	0.000	Lost Time:	0.100
	TH	2.00	676	3,200	0.224		
	LT	1.00	115	1,600	0.072 *		
Eastbound	RT	0.00	45	0	0.000	ICU:	0.758
	TH	2.00	415	3,200	0.144		
	LT	1.00	157	1,600	0.098 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	73	0	0.000	N-S(1):	0.286
	TH	2.00	958	3,200	0.322 *	N-S(2):	0.407 *
	LT	1.00	118	1,600	0.074	E-W(1):	0.325 *
Westbound	RT	0.00	61	0	0.000	E-W(2):	0.204
	TH	2.00	375	3,200	0.136		
	LT	1.00	62	1,600	0.039 *	V/C:	0.732
Northbound	RT	0.00	61	0	0.000	Lost Time:	0.100
	TH	2.00	617	3,200	0.212		
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.00	100	0	0.000	ICU:	0.832
	TH	2.00	815	3,200	0.286 *		
	LT	1.00	108	1,600	0.068	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	68	0	0.000	N-S(1):	0.290 *
	TH	2.00	501	3,200	0.178	N-S(2):	0.215
	LT	1.00	66	1,600	0.041 *	E-W(1):	0.256
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.392 *
	TH	2.00	783	3,200	0.299 *		
	LT	1.00	141	1,600	0.088	V/C:	0.682
Northbound	RT	0.00	116	0	0.000	Lost Time:	0.100
	TH	2.00	680	3,200	0.249 *		
	LT	1.00	59	1,600	0.037		
Eastbound	RT	0.00	65	0	0.000	ICU:	0.782
	TH	2.00	471	3,200	0.168		
	LT	1.00	149	1,600	0.093 *	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	110	0	0.000	N-S(1):	0.290
	TH	2.00	757	3,200	0.271 *	N-S(2):	0.305 *
	LT	1.00	139	1,600	0.087	E-W(1):	0.422 *
Westbound	RT	0.00	88	0	0.000	E-W(2):	0.310
	TH	2.00	653	3,200	0.232		
	LT	1.00	127	1,600	0.079 *	V/C:	0.727
Northbound	RT	0.00	90	0	0.000	Lost Time:	0.100
	TH	2.00	561	3,200	0.203		
	LT	1.00	55	1,600	0.034 *		
Eastbound	RT	0.00	92	0	0.000	ICU:	0.827
	TH	2.00	1,005	3,200	0.343 *		
	LT	1.00	124	1,600	0.078	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: PALM STREET-STATE ROUTE 91 EASTBOUND ON-RAMP

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.424 *
	TH	2.00	792	3,200	0.263	N-S(2):	0.274
	LT	1.00	219	1,600	0.137 *	E-W(1):	0.072 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.024
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.496
Northbound	RT	0.00	210	0	0.000	Lost Time:	0.100
	TH	2.00	691	3,200	0.287 *		
	LT	0.00	17	1,600	0.011		
Eastbound	RT	0.00	57	0	0.000	ICU:	0.596
	TH	1.00	20	1,600	0.072 *		
	LT	0.00	38	1,600	0.024	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	70	0	0.000	N-S(1):	0.465 *
	TH	2.00	1,015	3,200	0.339	N-S(2):	0.357
	LT	1.00	251	1,600	0.157 *	E-W(1):	0.084 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.044
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	V/C:	0.549
Northbound	RT	0.00	195	0	0.000	Lost Time:	0.100
	TH	2.00	762	3,200	0.308 *		
	LT	0.00	28	1,600	0.018		
Eastbound	RT	0.00	50	0	0.000	ICU:	0.649
	TH	1.00	13	1,600	0.084 *		
	LT	0.00	71	1,600	0.044	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: STATE ROUTE 91 WESTBOUND OFF-RAMP

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.228
	TH	2.00	859	3,200	0.268 *	N-S(2):	0.268 *
	LT	0.00	0	0	0.000	E-W(1):	0.120 *
Westbound	RT	0.90	155	1,434	0.108	E-W(2):	0.108
	TH	0.00	0	0	0.000		
	LT	1.10	191	1,590	0.120 *	V/C:	0.388
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	729	3,200	0.228		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.488
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.260
	TH	2.00	1,023	3,200	0.320 *	N-S(2):	0.320 *
	LT	0.00	0	0	0.000	E-W(1):	0.214 *
Westbound	RT	0.96	295	1,532	0.193	E-W(2):	0.193
	TH	0.00	0	0	0.000		
	LT	1.04	321	1,501	0.214 *	V/C:	0.534
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	2.00	833	3,200	0.260		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.634
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: ALONDRA BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	99	0	0.000	N-S(1):	0.272 *
	TH	2.00	480	3,200	0.181	N-S(2):	0.222
	LT	1.00	70	1,600	0.044 *	E-W(1):	0.254
Westbound	RT	0.00	70	0	0.000	E-W(2):	0.286 *
	TH	2.00	639	3,200	0.222 *		
	LT	1.00	125	1,600	0.078	V/C:	0.558
Northbound	RT	0.00	122	0	0.000	Lost Time:	0.100
	TH	2.00	606	3,200	0.228 *		
	LT	1.00	66	1,600	0.041		
Eastbound	RT	0.00	80	0	0.000	ICU:	0.658
	TH	2.00	484	3,200	0.176		
	LT	1.00	102	1,600	0.064 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	127	0	0.000	N-S(1):	0.304
	TH	2.00	739	3,200	0.271 *	N-S(2):	0.343 *
	LT	1.00	89	1,600	0.056	E-W(1):	0.378 *
Westbound	RT	0.00	68	0	0.000	E-W(2):	0.320
	TH	2.00	681	3,200	0.234		
	LT	1.00	116	1,600	0.073 *	V/C:	0.721
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	2.00	665	3,200	0.248		
	LT	1.00	115	1,600	0.072 *		
Eastbound	RT	0.00	170	0	0.000	ICU:	0.821
	TH	2.00	807	3,200	0.305 *		
	LT	1.00	137	1,600	0.086	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: SOMERSET BOULEVARD

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000	N-S(1):	0.275 *
	TH	2.00	458	3,200	0.169	N-S(2):	0.240
	LT	1.00	75	1,600	0.047 *	E-W(1):	0.264
Westbound	RT	0.00	61	0	0.000	E-W(2):	0.287 *
	TH	2.00	638	3,200	0.218 *		
	LT	1.00	110	1,600	0.069	V/C:	0.562
Northbound	RT	0.00	53	0	0.000	Lost Time:	0.100
	TH	2.00	677	3,200	0.228 *		
	LT	1.00	114	1,600	0.071		
Eastbound	RT	0.00	79	0	0.000	ICU:	0.662
	TH	2.00	544	3,200	0.195		
	LT	1.00	110	1,600	0.069 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	95	0	0.000	N-S(1):	0.291
	TH	2.00	595	3,200	0.216 *	N-S(2):	0.294 *
	LT	1.00	126	1,600	0.079	E-W(1):	0.319 *
Westbound	RT	0.00	100	0	0.000	E-W(2):	0.229
	TH	2.00	390	3,200	0.153		
	LT	1.00	107	1,600	0.067 *	V/C:	0.613
Northbound	RT	0.00	136	0	0.000	Lost Time:	0.100
	TH	2.00	543	3,200	0.212		
	LT	1.00	125	1,600	0.078 *		
Eastbound	RT	0.00	122	0	0.000	ICU:	0.713
	TH	2.00	684	3,200	0.252 *		
	LT	1.00	121	1,600	0.076	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: ROSECRANS AVENUE

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	51	0	0.000	N-S(1):	0.266 *
	TH	2.00	310	3,200	0.113	N-S(2):	0.177
	LT	1.00	105	1,600	0.066 *	E-W(1):	0.214 *
Westbound	RT	0.00	52	0	0.000	E-W(2):	0.214 *
	TH	3.00	721	4,800	0.161		
	LT	1.00	130	1,600	0.081 *	V/C:	0.480
Northbound	RT	0.00	138	0	0.000	Lost Time:	0.100
	TH	2.00	502	3,200	0.200 *		
	LT	1.00	102	1,600	0.064		
Eastbound	RT	0.00	81	0	0.000	ICU:	0.580
	TH	3.00	555	4,800	0.133 *		
	LT	1.00	84	1,600	0.053	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	73	0	0.000	N-S(1):	0.232
	TH	2.00	499	3,200	0.179 *	N-S(2):	0.268 *
	LT	1.00	76	1,600	0.048	E-W(1):	0.291 *
Westbound	RT	0.00	78	0	0.000	E-W(2):	0.201
	TH	3.00	605	4,800	0.142		
	LT	1.00	153	1,600	0.096 *	V/C:	0.559
Northbound	RT	0.00	160	0	0.000	Lost Time:	0.100
	TH	2.00	430	3,200	0.184		
	LT	1.00	142	1,600	0.089 *		
Eastbound	RT	0.00	142	0	0.000	ICU:	0.659
	TH	3.00	796	4,800	0.195 *		
	LT	1.00	95	1,600	0.059	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STATE ROUTE 91 EASTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	383	1,600	0.077	N-S(1):	0.369 *
	TH	2.00	938	3,200	0.293	N-S(2):	0.293
	LT	0.00	0	0	0.000 *	E-W(1):	0.162
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.180 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.549
Northbound	RT	0.00	327	0	0.000	Lost Time:	0.100
	TH	3.00	1,443	4,800	0.369 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.56	404	2,493	0.162	ICU:	0.649
	TH	0.00	0	0	0.000		
	LT	1.44	374	2,077	0.180 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	290	1,600	0.000	N-S(1):	0.423 *
	TH	2.00	1,254	3,200	0.392	N-S(2):	0.392
	LT	0.00	0	0	0.000 *	E-W(1):	0.187
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.207 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.630
Northbound	RT	0.00	262	0	0.000	Lost Time:	0.100
	TH	3.00	1,769	4,800	0.423 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.87	559	2,995	0.187	ICU:	0.730
	TH	0.00	0	0	0.000		
	LT	1.13	337	1,625	0.207 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STATE ROUTE 91 WESTBOUND RAMPS

Scenario: FUTURE (2020) WITHOUT PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000	N-S(1):	0.415 *
	TH	3.00	1,492	4,800	0.316	N-S(2):	0.316
	LT	1.00	30	1,600	0.019 *	E-W(1):	0.135 *
Westbound	RT	1.34	117	2,152	0.040	E-W(2):	0.056
	TH	0.00	0	0	0.000		
	LT	1.66	144	2,383	0.060 *	V/C:	0.550
Northbound	RT	1.01	641	1,619	0.342	Lost Time:	0.100
	TH	1.99	1,259	3,181	0.396 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	73	0	0.000	ICU:	0.650
	TH	1.00	21	1,600	0.075 *		
	LT	0.00	26	1,600	0.016	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	22	0	0.000	N-S(1):	0.503 *
	TH	3.00	1,471	4,800	0.311	N-S(2):	0.311
	LT	1.00	49	1,600	0.031 *	E-W(1):	0.223 *
Westbound	RT	1.40	233	2,241	0.082	E-W(2):	0.103
	TH	0.00	0	0	0.000		
	LT	1.60	266	2,303	0.116 *	V/C:	0.726
Northbound	RT	1.00	627	1,600	0.288	Lost Time:	0.100
	TH	2.00	1,511	3,200	0.472 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	103	0	0.000	ICU:	0.826
	TH	1.00	34	1,600	0.107 *		
	LT	0.00	34	1,600	0.021	LOS:	D

* = Critical Movement

FUTURE (2020) WITHOUT PROJECT

APPENDIX

respectively, compared to 2 and 4 of the locations impacted by the Proposed Project during the same respective peak hours. On an overall basis, this alternative would adversely impact traffic to a lesser degree than the Proposed Project. No significant differences in travel patterns outside the project area would be expected between this alternative and the Proposed Project.

Analysis of the transportation system operating conditions in the future with the project alternative reveals the following system performance characteristics in relation to those with the Proposed Project:

- The average volume to capacity (V/C) ratio (or demand to capacity ratio) of the system will decrease to 0.767 and 0.865 during AM and PM peak hours, respectively, compared to the average V/C ratio of 0.771 and 0.867 respectively, during the same peak hours for the Proposed Project.

- Approximately 12 and 37 of the 105 analyzed intersection locations are projected to operate at unacceptable levels of service (LOS E or F) during AM and PM peak hours, respectively, compared to 13 and 37 locations operating at unacceptable LOS E or F with the Proposed Project during the same time period.

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
	City of South Gate							
98	Garfield Avenue & Firestone Boulevard	AM	0.948	E	0.953	E	0.005	No
		PM	1.260	F	1.272	F	0.012	No
99	Garfield Avenue & Imperial Highway	AM	0.690	B	0.693	B	0.003	No
		PM	0.728	C	0.735	C	0.007	No
100	I-710 Northbound Off-Ramp & Firestone Boulevard	AM	0.820	D	0.824	D	0.004	No
		PM	1.013	F	1.024	F	0.011	No
101	I-710 Southbound Off-Ramp & Firestone Boulevard	AM	0.857	D	0.863	D	0.006	No
		PM	1.101	F	1.113	F	0.012	No
96	Paramount Boulevard & Somerset Ranch Road North	AM	0.875	D	0.875	D	0.000	No
		PM	0.891	D	0.891	D	0.000	No
97	Paramount Boulevard & Somerset Ranch Road South	AM	0.738	C	0.739	C	0.001	No
		PM	0.828	D	0.830	D	0.002	No

*** Intersection delay cannot be calculated.
[1] Los Angeles County Congestion Management Program (CMP) monitoring location.
[2] Unsignalized intersections - stop-controlled on all approach.
[3] Unsignalized intersections - stop-controlled on minor approach(es).

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
80	Hoxie Avenue & Imperial Highway	AM	0.779	C	0.783	C	0.004	No
		PM	1.001	F	1.017	F	0.016	No
82	I-605 Northbound Off-Ramp/I-105 Westbound On-Ramp & Rosecrans Avenue	AM	0.714	C	0.717	C	0.003	No
		PM	0.895	D	0.899	D	0.004	No
77	I-605 Southbound Ramps & Firestone Boulevard	AM	0.844	D	0.881	D	0.037	No
		PM	0.977	E	1.041	F	0.064	**Yes**
88	Pioneer Boulevard & Imperial Highway	AM	1.035	F	1.049	F	0.014	No
		PM	0.928	E	0.942	E	0.014	No
83	Studebaker Road & Firestone Boulevard	AM	0.810	D	0.827	D	0.017	No
		PM	0.878	D	0.898	D	0.020	No
84	Studebaker Road & Imperial Highway	AM	0.874	D	0.881	D	0.007	No
		PM	0.831	D	0.843	D	0.012	No
86	Studebaker Road & Rosecrans Avenue	AM	0.839	D	0.841	D	0.002	No
		PM	0.973	E	0.978	E	0.005	No
85	Studebaker Road & I-105 Westbound On-Ramp/Eastbound Off-Ramp	AM	0.875	D	0.876	D	0.001	No
		PM	0.837	D	0.841	D	0.004	No
City of Paramount								
93	Downey Avenue & Alondra Boulevard	AM	0.918	E	0.920	E	0.002	No
		PM	0.817	D	0.822	D	0.005	No
91	Downey Avenue & Rosecrans Avenue	AM	1.007	F	1.011	F	0.004	No
		PM	1.080	F	1.086	F	0.006	No
92	Downey Avenue & Somerset Boulevard	AM	0.785	C	0.786	C	0.001	No
		PM	0.787	C	0.791	C	0.004	No
94	Paramount Boulevard & Rosecrans Avenue	AM	0.778	C	0.780	C	0.002	No
		PM	0.869	D	0.872	D	0.003	No
95	Paramount Boulevard & Somerset Boulevard	AM	0.890	D	0.890	D	0.000	No
		PM	0.916	E	0.916	E	0.000	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
6	Clark Avenue & SR-91 Westbound Off-Ramp	AM	0.488	A	0.490	A	0.002	No
		PM	0.634	B	0.637	B	0.003	No
90	Lakewood Boulevard & Alondra Boulevard	AM	0.735	C	0.737	C	0.002	No
		PM	1.046	F	1.055	F	0.009	No
89	Lakewood Boulevard & Compton Boulevard/Somerset Boulevard	AM	0.916	E	0.927	E	0.011	No
		PM	0.944	E	0.957	E	0.013	No
1	Lakewood Boulevard & Park Street/SR-91 Westbound Ramps	AM	0.650	B	0.651	B	0.001	No
		PM	0.826	D	0.829	D	0.003	No
2	Lakewood Boulevard & SR-91 Eastbound Ramps	AM	0.649	B	0.650	B	0.001	No
		PM	0.730	C	0.732	C	0.002	No
15	Woodruff Avenue & Alondra Boulevard	AM	0.763	C	0.765	C	0.002	No
		PM	0.974	E	0.982	E	0.008	No
14	Woodruff Avenue & Compton Boulevard	AM	0.593	A	0.599	A	0.006	No
		PM	0.629	B	0.638	B	0.009	No
13	Woodruff Avenue & Rosecrans Avenue	AM	0.840	D	0.846	D	0.006	No
		PM	0.860	D	0.878	D	0.018	No
City of Norwalk								
87	Firestone Boulevard & Imperial Highway/Orr and Day Road [1]	AM	0.763	C	0.775	C	0.012	No
		PM	0.813	D	0.841	D	0.028	No
79	Flatbush Avenue/I-605 Southbound Ramps & Imperial Highway	AM	0.784	C	0.790	C	0.006	No
		PM	0.833	D	0.839	D	0.006	No
81	Flatbush Avenue/I-605 Southbound Off-Ramp & Rosecrans Avenue	AM	0.757	C	0.758	C	0.001	No
		PM	0.884	D	0.888	D	0.004	No
78	Hoxie Avenue/I-605 Northbound Ramps & Firestone Boulevard	AM	0.911	E	0.933	E	0.022	No
		PM	0.908	E	0.934	E	0.026	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
46	Woodruff Avenue & Foster Road	AM	0.506	A	0.510	A	0.004	No
		PM	0.555	A	0.567	A	0.012	No
45	Woodruff Avenue & Imperial Highway	AM	0.754	C	0.770	C	0.016	No
		PM	0.831	D	0.856	D	0.025	No
43	Woodruff Avenue & Stewart and Gray Road	AM	0.528	A	0.549	A	0.021	No
		PM	0.658	B	0.714	C	0.056	No
44	Woodruff Avenue & Washburn Road	AM	0.461	A	0.461	A	0.000	No
		PM	0.511	A	0.511	A	0.000	No
City of Bellflower								
10	Bellflower Boulevard & Alondra Boulevard	AM	0.639	B	0.641	B	0.002	No
		PM	0.809	D	0.810	D	0.001	No
12	Bellflower Boulevard & Beverly Street/SR-91 Eastbound Ramps	AM	0.886	D	0.886	D	0.000	No
		PM	0.864	D	0.864	D	0.000	No
9	Bellflower Boulevard & Compton Boulevard	AM	0.758	C	0.760	C	0.002	No
		PM	0.832	D	0.837	D	0.005	No
8	Bellflower Boulevard & Rosecrans Avenue	AM	0.782	C	0.785	C	0.003	No
		PM	0.827	D	0.832	D	0.005	No
11	Bellflower Boulevard & SR-91 Westbound Ramps	AM	0.793	C	0.793	C	0.000	No
		PM	1.010	F	1.010	F	0.000	No
5	Clark Avenue & Alondra Boulevard	AM	0.658	B	0.662	B	0.004	No
		PM	0.821	D	0.829	D	0.008	No
4	Clark Avenue & Compton Boulevard	AM	0.662	B	0.670	B	0.008	No
		PM	0.713	C	0.729	C	0.016	No
7	Clark Avenue & Palm St/SR-91 Eastbound On-Ramp	AM	0.596	A	0.598	A	0.002	No
		PM	0.649	B	0.652	B	0.003	No
3	Clark Avenue & Rosecrans Avenue	AM	0.580	A	0.587	A	0.007	No
		PM	0.659	B	0.675	B	0.016	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
58	Paramount Boulevard & I-5 Southbound Ramps [2]	AM	*** sec	F	*** sec	F	-	No
		PM	*** sec	F	*** sec	F	-	No
		AM	0.896	[4]	0.898	[4]	0.002	
		PM	1.099	[4]	1.108	[4]	0.009	
63	Paramount Boulevard & Imperial Highway	AM	0.817	D	0.820	D	0.003	No
		PM	0.969	E	0.983	E	0.014	No
61	Paramount Boulevard & Stewart and Gray Road	AM	0.854	D	0.863	D	0.009	No
		PM	0.939	E	0.948	E	0.009	No
56	Paramount Boulevard & Telegraph Road	AM	0.837	D	0.844	D	0.007	No
		PM	0.854	D	0.867	D	0.013	No
65	Rives Avenue & Firestone Boulevard	AM	0.689	B	0.696	B	0.007	No
		PM	0.743	C	0.752	C	0.009	No
67	Rives Avenue & Imperial Highway [2]	AM	14.9 sec	B	15.1 sec	C	-	No
		PM	14.5 sec	B	15.0 sec	B	-	No
		AM	0.492	[4]	0.495	[4]	0.003	
		PM	0.516	[4]	0.530	[4]	0.014	
66	Rives Avenue & Stewart and Gray Road	AM	0.586	A	0.592	A	0.006	No
		PM	0.703	C	0.713	C	0.010	No
35	Rosemead Boulevard & Telegraph Road [1]	AM	1.040	F	1.047	F	0.007	No
		PM	1.216	F	1.228	F	0.012	No
47	Stewart and Gray Road & Firestone Boulevard	AM	0.612	B	0.639	B	0.027	No
		PM	0.854	D	0.924	E	0.070	No
49	Studebaker Road & Florence Avenue	AM	0.850	D	0.853	D	0.003	No
		PM	0.843	D	0.847	D	0.004	No
42	Woodruff Avenue & Firestone Boulevard (E)	AM	0.618	B	0.618	B	0.000	No
		PM	0.672	B	0.672	B	0.000	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
30	Lakewood Boulevard & Rosecrans Avenue [1]	AM	0.814	D	0.831	D	0.017	No
		PM	0.893	D	0.921	E	0.028	No
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.858	D	0.055	No
		PM	0.895	D	1.011	F	0.116	**Yes**
36	Lakewood Boulevard & Vista Del Rosa Street/I-5 Northbound Off-Ramp	AM	0.726	C	0.742	C	0.016	No
		PM	0.917	E	0.963	E	0.046	No
48	Little Lake Road/I-605 Southbound Ramps & Florence Avenue	AM	0.796	C	0.801	D	0.005	No
		PM	0.951	E	0.958	E	0.007	No
69	Old River School Road & Firestone Boulevard & Burns Avenue	AM	0.719	C	0.723	C	0.004	No
		PM	0.970	E	0.982	E	0.012	No
71	Old River School Road & Imperial Highway	AM	0.774	C	0.776	C	0.002	No
		PM	0.776	C	0.783	C	0.007	No
70	Old River School Road & Stewart and Gray Road	AM	0.749	C	0.752	C	0.003	No
		PM	0.751	C	0.755	C	0.004	No
68	Old River School Road/Tecum Road & Florence Avenue	AM	0.859	D	0.861	D	0.002	No
		PM	0.986	E	0.988	E	0.002	No
62	Paramount Boulevard & Alameda Street	AM	0.652	B	0.656	B	0.004	No
		PM	0.701	C	0.717	C	0.016	No
60	Paramount Boulevard & Firestone Boulevard	AM	0.890	D	0.897	D	0.007	No
		PM	1.014	F	1.032	F	0.018	No
59	Paramount Boulevard & Florence Avenue	AM	0.943	E	0.948	E	0.005	No
		PM	1.073	F	1.081	F	0.008	No
64	Paramount Boulevard & Gardendale Street	AM	0.664	B	0.666	B	0.002	No
		PM	0.762	C	0.766	C	0.004	No
57	Paramount Boulevard & I-5 Northbound Ramps	AM	0.760	C	0.760	C	0.000	No
		PM	1.037	F	1.046	F	0.009	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
16	Lakewood Boulevard & Bellflower Boulevard	AM	0.596	A	0.625	B	0.029	No
		PM	0.606	B	0.688	B	0.082	No
104	Lakewood Boulevard & Cherokee Drive	AM	0.520	A	0.543	A	0.023	No
		PM	0.643	B	0.687	B	0.044	No
20	Lakewood Boulevard & Clark Avenue	AM	0.426	A	0.462	A	0.036	No
		PM	0.483	A	0.556	A	0.073	No
75	Lakewood Boulevard & Cleta Street	AM	0.469	A	0.503	A	0.034	No
		PM	0.431	A	0.485	A	0.054	No
76	Lakewood Boulevard & Donovan Street	AM	0.605	B	0.647	B	0.042	No
		PM	0.481	A	0.535	A	0.054	No
41	Lakewood Boulevard & Firestone Boulevard [1]	AM	0.825	D	0.877	D	0.052	No
		PM	0.873	D	0.991	E	0.118	No
39	Lakewood Boulevard & Florence Avenue	AM	0.875	D	0.896	D	0.021	No
		PM	0.938	E	0.987	E	0.049	No
38	Lakewood Boulevard & Gallatin Road	AM	1.091	F	1.108	F	0.017	No
		PM	1.081	F	1.128	F	0.047	**Yes**
29	Lakewood Boulevard & Gardendale Street	AM	0.911	E	0.921	E	0.010	No
		PM	0.940	E	0.973	E	0.033	No
28	Lakewood Boulevard & I-105 Westbound Ramps/Eastbound Off-Ramp	AM	0.697	B	0.748	C	0.051	No
		PM	0.849	D	0.914	E	0.065	No
37	Lakewood Boulevard & I-5 Southbound Ramps	AM	0.694	B	0.743	C	0.049	No
		PM	0.721	C	0.810	D	0.089	No
21	Lakewood Boulevard & Imperial Highway	AM	0.714	C	0.757	C	0.043	No
		PM	0.850	D	0.925	E	0.075	No
18	Lakewood Boulevard & Landing Center Driveway	AM	0.414	A	0.443	A	0.029	No
		PM	0.610	B	0.726	C	0.116	No

TABLE 10 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
53	Downey Avenue & Alameda Street	AM	0.422	A	0.427	A	0.005	No
		PM	0.468	A	0.481	A	0.013	No
51	Downey Avenue & Firestone Boulevard	AM	0.599	A	0.618	B	0.019	No
		PM	0.809	D	0.833	D	0.024	No
50	Downey Avenue & Florence Avenue	AM	0.677	B	0.678	B	0.001	No
		PM	0.683	B	0.685	B	0.002	No
55	Downey Avenue & Gardendale Street	AM	0.518	A	0.518	A	0.000	No
		PM	0.556	A	0.556	A	0.000	No
54	Downey Avenue & Imperial Highway	AM	0.728	C	0.735	C	0.007	No
		PM	0.621	B	0.636	B	0.015	No
52	Downey Avenue & Stewart and Gray Road	AM	0.596	A	0.608	B	0.012	No
		PM	0.764	C	0.797	C	0.033	No
103	Erickson Avenue & Imperial Highway Eastbound Ramps [3]	AM	8.9 sec	A	8.9 sec	A	-	No
		PM	8.3 sec	A	8.3 sec	A	-	No
		AM	0.286	[4]	0.286	[4]	0.000	
		PM	0.256	[4]	0.256	[4]	0.000	
102	Erickson Avenue & Imperial Highway Westbound Ramps [3]	AM	10.1 sec	B	10.1 sec	B	-	No
		PM	8.6 sec	A	8.6 sec	A	-	No
		AM	0.308	[4]	0.308	[4]	0.000	
		PM	0.241	[4]	0.241	[4]	0.000	
105	Lakewood Boulevard & 3rd Street-Stonewood Street	AM	0.404	A	0.426	A	0.022	No
		PM	0.555	A	0.614	B	0.059	No
40	Lakewood Boulevard & 5th Street	AM	0.843	D	0.868	D	0.025	No
		PM	0.923	E	0.995	E	0.072	No
19	Lakewood Boulevard & Alameda Street	AM	0.382	A	0.417	A	0.035	No
		PM	0.563	A	0.670	B	0.107	No

TABLE 10
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE E: ALL COMMERCIAL

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. E V/C	Future (2020) with Project Alt. E LOS	Project Increase in V/C	Significant Impact
City of Downey								
23	Ardis Avenue & Imperial Highway	AM	0.600	A	0.632	B	0.032	No
		PM	0.708	C	0.759	C	0.051	No
33	Bellflower Boulevard & I-105 Eastbound Ramps	AM	0.704	C	0.751	C	0.047	No
		PM	0.780	C	0.894	D	0.114	No
32	Bellflower Boulevard & I-105 Westbound Ramps	AM	0.762	C	0.805	D	0.043	No
		PM	0.730	C	0.810	D	0.080	No
34	Bellflower Boulevard & Foster Road	AM	0.770	C	0.780	C	0.010	No
		PM	0.677	B	0.697	B	0.020	No
24	Bellflower Boulevard & Imperial Highway	AM	1.244	F	1.313	F	0.069	**Yes**
		PM	1.313	F	1.443	F	0.130	**Yes**
25	Bellflower Boulevard & Congressman Steve Horn Way	AM	0.506	A	0.560	A	0.054	No
		PM	0.573	A	0.718	C	0.145	No
27	Bellflower Boulevard & Stewart and Gray Road	AM	0.786	C	0.897	D	0.111	No
		PM	0.793	C	0.923	E	0.130	No
26	Bellflower Boulevard & Washburn Road	AM	0.563	A	0.664	B	0.101	No
		PM	0.541	A	0.828	D	0.287	No
73	Brookshire Avenue & Firestone Boulevard	AM	0.621	B	0.630	B	0.009	No
		PM	0.809	D	0.839	D	0.030	No
72	Brookshire Avenue & Florence Avenue	AM	0.658	B	0.661	B	0.003	No
		PM	0.779	C	0.783	C	0.004	No
74	Brookshire Avenue & Imperial Highway	AM	0.767	C	0.771	C	0.004	No
		PM	0.770	C	0.782	C	0.012	No
31	Clark Avenue & Foster Road	AM	0.703	C	0.713	C	0.010	No
		PM	0.548	A	0.569	A	0.021	No
22	Clark Avenue & Imperial Highway	AM	0.726	C	0.754	C	0.028	No
		PM	0.630	B	0.693	B	0.063	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
	City of South Gate							
98	Garfield Avenue & Firestone Boulevard	AM	0.948	E	0.953	E	0.005	No
		PM	1.260	F	1.270	F	0.010	No
99	Garfield Avenue & Imperial Highway	AM	0.690	B	0.693	B	0.003	No
		PM	0.728	C	0.734	C	0.006	No
100	I-710 Northbound Off-Ramp & Firestone Boulevard	AM	0.820	D	0.824	D	0.004	No
		PM	1.013	F	1.023	F	0.010	No
101	I-710 Southbound Off-Ramp & Firestone Boulevard	AM	0.857	D	0.863	D	0.006	No
		PM	1.101	F	1.111	F	0.010	No
96	Paramount Boulevard & Somerset Ranch Road North	AM	0.875	D	0.875	D	0.000	No
		PM	0.891	D	0.891	D	0.000	No
97	Paramount Boulevard & Somerset Ranch Road South	AM	0.738	C	0.739	C	0.001	No
		PM	0.828	D	0.830	D	0.002	No

*** Intersection delay cannot be calculated.
[1] Los Angeles County Congestion Management Program (CMP) monitoring location.
[2] Unsignalized intersections - stop-controlled on all approach.
[3] Unsignalized intersections - stop-controlled on minor approach(es).

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
80	Hoxie Avenue & Imperial Highway	AM	0.779	C	0.783	C	0.004	No
		PM	1.001	F	1.015	F	0.014	No
82	I-605 Northbound Off-Ramp/I-105 Westbound On-Ramp & Rosecrans Avenue	AM	0.714	C	0.717	C	0.003	No
		PM	0.895	D	0.898	D	0.003	No
77	I-605 Southbound Ramps & Firestone Boulevard	AM	0.844	D	0.880	D	0.036	No
		PM	0.977	E	1.031	F	0.054	**Yes**
88	Pioneer Boulevard & Imperial Highway	AM	1.035	F	1.049	F	0.014	No
		PM	0.928	E	0.940	E	0.012	No
83	Studebaker Road & Firestone Boulevard	AM	0.810	D	0.827	D	0.017	No
		PM	0.878	D	0.895	D	0.017	No
84	Studebaker Road & Imperial Highway	AM	0.874	D	0.881	D	0.007	No
		PM	0.831	D	0.841	D	0.010	No
86	Studebaker Road & Rosecrans Avenue	AM	0.839	D	0.841	D	0.002	No
		PM	0.973	E	0.977	E	0.004	No
85	Studebaker Road & I-105 Westbound On-Ramp/Eastbound Off-Ramp	AM	0.875	D	0.876	D	0.001	No
		PM	0.837	D	0.840	D	0.003	No
City of Paramount								
93	Downey Avenue & Alondra Boulevard	AM	0.918	E	0.920	E	0.002	No
		PM	0.817	D	0.821	D	0.004	No
91	Downey Avenue & Rosecrans Avenue	AM	1.007	F	1.011	F	0.004	No
		PM	1.080	F	1.085	F	0.005	No
92	Downey Avenue & Somerset Boulevard	AM	0.785	C	0.786	C	0.001	No
		PM	0.787	C	0.790	C	0.003	No
94	Paramount Boulevard & Rosecrans Avenue	AM	0.778	C	0.780	C	0.002	No
		PM	0.869	D	0.871	D	0.002	No
95	Paramount Boulevard & Somerset Boulevard	AM	0.890	D	0.890	D	0.000	No
		PM	0.916	E	0.916	E	0.000	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
6	Clark Avenue & SR-91 Westbound Off-Ramp	AM	0.488	A	0.490	A	0.002	No
		PM	0.634	B	0.636	B	0.002	No
90	Lakewood Boulevard & Alondra Boulevard	AM	0.735	C	0.737	C	0.002	No
		PM	1.046	F	1.053	F	0.007	No
89	Lakewood Boulevard & Compton Boulevard/Somerset Boulevard	AM	0.916	E	0.927	E	0.011	No
		PM	0.944	E	0.955	E	0.011	No
1	Lakewood Boulevard & Park Street/SR-91 Westbound Ramps	AM	0.650	B	0.651	B	0.001	No
		PM	0.826	D	0.828	D	0.002	No
2	Lakewood Boulevard & SR-91 Eastbound Ramps	AM	0.649	B	0.650	B	0.001	No
		PM	0.730	C	0.732	C	0.002	No
15	Woodruff Avenue & Alondra Boulevard	AM	0.763	C	0.765	C	0.002	No
		PM	0.974	E	0.980	E	0.006	No
14	Woodruff Avenue & Compton Boulevard	AM	0.593	A	0.599	A	0.006	No
		PM	0.629	B	0.636	B	0.007	No
13	Woodruff Avenue & Rosecrans Avenue	AM	0.840	D	0.846	D	0.006	No
		PM	0.860	D	0.875	D	0.015	No
City of Norwalk								
87	Firestone Boulevard & Imperial Highway/Orr and Day Road [1]	AM	0.763	C	0.774	C	0.011	No
		PM	0.813	D	0.837	D	0.024	No
79	Flatbush Avenue/I-605 Southbound Ramps & Imperial Highway	AM	0.784	C	0.790	C	0.006	No
		PM	0.833	D	0.838	D	0.005	No
81	Flatbush Avenue/I-605 Southbound Off-Ramp & Rosecrans Avenue	AM	0.757	C	0.758	C	0.001	No
		PM	0.884	D	0.887	D	0.003	No
78	Hoxie Avenue/I-605 Northbound Ramps & Firestone Boulevard	AM	0.911	E	0.932	E	0.021	No
		PM	0.908	E	0.930	E	0.022	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
46	Woodruff Avenue & Foster Road	AM	0.506	A	0.510	A	0.004	No
		PM	0.555	A	0.565	A	0.010	No
45	Woodruff Avenue & Imperial Highway	AM	0.754	C	0.770	C	0.016	No
		PM	0.831	D	0.852	D	0.021	No
43	Woodruff Avenue & Stewart and Gray Road	AM	0.528	A	0.548	A	0.020	No
		PM	0.658	B	0.705	C	0.047	No
44	Woodruff Avenue & Washburn Road	AM	0.461	A	0.461	A	0.000	No
		PM	0.511	A	0.511	A	0.000	No
City of Bellflower								
10	Bellflower Boulevard & Alondra Boulevard	AM	0.639	B	0.641	B	0.002	No
		PM	0.809	D	0.810	D	0.001	No
12	Bellflower Boulevard & Beverly Street/SR-91 Eastbound Ramps	AM	0.886	D	0.886	D	0.000	No
		PM	0.864	D	0.864	D	0.000	No
9	Bellflower Boulevard & Compton Boulevard	AM	0.758	C	0.760	C	0.002	No
		PM	0.832	D	0.836	D	0.004	No
8	Bellflower Boulevard & Rosecrans Avenue	AM	0.782	C	0.785	C	0.003	No
		PM	0.827	D	0.831	D	0.004	No
11	Bellflower Boulevard & SR-91 Westbound Ramps	AM	0.793	C	0.793	C	0.000	No
		PM	1.010	F	1.010	F	0.000	No
5	Clark Avenue & Alondra Boulevard	AM	0.658	B	0.662	B	0.004	No
		PM	0.821	D	0.827	D	0.006	No
4	Clark Avenue & Compton Boulevard	AM	0.662	B	0.670	B	0.008	No
		PM	0.713	C	0.727	C	0.014	No
7	Clark Avenue & Palm St/SR-91 Eastbound On-Ramp	AM	0.596	A	0.598	A	0.002	No
		PM	0.649	B	0.651	B	0.002	No
3	Clark Avenue & Rosecrans Avenue	AM	0.580	A	0.587	A	0.007	No
		PM	0.659	B	0.673	B	0.014	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
58	Paramount Boulevard & I-5 Southbound Ramps [2]	AM	*** sec	F	*** sec	F	-	No
		PM	*** sec	F	*** sec	F	-	No
		AM	0.896	[4]	0.898	[4]	0.002	
		PM	1.099	[4]	1.107	[4]	0.008	
63	Paramount Boulevard & Imperial Highway	AM	0.817	D	0.820	D	0.003	No
		PM	0.969	E	0.981	E	0.012	No
61	Paramount Boulevard & Stewart and Gray Road	AM	0.854	D	0.863	D	0.009	No
		PM	0.939	E	0.946	E	0.007	No
56	Paramount Boulevard & Telegraph Road	AM	0.837	D	0.844	D	0.007	No
		PM	0.854	D	0.865	D	0.011	No
65	Rives Avenue & Firestone Boulevard	AM	0.689	B	0.696	B	0.007	No
		PM	0.743	C	0.750	C	0.007	No
67	Rives Avenue & Imperial Highway [2]	AM	14.9 sec	B	15.1 sec	C	-	No
		PM	14.5 sec	B	15.0 sec	B	-	No
		AM	0.492	[4]	0.495	[4]	0.003	
		PM	0.516	[4]	0.528	[4]	0.012	
66	Rives Avenue & Stewart and Gray Road	AM	0.586	A	0.592	A	0.006	No
		PM	0.703	C	0.712	C	0.009	No
35	Rosemead Boulevard & Telegraph Road [1]	AM	1.040	F	1.047	F	0.007	No
		PM	1.216	F	1.226	F	0.010	No
47	Stewart and Gray Road & Firestone Boulevard	AM	0.612	B	0.638	B	0.026	No
		PM	0.854	D	0.914	E	0.060	No
49	Studebaker Road & Florence Avenue	AM	0.850	D	0.853	D	0.003	No
		PM	0.843	D	0.846	D	0.003	No
42	Woodruff Avenue & Firestone Boulevard (E)	AM	0.618	B	0.618	B	0.000	No
		PM	0.672	B	0.672	B	0.000	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
30	Lakewood Boulevard & Rosecrans Avenue [1]	AM	0.814	D	0.831	D	0.017	No
		PM	0.893	D	0.916	E	0.023	No
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.857	D	0.054	No
		PM	0.895	D	0.993	E	0.098	No
36	Lakewood Boulevard & Vista Del Rosa Street/I-5 Northbound Off-Ramp	AM	0.726	C	0.742	C	0.016	No
		PM	0.917	E	0.956	E	0.039	No
48	Little Lake Road/I-605 Southbound Ramps & Florence Avenue	AM	0.796	C	0.801	D	0.005	No
		PM	0.951	E	0.957	E	0.006	No
69	Old River School Road & Firestone Boulevard & Burns Avenue	AM	0.719	C	0.723	C	0.004	No
		PM	0.970	E	0.980	E	0.010	No
71	Old River School Road & Imperial Highway	AM	0.774	C	0.776	C	0.002	No
		PM	0.776	C	0.782	C	0.006	No
70	Old River School Road & Stewart and Gray Road	AM	0.749	C	0.752	C	0.003	No
		PM	0.751	C	0.754	C	0.003	No
68	Old River School Road/Tecum Road & Florence Avenue	AM	0.859	D	0.861	D	0.002	No
		PM	0.986	E	0.988	E	0.002	No
62	Paramount Boulevard & Alameda Street	AM	0.652	B	0.656	B	0.004	No
		PM	0.701	C	0.715	C	0.014	No
60	Paramount Boulevard & Firestone Boulevard	AM	0.890	D	0.897	D	0.007	No
		PM	1.014	F	1.029	F	0.015	No
59	Paramount Boulevard & Florence Avenue	AM	0.943	E	0.948	E	0.005	No
		PM	1.073	F	1.079	F	0.006	No
64	Paramount Boulevard & Gardendale Street	AM	0.664	B	0.666	B	0.002	No
		PM	0.762	C	0.765	C	0.003	No
57	Paramount Boulevard & I-5 Northbound Ramps	AM	0.760	C	0.760	C	0.000	No
		PM	1.037	F	1.045	F	0.008	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
16	Lakewood Boulevard & Bellflower Boulevard	AM	0.596	A	0.625	B	0.029	No
		PM	0.606	B	0.675	B	0.069	No
104	Lakewood Boulevard & Cherokee Drive	AM	0.520	A	0.543	A	0.023	No
		PM	0.643	B	0.680	B	0.037	No
20	Lakewood Boulevard & Clark Avenue	AM	0.426	A	0.461	A	0.035	No
		PM	0.483	A	0.545	A	0.062	No
75	Lakewood Boulevard & Cleta Street	AM	0.469	A	0.503	A	0.034	No
		PM	0.431	A	0.477	A	0.046	No
76	Lakewood Boulevard & Donovan Street	AM	0.605	B	0.646	B	0.041	No
		PM	0.481	A	0.527	A	0.046	No
41	Lakewood Boulevard & Firestone Boulevard [1]	AM	0.825	D	0.877	D	0.052	No
		PM	0.873	D	0.973	E	0.100	No
39	Lakewood Boulevard & Florence Avenue	AM	0.875	D	0.895	D	0.020	No
		PM	0.938	E	0.980	E	0.042	No
38	Lakewood Boulevard & Gallatin Road	AM	1.091	F	1.107	F	0.016	No
		PM	1.081	F	1.120	F	0.039	**Yes**
29	Lakewood Boulevard & Gardendale Street	AM	0.911	E	0.921	E	0.010	No
		PM	0.940	E	0.968	E	0.028	No
28	Lakewood Boulevard & I-105 Westbound Ramps/Eastbound Off-Ramp	AM	0.697	B	0.747	C	0.050	No
		PM	0.849	D	0.904	E	0.055	No
37	Lakewood Boulevard & I-5 Southbound Ramps	AM	0.694	B	0.742	C	0.048	No
		PM	0.721	C	0.797	C	0.076	No
21	Lakewood Boulevard & Imperial Highway	AM	0.714	C	0.757	C	0.043	No
		PM	0.850	D	0.914	E	0.064	No
18	Lakewood Boulevard & Landing Center Driveway	AM	0.414	A	0.443	A	0.029	No
		PM	0.610	B	0.708	C	0.098	No

TABLE 9 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
53	Downey Avenue & Alameda Street	AM	0.422	A	0.427	A	0.005	No
		PM	0.468	A	0.479	A	0.011	No
51	Downey Avenue & Firestone Boulevard	AM	0.599	A	0.618	B	0.019	No
		PM	0.809	D	0.829	D	0.020	No
50	Downey Avenue & Florence Avenue	AM	0.677	B	0.678	B	0.001	No
		PM	0.683	B	0.685	B	0.002	No
55	Downey Avenue & Gardendale Street	AM	0.518	A	0.518	A	0.000	No
		PM	0.556	A	0.556	A	0.000	No
54	Downey Avenue & Imperial Highway	AM	0.728	C	0.735	C	0.007	No
		PM	0.621	B	0.634	B	0.013	No
52	Downey Avenue & Stewart and Gray Road	AM	0.596	A	0.608	B	0.012	No
		PM	0.764	C	0.792	C	0.028	No
103	Erickson Avenue & Imperial Highway Eastbound Ramps [3]	AM	8.9 sec	A	8.9 sec	A	-	No
		PM	8.3 sec	A	8.3 sec	A	-	No
		AM	0.286	[4]	0.286	[4]	0.000	
		PM	0.256	[4]	0.256	[4]	0.000	
102	Erickson Avenue & Imperial Highway Westbound Ramps [3]	AM	10.1 sec	B	10.1 sec	B	-	No
		PM	8.6 sec	A	8.6 sec	A	-	No
		AM	0.308	[4]	0.308	[4]	0.000	
		PM	0.241	[4]	0.241	[4]	0.000	
105	Lakewood Boulevard & 3rd Street-Stonewood Street	AM	0.404	A	0.425	A	0.021	No
		PM	0.555	A	0.605	B	0.050	No
40	Lakewood Boulevard & 5th Street	AM	0.843	D	0.868	D	0.025	No
		PM	0.923	E	0.984	E	0.061	No
19	Lakewood Boulevard & Alameda Street	AM	0.382	A	0.416	A	0.034	No
		PM	0.563	A	0.654	B	0.091	No

TABLE 9
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE C: REDUCED DENSITY

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. C V/C	Future (2020) with Project Alt. C LOS	Project Increase in V/C	Significant Impact
City of Downey								
23	Ardis Avenue & Imperial Highway	AM	0.600	A	0.631	B	0.031	No
		PM	0.708	C	0.751	C	0.043	No
33	Bellflower Boulevard & I-105 Eastbound Ramps	AM	0.704	C	0.750	C	0.046	No
		PM	0.780	C	0.877	D	0.097	No
32	Bellflower Boulevard & I-105 Westbound Ramps	AM	0.762	C	0.805	D	0.043	No
		PM	0.730	C	0.798	C	0.068	No
34	Bellflower Boulevard & Foster Road	AM	0.770	C	0.780	C	0.010	No
		PM	0.677	B	0.694	B	0.017	No
24	Bellflower Boulevard & Imperial Highway	AM	1.244	F	1.312	F	0.068	**Yes**
		PM	1.313	F	1.423	F	0.110	**Yes**
25	Bellflower Boulevard & Congressman Steve Horn Way	AM	0.506	A	0.559	A	0.053	No
		PM	0.573	A	0.696	B	0.123	No
27	Bellflower Boulevard & Stewart and Gray Road	AM	0.786	C	0.895	D	0.109	No
		PM	0.793	C	0.903	E	0.110	No
26	Bellflower Boulevard & Washburn Road	AM	0.563	A	0.662	B	0.099	No
		PM	0.541	A	0.784	C	0.243	No
73	Brookshire Avenue & Firestone Boulevard	AM	0.621	B	0.630	B	0.009	No
		PM	0.809	D	0.835	D	0.026	No
72	Brookshire Avenue & Florence Avenue	AM	0.658	B	0.661	B	0.003	No
		PM	0.779	C	0.782	C	0.003	No
74	Brookshire Avenue & Imperial Highway	AM	0.767	C	0.771	C	0.004	No
		PM	0.770	C	0.780	C	0.010	No
31	Clark Avenue & Foster Road	AM	0.703	C	0.713	C	0.010	No
		PM	0.548	A	0.566	A	0.018	No
22	Clark Avenue & Imperial Highway	AM	0.726	C	0.754	C	0.028	No
		PM	0.630	B	0.683	B	0.053	No

Alternative C – Reduced Intensity (25% Reduction)

Table 9 summarizes the AM and PM peak hour traffic impacts of this alternative and compares the same to those of the Proposed Project. It can be observed from this table that this alternative produces traffic impacts at 1 and 3 of the analysis locations in the AM and PM peak hours, respectively, compared to 2 and 4 of the locations impacted by the Proposed Project during the same respective peak hours. On an overall basis, this alternative would adversely impact traffic to a lesser degree than the Proposed Project. No significant differences in travel patterns outside the project area would be expected between this alternative and the Proposed Project.

Analysis of the transportation system operating conditions in the future with the project alternative reveals the following system performance characteristics in relation to those with the Proposed Project:

- The average volume to capacity (V/C) ratio (or demand to capacity ratio) of the system will decrease to 0.767 and 0.860 during AM and PM peak hours, respectively, compared to the average V/C ratio of 0.771 and 0.867 respectively, during the same peak hours for the Proposed Project.

- Approximately 12 and 37 of the 105 analyzed intersection locations are projected to operate at unacceptable levels of service (LOS E or F) during AM and PM peak hours, respectively, compared to 13 and 37 locations operating at unacceptable LOS E or F with the Proposed Project during the same time period.

Alternative D – Reduced Site Alternative

The daily and peak hour trip generation estimates for this alternative are the same as the Proposed Project. As indicated, the eastern 20-acres of the site would be preserved as open space and the points of access, particularly those along Bellflower Boulevard, would not change compared to the Proposed Project. Therefore, on an overall basis, this alternative would adversely impact traffic to the same degree as the Proposed Project.

Alternative E – All Commercial

Table 10 summarizes the AM and PM peak hour traffic impacts of this alternative and compares the same to those of the Proposed Project. It can be observed from this table that this alternative produces traffic impacts at 1 and 4 of the analysis locations in the AM and PM peak hours,

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
	City of South Gate							
98	Garfield Avenue & Firestone Boulevard	AM	0.948	E	0.954	E	0.006	No
		PM	1.260	F	1.267	F	0.007	No
99	Garfield Avenue & Imperial Highway	AM	0.690	B	0.694	B	0.004	No
		PM	0.728	C	0.732	C	0.004	No
100	I-710 Northbound Off-Ramp & Firestone Boulevard	AM	0.820	D	0.825	D	0.005	No
		PM	1.013	F	1.019	F	0.006	No
101	I-710 Southbound Off-Ramp & Firestone Boulevard	AM	0.857	D	0.864	D	0.007	No
		PM	1.101	F	1.108	F	0.007	No
96	Paramount Boulevard & Somerset Ranch Road North	AM	0.875	D	0.875	D	0.000	No
		PM	0.891	D	0.891	D	0.000	No
97	Paramount Boulevard & Somerset Ranch Road South	AM	0.738	C	0.739	C	0.001	No
		PM	0.828	D	0.829	D	0.001	No

*** Intersection delay cannot be calculated.
[1] Los Angeles County Congestion Management Program (CMP) monitoring location.
[2] Unsignalized intersections - stop-controlled on all approach.
[3] Unsignalized intersections - stop-controlled on minor approach(es).

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
80	Hoxie Avenue & Imperial Highway	AM	0.779	C	0.784	C	0.005	No
		PM	1.001	F	1.010	F	0.009	No
82	I-605 Northbound Off-Ramp/I-105 Westbound On-Ramp & Rosecrans Avenue	AM	0.714	C	0.718	C	0.004	No
		PM	0.895	D	0.897	D	0.002	No
77	I-605 Southbound Ramps & Firestone Boulevard	AM	0.844	D	0.890	D	0.046	No
		PM	0.977	E	1.011	F	0.034	**Yes**
88	Pioneer Boulevard & Imperial Highway	AM	1.035	F	1.053	F	0.018	No
		PM	0.928	E	0.936	E	0.008	No
83	Studebaker Road & Firestone Boulevard	AM	0.810	D	0.832	D	0.022	No
		PM	0.878	D	0.889	D	0.011	No
84	Studebaker Road & Imperial Highway	AM	0.874	D	0.883	D	0.009	No
		PM	0.831	D	0.838	D	0.007	No
86	Studebaker Road & Rosecrans Avenue	AM	0.839	D	0.841	D	0.002	No
		PM	0.973	E	0.976	E	0.003	No
85	Studebaker Road & I-105 Westbound On-Ramp/Eastbound Off-Ramp	AM	0.875	D	0.876	D	0.001	No
		PM	0.837	D	0.839	D	0.002	No
City of Paramount								
93	Downey Avenue & Alondra Boulevard	AM	0.918	E	0.921	E	0.003	No
		PM	0.817	D	0.820	D	0.003	No
91	Downey Avenue & Rosecrans Avenue	AM	1.007	F	1.012	F	0.005	No
		PM	1.080	F	1.083	F	0.003	No
92	Downey Avenue & Somerset Boulevard	AM	0.785	C	0.786	C	0.001	No
		PM	0.787	C	0.789	C	0.002	No
94	Paramount Boulevard & Rosecrans Avenue	AM	0.778	C	0.780	C	0.002	No
		PM	0.869	D	0.871	D	0.002	No
95	Paramount Boulevard & Somerset Boulevard	AM	0.890	D	0.890	D	0.000	No
		PM	0.916	E	0.916	E	0.000	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
6	Clark Avenue & SR-91 Westbound Off-Ramp	AM	0.488	A	0.490	A	0.002	No
		PM	0.634	B	0.636	B	0.002	No
90	Lakewood Boulevard & Alondra Boulevard	AM	0.735	C	0.738	C	0.003	No
		PM	1.046	F	1.051	F	0.005	No
89	Lakewood Boulevard & Compton Boulevard/Somerset Boulevard	AM	0.916	E	0.929	E	0.013	No
		PM	0.944	E	0.951	E	0.007	No
1	Lakewood Boulevard & Park Street/SR-91 Westbound Ramps	AM	0.650	B	0.651	B	0.001	No
		PM	0.826	D	0.828	D	0.002	No
2	Lakewood Boulevard & SR-91 Eastbound Ramps	AM	0.649	B	0.650	B	0.001	No
		PM	0.730	C	0.731	C	0.001	No
15	Woodruff Avenue & Alondra Boulevard	AM	0.763	C	0.766	C	0.003	No
		PM	0.974	E	0.978	E	0.004	No
14	Woodruff Avenue & Compton Boulevard	AM	0.593	A	0.600	A	0.007	No
		PM	0.629	B	0.634	B	0.005	No
13	Woodruff Avenue & Rosecrans Avenue	AM	0.840	D	0.847	D	0.007	No
		PM	0.860	D	0.870	D	0.010	No
City of Norwalk								
87	Firestone Boulevard & Imperial Highway/Orr and Day Road [1]	AM	0.763	C	0.778	C	0.015	No
		PM	0.813	D	0.828	D	0.015	No
79	Flatbush Avenue/I-605 Southbound Ramps & Imperial Highway	AM	0.784	C	0.791	C	0.007	No
		PM	0.833	D	0.836	D	0.003	No
81	Flatbush Avenue/I-605 Southbound Off-Ramp & Rosecrans Avenue	AM	0.757	C	0.758	C	0.001	No
		PM	0.884	D	0.886	D	0.002	No
78	Hoxie Avenue/I-605 Northbound Ramps & Firestone Boulevard	AM	0.911	E	0.938	E	0.027	No
		PM	0.908	E	0.922	E	0.014	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	LOS	Future (2020) with Project Alt. B V/C	LOS	Project Increase in V/C	Significant Impact
46	Woodruff Avenue & Foster Road	AM	0.506	A	0.511	A	0.005	No
		PM	0.555	A	0.562	A	0.007	No
45	Woodruff Avenue & Imperial Highway	AM	0.754	C	0.774	C	0.020	No
		PM	0.831	D	0.844	D	0.013	No
43	Woodruff Avenue & Stewart and Gray Road	AM	0.528	A	0.554	A	0.026	No
		PM	0.658	B	0.688	B	0.030	No
44	Woodruff Avenue & Washburn Road	AM	0.461	A	0.461	A	0.000	No
		PM	0.511	A	0.511	A	0.000	No
City of Bellflower								
10	Bellflower Boulevard & Alondra Boulevard	AM	0.639	B	0.641	B	0.002	No
		PM	0.809	D	0.810	D	0.001	No
12	Bellflower Boulevard & Beverly Street/SR-91 Eastbound Ramps	AM	0.886	D	0.886	D	0.000	No
		PM	0.864	D	0.864	D	0.000	No
9	Bellflower Boulevard & Compton Boulevard	AM	0.758	C	0.760	C	0.002	No
		PM	0.832	D	0.835	D	0.003	No
8	Bellflower Boulevard & Rosecrans Avenue	AM	0.782	C	0.786	C	0.004	No
		PM	0.827	D	0.830	D	0.003	No
11	Bellflower Boulevard & SR-91 Westbound Ramps	AM	0.793	C	0.793	C	0.000	No
		PM	1.010	F	1.010	F	0.000	No
5	Clark Avenue & Alondra Boulevard	AM	0.658	B	0.663	B	0.005	No
		PM	0.821	D	0.825	D	0.004	No
4	Clark Avenue & Compton Boulevard	AM	0.662	B	0.672	B	0.010	No
		PM	0.713	C	0.722	C	0.009	No
7	Clark Avenue & Palm St/SR-91 Eastbound On-Ramp	AM	0.596	A	0.598	A	0.002	No
		PM	0.649	B	0.651	B	0.002	No
3	Clark Avenue & Rosecrans Avenue	AM	0.580	A	0.589	A	0.009	No
		PM	0.659	B	0.668	B	0.009	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
58	Paramount Boulevard & I-5 Southbound Ramps [2]	AM	*** sec	F	*** sec	F	-	No
		PM	*** sec	F	*** sec	F	-	No
		AM	0.896	[4]	0.899	[4]	0.003	
		PM	1.099	[4]	1.104	[4]	0.005	
63	Paramount Boulevard & Imperial Highway	AM	0.817	D	0.821	D	0.004	No
		PM	0.969	E	0.977	E	0.008	No
61	Paramount Boulevard & Stewart and Gray Road	AM	0.854	D	0.865	D	0.011	No
		PM	0.939	E	0.944	E	0.005	No
56	Paramount Boulevard & Telegraph Road	AM	0.837	D	0.846	D	0.009	No
		PM	0.854	D	0.861	D	0.007	No
65	Rives Avenue & Firestone Boulevard	AM	0.689	B	0.697	B	0.008	No
		PM	0.743	C	0.748	C	0.005	No
67	Rives Avenue & Imperial Highway [2]	AM	14.9 sec	B	15.1 sec	C	-	No
		PM	14.5 sec	B	15.0 sec	B	-	No
		AM	0.492	[4]	0.496	[4]	0.004	
		PM	0.516	[4]	0.524	[4]	0.008	
66	Rives Avenue & Stewart and Gray Road	AM	0.586	A	0.593	A	0.007	No
		PM	0.703	C	0.709	C	0.006	No
35	Rosemead Boulevard & Telegraph Road [1]	AM	1.040	F	1.048	F	0.008	No
		PM	1.216	F	1.223	F	0.007	No
47	Stewart and Gray Road & Firestone Boulevard	AM	0.612	B	0.645	B	0.033	No
		PM	0.854	D	0.892	D	0.038	No
49	Studebaker Road & Florence Avenue	AM	0.850	D	0.854	D	0.004	No
		PM	0.843	D	0.845	D	0.002	No
42	Woodruff Avenue & Firestone Boulevard (E)	AM	0.618	B	0.618	B	0.000	No
		PM	0.672	B	0.672	B	0.000	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
30	Lakewood Boulevard & Rosecrans Avenue [1]	AM	0.814	D	0.836	D	0.022	No
		PM	0.893	D	0.908	E	0.015	No
17	Lakewood Boulevard & Stewart and Gray Road	AM	0.803	D	0.871	D	0.068	No
		PM	0.895	D	0.957	E	0.062	No
36	Lakewood Boulevard & Vista Del Rosa Street/I-5 Northbound Off-Ramp	AM	0.726	C	0.746	C	0.020	No
		PM	0.917	E	0.941	E	0.024	No
48	Little Lake Road/I-605 Southbound Ramps & Florence Avenue	AM	0.796	C	0.802	D	0.006	No
		PM	0.951	E	0.955	E	0.004	No
69	Old River School Road & Firestone Boulevard & Burns Avenue	AM	0.719	C	0.724	C	0.005	No
		PM	0.970	E	0.977	E	0.007	No
71	Old River School Road & Imperial Highway	AM	0.774	C	0.777	C	0.003	No
		PM	0.776	C	0.780	C	0.004	No
70	Old River School Road & Stewart and Gray Road	AM	0.749	C	0.753	C	0.004	No
		PM	0.751	C	0.753	C	0.002	No
68	Old River School Road/Tecum Road & Florence Avenue	AM	0.859	D	0.861	D	0.002	No
		PM	0.986	E	0.987	E	0.001	No
62	Paramount Boulevard & Alameda Street	AM	0.652	B	0.657	B	0.005	No
		PM	0.701	C	0.710	C	0.009	No
60	Paramount Boulevard & Firestone Boulevard	AM	0.890	D	0.898	D	0.008	No
		PM	1.014	F	1.024	F	0.010	No
59	Paramount Boulevard & Florence Avenue	AM	0.943	E	0.949	E	0.006	No
		PM	1.073	F	1.077	F	0.004	No
64	Paramount Boulevard & Gardendale Street	AM	0.664	B	0.666	B	0.002	No
		PM	0.762	C	0.764	C	0.002	No
57	Paramount Boulevard & I-5 Northbound Ramps	AM	0.760	C	0.760	C	0.000	No
		PM	1.037	F	1.042	F	0.005	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	Future (2020) without Project LOS	Future (2020) with Project Alt. B V/C	Future (2020) with Project Alt. B LOS	Project Increase in V/C	Significant Impact
16	Lakewood Boulevard & Bellflower Boulevard	AM	0.596	A	0.632	B	0.036	No
		PM	0.606	B	0.650	B	0.044	No
104	Lakewood Boulevard & Cherokee Drive	AM	0.520	A	0.549	A	0.029	No
		PM	0.643	B	0.666	B	0.023	No
20	Lakewood Boulevard & Clark Avenue	AM	0.426	A	0.471	A	0.045	No
		PM	0.483	A	0.522	A	0.039	No
75	Lakewood Boulevard & Cleta Street	AM	0.469	A	0.511	A	0.042	No
		PM	0.431	A	0.460	A	0.029	No
76	Lakewood Boulevard & Donovan Street	AM	0.605	B	0.657	B	0.052	No
		PM	0.481	A	0.510	A	0.029	No
41	Lakewood Boulevard & Firestone Boulevard [1]	AM	0.825	D	0.890	D	0.065	No
		PM	0.873	D	0.936	E	0.063	No
39	Lakewood Boulevard & Florence Avenue	AM	0.875	D	0.901	E	0.026	No
		PM	0.938	E	0.964	E	0.026	No
38	Lakewood Boulevard & Gallatin Road	AM	1.091	F	1.112	F	0.021	**Yes**
		PM	1.081	F	1.106	F	0.025	**Yes**
29	Lakewood Boulevard & Gardendale Street	AM	0.911	E	0.923	E	0.012	No
		PM	0.940	E	0.958	E	0.018	No
28	Lakewood Boulevard & I-105 Westbound Ramps/Eastbound Off-Ramp	AM	0.697	B	0.760	C	0.063	No
		PM	0.849	D	0.884	D	0.035	No
37	Lakewood Boulevard & I-5 Southbound Ramps	AM	0.694	B	0.755	C	0.061	No
		PM	0.721	C	0.769	C	0.048	No
21	Lakewood Boulevard & Imperial Highway	AM	0.714	C	0.768	C	0.054	No
		PM	0.850	D	0.890	D	0.040	No
18	Lakewood Boulevard & Landing Center Driveway	AM	0.414	A	0.450	A	0.036	No
		PM	0.610	B	0.672	B	0.062	No

TABLE 8 (continued)
SUMMARY OF INTERSECTION LEVEL OF SERVICE ANALYSIS - FUTURE CONDITIONS - ALTERNATIVE B: EXISTING SPECIFIC PLAN BUILD-OUT

Map #	INTERSECTION	Peak Hour	Future (2020) without Project V/C	LOS	Future (2020) with Project Alt. B V/C	LOS	Project Increase in V/C	Significant Impact
53	Downey Avenue & Alameda Street	AM	0.422	A	0.428	A	0.006	No
		PM	0.468	A	0.475	A	0.007	No
51	Downey Avenue & Firestone Boulevard	AM	0.599	A	0.623	B	0.024	No
		PM	0.809	D	0.822	D	0.013	No
50	Downey Avenue & Florence Avenue	AM	0.677	B	0.678	B	0.001	No
		PM	0.683	B	0.684	B	0.001	No
55	Downey Avenue & Gardendale Street	AM	0.518	A	0.518	A	0.000	No
		PM	0.556	A	0.556	A	0.000	No
54	Downey Avenue & Imperial Highway	AM	0.728	C	0.736	C	0.008	No
		PM	0.621	B	0.629	B	0.008	No
52	Downey Avenue & Stewart and Gray Road	AM	0.596	A	0.612	B	0.016	No
		PM	0.764	C	0.782	C	0.018	No
103	Erickson Avenue & Imperial Highway Eastbound Ramps [3]	AM	8.9 sec	A	8.9 sec	A	-	No
		PM	8.3 sec	A	8.3 sec	A	-	No
		AM	0.286	[4]	0.286	[4]	0.000	
		PM	0.256	[4]	0.256	[4]	0.000	
102	Erickson Avenue & Imperial Highway Westbound Ramps [3]	AM	10.1 sec	B	10.1 sec	B	-	No
		PM	8.6 sec	A	8.6 sec	A	-	No
		AM	0.308	[4]	0.308	[4]	0.000	
		PM	0.241	[4]	0.241	[4]	0.000	
105	Lakewood Boulevard & 3rd Street-Stonewood Street	AM	0.404	A	0.431	A	0.027	No
		PM	0.555	A	0.587	A	0.032	No
40	Lakewood Boulevard & 5th Street	AM	0.843	D	0.874	D	0.031	No
		PM	0.923	E	0.962	E	0.039	No
19	Lakewood Boulevard & Alameda Street	AM	0.382	A	0.426	A	0.044	No
		PM	0.563	A	0.621	B	0.058	No

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	29	0	0.000	N-S(1):	0.218 *
	TH	2.00	197	3,200	0.071	N-S(2):	0.162
	LT	1.00	139	1,600	0.087 *	E-W(1):	0.414 *
Westbound	RT	0.00	97	0	0.000	E-W(2):	0.271
	TH	3.00	992	4,800	0.227		
	LT	1.00	165	1,600	0.103 *	V/C:	0.632
Northbound	RT	0.00	209	1,600	0.131 *	Lost Time:	0.100
	TH	2.00	200	1,600	0.125		
	LT	1.00	146	1,600	0.091		
Eastbound	RT	0.00	243	0	0.000	ICU:	0.732
	TH	3.00	1,252	4,800	0.311 *		
	LT	1.00	71	1,600	0.044	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	92	0	0.000	N-S(1):	0.196
	TH	2.00	184	3,200	0.086 *	N-S(2):	0.200 *
	LT	1.00	152	1,600	0.095	E-W(1):	0.369 *
Westbound	RT	0.00	175	0	0.000	E-W(2):	0.357
	TH	3.00	1,209	4,800	0.288		
	LT	1.00	186	1,600	0.116 *	V/C:	0.569
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	209	3,200	0.101		
	LT	1.00	183	1,600	0.114 *		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.669
	TH	3.00	1,095	4,800	0.253 *		
	LT	1.00	110	1,600	0.069	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ARDIS AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	72	0	0.000	N-S(1):	0.169 *
	TH	1.00	23	1,600	0.059	N-S(2):	0.101
	LT	1.00	78	1,600	0.049 *	E-W(1):	0.393
Westbound	RT	0.00	264	0	0.000	E-W(2):	0.431 *
	TH	3.00	1,087	4,800	0.281 *		
	LT	1.00	114	1,600	0.071	V/C:	0.600
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	1.00	137	1,600	0.120 *		
	LT	1.00	67	1,600	0.042		
Eastbound	RT	0.00	136	0	0.000	ICU:	0.700
	TH	3.00	1,411	4,800	0.322		
	LT	1.00	240	1,600	0.150 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	261	0	0.000	N-S(1):	0.317 *
	TH	1.00	69	1,600	0.206	N-S(2):	0.249
	LT	1.00	236	1,600	0.148 *	E-W(1):	0.408 *
Westbound	RT	0.00	182	0	0.000	E-W(2):	0.365
	TH	3.00	1,212	4,800	0.290		
	LT	1.00	115	1,600	0.072 *	V/C:	0.725
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	1.00	143	1,600	0.169 *		
	LT	1.00	68	1,600	0.043		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.825
	TH	3.00	1,555	4,800	0.336 *		
	LT	1.00	120	1,600	0.075	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DONOVAN STREET/ROSE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	26	0	0.000	N-S(1):	0.369 *
	TH	3.00	889	4,800	0.191	N-S(2):	0.333
	LT	1.00	220	1,600	0.138 *	E-W(1):	0.186 *
Westbound	RT	0.00	44	0	0.000	E-W(2):	0.101
	TH	1.00	94	1,600	0.089		
	LT	0.00	4	1,600	0.003 *	V/C:	0.555
Northbound	RT	0.00	9	0	0.000	Lost Time:	0.100
	TH	3.00	1,100	4,800	0.231 *		
	LT	1.00	227	1,600	0.142		
Eastbound	RT	0.00	124	0	0.000	ICU:	0.655
	TH	1.00	149	1,600	0.183 *		
	LT	0.00	19	1,600	0.012	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	67	0	0.000	N-S(1):	0.369
	TH	3.00	1,409	4,800	0.308 *	N-S(2):	0.431 *
	LT	1.00	154	1,600	0.096	E-W(1):	0.050 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.029
	TH	1.00	16	1,600	0.023		
	LT	0.00	1	1,600	0.001 *	V/C:	0.481
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	3.00	1,293	4,800	0.273		
	LT	1.00	196	1,600	0.123 *		
Eastbound	RT	0.00	34	0	0.000	ICU:	0.581
	TH	1.00	35	1,600	0.049 *		
	LT	0.00	10	1,600	0.006	LOS:	A

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: MARKET STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.295 *
	TH	3.00	1,033	4,800	0.215	N-S(2):	0.215
	LT	1.00	79	1,600	0.049 *	E-W(1):	0.014
Westbound	RT	1.00	309	1,600	0.144 *	E-W(2):	0.144 *
	TH	0.00	0	0	0.000		
	LT	1.00	23	1,600	0.014	V/C:	0.439
Northbound	RT	0.00	116	0	0.000	Lost Time:	0.100
	TH	3.00	1,065	4,800	0.246 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.539
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.380 *
	TH	3.00	1,461	4,800	0.304	N-S(2):	0.304
	LT	1.00	138	1,600	0.086 *	E-W(1):	0.089
Westbound	RT	1.00	457	1,600	0.199 *	E-W(2):	0.199 *
	TH	0.00	0	0	0.000		
	LT	1.00	143	1,600	0.089	V/C:	0.579
Northbound	RT	0.00	123	0	0.000	Lost Time:	0.100
	TH	3.00	1,288	4,800	0.294 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.679
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CENTRAL PLAZA

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.333 *
	TH	3.00	1,083	4,800	0.226	N-S(2):	0.226
	LT	1.00	75	1,600	0.047 *	E-W(1):	0.018
Westbound	RT	1.00	184	1,600	0.068 *	E-W(2):	0.068 *
	TH	0.00	0	0	0.000		
	LT	1.00	29	1,600	0.018	V/C:	0.401
Northbound	RT	0.00	69	0	0.000	Lost Time:	0.100
	TH	3.00	1,305	4,800	0.286 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.501
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.419 *
	TH	3.00	1,482	4,800	0.309	N-S(2):	0.309
	LT	1.00	88	1,600	0.055 *	E-W(1):	0.073
Westbound	RT	1.00	319	1,600	0.144 *	E-W(2):	0.144 *
	TH	0.00	0	0	0.000		
	LT	1.00	117	1,600	0.073	V/C:	0.563
Northbound	RT	0.00	75	0	0.000	Lost Time:	0.100
	TH	3.00	1,670	4,800	0.364 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.663
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: ALAMEDA STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	113	0	0.000	N-S(1):	0.288
	TH	3.00	992	4,800	0.230 *	N-S(2):	0.295 *
	LT	0.00	0	0	0.000	E-W(1):	0.028
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.033 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.328
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,382	4,800	0.288		
	LT	1.00	104	1,600	0.065 *		
Eastbound	RT	1.00	149	1,600	0.028	ICU:	0.428
	TH	0.00	0	0	0.000		
	LT	1.00	52	1,600	0.033 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	86	0	0.000	N-S(1):	0.385
	TH	3.00	1,498	4,800	0.330 *	N-S(2):	0.434 *
	LT	0.00	0	0	0.000	E-W(1):	0.026
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.074 *
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	V/C:	0.508
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	3.00	1,847	4,800	0.385		
	LT	1.00	166	1,600	0.104 *		
Eastbound	RT	1.00	208	1,600	0.026	ICU:	0.608
	TH	0.00	0	0	0.000		
	LT	1.00	118	1,600	0.074 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DISCOVERY ALLEY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN C

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.387 *
	TH	3.00	1,075	4,800	0.224	N-S(2):	0.224
	LT	1.00	141	1,600	0.088 *	E-W(1):	0.022 *
Westbound	RT	1.00	69	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	35	1,600	0.022 *	V/C:	0.409
Northbound	RT	0.00	85	0	0.000	Lost Time:	0.100
	TH	3.00	1,349	4,800	0.299 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.509
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.555 *
	TH	3.00	1,443	4,800	0.301	N-S(2):	0.301
	LT	1.00	233	1,600	0.146 *	E-W(1):	0.088 *
Westbound	RT	1.00	216	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	141	1,600	0.088 *	V/C:	0.643
Northbound	RT	0.00	92	0	0.000	Lost Time:	0.100
	TH	3.00	1,873	4,800	0.409 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.743
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #8 Lakewood Bl/Alameda St [Future w/Project-PM Access Plan B]
******************************************************************************
Average Delay (sec/veh):      1.0   Worst Case Level Of Service:       C[ 17.9]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  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  3  0  0    0  0  2  1  0    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1918     0     0 1548    86     0    0   200     0    0     0
Growth Adj:  1.00 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 1918     0     0 1548    86     0    0   200     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1918     0     0 1548    86     0    0   200     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1918     0     0 1548    86     0    0   200     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   559  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   478  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   478  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.42  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   2.0 xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  17.9 xxxxx xxxx xxxxx
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             17.9           xxxxxx
ApproachLOS:        *                *                C                *
```

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #7 Lakewood Bl/Alameda St [Future w/Project-AM Access Plan B]
******************************************************************************
Average Delay (sec/veh):      0.6   Worst Case Level Of Service:       B[ 12.5]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  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  3  0  0    0  0  2  1  0    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1413     0     0 1015   113     0    0   128     0    0     0
Growth Adj:  1.00 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 1413     0     0 1015   113     0    0   128     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1413     0     0 1015   113     0    0   128     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1413     0     0 1015   113     0    0   128     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   395  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   610  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   610  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.21  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   0.8 xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  12.5 xxxxx xxxx xxxxx
LOS by Move:   *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx 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             12.5           xxxxxx
ApproachLOS:        *                *                B                *
```

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS WITH MITIGATION - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.274
	TH	3.00	981	4,800	0.218 *	N-S(2):	0.377 *
	LT	1.00	130	1,600	0.081	E-W(1):	0.341 *
Westbound	RT	1.00	57	1,600	0.000	E-W(2):	0.241
	TH	2.00	598	3,200	0.187		
	LT	1.00	101	1,600	0.063 *	V/C:	0.718
Northbound	RT	1.00	70	1,600	0.000	Lost Time:	0.100
	TH	3.00	925	4,800	0.193		
	LT	1.00	255	1,600	0.159 *		
Eastbound	RT	1.00	163	1,600	0.000	ICU:	0.818
	TH	2.00	891	3,200	0.278 *		
	LT	1.00	86	1,600	0.054	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	96	0	0.000	N-S(1):	0.429
	TH	3.00	1,216	4,800	0.273 *	N-S(2):	0.507 *
	LT	1.00	235	1,600	0.147	E-W(1):	0.343
Westbound	RT	1.00	29	1,600	0.000	E-W(2):	0.375 *
	TH	2.00	870	3,200	0.272 *		
	LT	1.00	92	1,600	0.058	V/C:	0.882
Northbound	RT	1.00	101	1,600	0.006	Lost Time:	0.100
	TH	3.00	1,354	4,800	0.282		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	1.00	215	1,600	0.000	ICU:	0.982
	TH	2.00	912	3,200	0.285		
	LT	1.00	165	1,600	0.103 *	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: CENTRAL PLAZA

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.332 *
	TH	3.00	1,062	4,800	0.221	N-S(2):	0.221
	LT	1.00	98	1,600	0.061 *	E-W(1):	0.018
Westbound	RT	1.00	184	1,600	0.054 *	E-W(2):	0.054 *
	TH	0.00	0	0	0.000		
	LT	1.00	29	1,600	0.018	V/C:	0.386
Northbound	RT	0.00	69	0	0.000	Lost Time:	0.100
	TH	3.00	1,232	4,800	0.271 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.486
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.440 *
	TH	3.00	1,459	4,800	0.304	N-S(2):	0.304
	LT	1.00	153	1,600	0.096 *	E-W(1):	0.073
Westbound	RT	1.00	319	1,600	0.104 *	E-W(2):	0.104 *
	TH	0.00	0	0	0.000		
	LT	1.00	117	1,600	0.073	V/C:	0.544
Northbound	RT	0.00	75	0	0.000	Lost Time:	0.100
	TH	3.00	1,575	4,800	0.344 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.644
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: MARKET STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.288 *
	TH	3.00	1,012	4,800	0.211	N-S(2):	0.211
	LT	1.00	79	1,600	0.049 *	E-W(1):	0.024
Westbound	RT	1.00	269	1,600	0.119 *	E-W(2):	0.119 *
	TH	0.00	0	0	0.000		
	LT	1.00	38	1,600	0.024	V/C:	0.407
Northbound	RT	0.00	116	0	0.000	Lost Time:	0.100
	TH	3.00	1,032	4,800	0.239 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.507
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.364 *
	TH	3.00	1,453	4,800	0.303	N-S(2):	0.303
	LT	1.00	123	1,600	0.077 *	E-W(1):	0.089
Westbound	RT	1.00	396	1,600	0.171 *	E-W(2):	0.171 *
	TH	0.00	0	0	0.000		
	LT	1.00	143	1,600	0.089	V/C:	0.535
Northbound	RT	0.00	123	0	0.000	Lost Time:	0.100
	TH	3.00	1,254	4,800	0.287 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.635
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DISCOVERY ALLEY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.368 *
	TH	3.00	1,098	4,800	0.229	N-S(2):	0.229
	LT	1.00	118	1,600	0.074 *	E-W(1):	0.022 *
Westbound	RT	1.00	69	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	35	1,600	0.022 *	V/C:	0.390
Northbound	RT	0.00	85	0	0.000	Lost Time:	0.100
	TH	3.00	1,328	4,800	0.294 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.490
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.514 *
	TH	3.00	1,493	4,800	0.311	N-S(2):	0.311
	LT	1.00	183	1,600	0.114 *	E-W(1):	0.088 *
Westbound	RT	1.00	216	1,600	0.021	E-W(2):	0.021
	TH	0.00	0	0	0.000		
	LT	1.00	141	1,600	0.088 *	V/C:	0.602
Northbound	RT	0.00	92	0	0.000	Lost Time:	0.100
	TH	3.00	1,826	4,800	0.400 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.702
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DONOVAN STREET/ROSE AVENUE

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	41	0	0.000	N-S(1):	0.357
	TH	3.00	868	4,800	0.189 *	N-S(2):	0.368 *
	LT	1.00	220	1,600	0.138	E-W(1):	0.218 *
Westbound	RT	0.00	39	0	0.000	E-W(2):	0.135
	TH	1.00	124	1,600	0.104		
	LT	0.00	4	1,600	0.003 *	V/C:	0.586
Northbound	RT	0.00	9	0	0.000	Lost Time:	0.100
	TH	3.00	1,041	4,800	0.219		
	LT	1.00	286	1,600	0.179 *		
Eastbound	RT	0.00	145	0	0.000	ICU:	0.686
	TH	1.00	149	1,600	0.215 *		
	LT	0.00	50	1,600	0.031	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	67	0	0.000	N-S(1):	0.347
	TH	3.00	1,401	4,800	0.306 *	N-S(2):	0.494 *
	LT	1.00	154	1,600	0.096	E-W(1):	0.100
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.112 *
	TH	1.00	77	1,600	0.061 *		
	LT	0.00	1	1,600	0.001	V/C:	0.606
Northbound	RT	0.00	17	0	0.000	Lost Time:	0.100
	TH	3.00	1,188	4,800	0.251		
	LT	1.00	301	1,600	0.188 *		
Eastbound	RT	0.00	42	0	0.000	ICU:	0.706
	TH	1.00	35	1,600	0.099		
	LT	0.00	81	1,600	0.051 *	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: ARDIS AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	72	0	0.000	N-S(1):	0.169 *
	TH	1.00	23	1,600	0.059	N-S(2):	0.101
	LT	1.00	78	1,600	0.049 *	E-W(1):	0.393
Westbound	RT	0.00	264	0	0.000	E-W(2):	0.431 *
	TH	3.00	1,087	4,800	0.281 *		
	LT	1.00	114	1,600	0.071	V/C:	0.600
Northbound	RT	0.00	55	0	0.000	Lost Time:	0.100
	TH	1.00	137	1,600	0.120 *		
	LT	1.00	67	1,600	0.042		
Eastbound	RT	0.00	136	0	0.000	ICU:	0.700
	TH	3.00	1,411	4,800	0.322		
	LT	1.00	240	1,600	0.150 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	261	0	0.000	N-S(1):	0.317 *
	TH	1.00	69	1,600	0.206	N-S(2):	0.249
	LT	1.00	236	1,600	0.148 *	E-W(1):	0.408 *
Westbound	RT	0.00	182	0	0.000	E-W(2):	0.365
	TH	3.00	1,212	4,800	0.290		
	LT	1.00	115	1,600	0.072 *	V/C:	0.725
Northbound	RT	0.00	127	0	0.000	Lost Time:	0.100
	TH	1.00	143	1,600	0.169 *		
	LT	1.00	68	1,600	0.043		
Eastbound	RT	0.00	56	0	0.000	ICU:	0.825
	TH	3.00	1,555	4,800	0.336 *		
	LT	1.00	120	1,600	0.075	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: CLARK AVENUE
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	29	0	0.000	N-S(1):	0.218 *
	TH	2.00	197	3,200	0.071	N-S(2):	0.178
	LT	1.00	139	1,600	0.087 *	E-W(1):	0.414 *
Westbound	RT	0.00	97	0	0.000	E-W(2):	0.271
	TH	3.00	992	4,800	0.227		
	LT	1.00	165	1,600	0.103 *	V/C:	0.632
Northbound	RT	0.00	209	1,600	0.131 *	Lost Time:	0.100
	TH	2.00	175	1,600	0.109		
	LT	1.00	171	1,600	0.107		
Eastbound	RT	0.00	243	0	0.000	ICU:	0.732
	TH	3.00	1,252	4,800	0.311 *		
	LT	1.00	71	1,600	0.044	LOS:	C

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	92	0	0.000	N-S(1):	0.186
	TH	2.00	184	3,200	0.086 *	N-S(2):	0.219 *
	LT	1.00	152	1,600	0.095	E-W(1):	0.369 *
Westbound	RT	0.00	144	0	0.000	E-W(2):	0.357
	TH	3.00	1,240	4,800	0.288		
	LT	1.00	186	1,600	0.116 *	V/C:	0.588
Northbound	RT	0.00	113	0	0.000	Lost Time:	0.100
	TH	2.00	179	3,200	0.091		
	LT	1.00	213	1,600	0.133 *		
Eastbound	RT	0.00	118	0	0.000	ICU:	0.688
	TH	3.00	1,095	4,800	0.253 *		
	LT	1.00	110	1,600	0.069	LOS:	B

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: LANDING CENTER DRIVEWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.306 *
	TH	3.00	1,186	4,800	0.247	N-S(2):	0.268
	LT	1.00	44	1,600	0.028 *	E-W(1):	0.039 *
Westbound	RT	0.88	49	1,400	0.004	E-W(2):	0.004
	TH	0.00	0	0	0.000		
	LT	1.13	63	1,620	0.039 *	V/C:	0.345
Northbound	RT	1.00	60	1,600	0.003	Lost Time:	0.100
	TH	3.00	1,333	4,800	0.278 *		
	LT	1.00	34	1,600	0.021		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.445
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.458 *
	TH	3.00	1,206	4,800	0.251	N-S(2):	0.266
	LT	1.00	167	1,600	0.104 *	E-W(1):	0.164 *
Westbound	RT	1.00	235	1,597	0.043	E-W(2):	0.043
	TH	0.00	0	0	0.000		
	LT	1.00	236	1,443	0.164 *	V/C:	0.622
Northbound	RT	1.00	106	1,600	0.000	Lost Time:	0.100
	TH	3.00	1,698	4,800	0.354 *		
	LT	1.00	24	1,600	0.015		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.722
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	C

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN B

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.274
	TH	3.00	981	4,800	0.218 *	N-S(2):	0.377 *
	LT	1.00	130	1,600	0.081	E-W(1):	0.392 *
Westbound	RT	1.00	57	1,600	0.000	E-W(2):	0.241
	TH	2.00	598	3,200	0.187		
	LT	1.00	101	1,600	0.063 *	V/C:	0.769
Northbound	RT	1.00	70	1,600	0.000	Lost Time:	0.100
	TH	3.00	925	4,800	0.193		
	LT	1.00	255	1,600	0.159 *		
Eastbound	RT	0.00	163	0	0.000	ICU:	0.869
	TH	2.00	891	3,200	0.329 *		
	LT	1.00	86	1,600	0.054	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	96	0	0.000	N-S(1):	0.429
	TH	3.00	1,216	4,800	0.273 *	N-S(2):	0.507 *
	LT	1.00	235	1,600	0.147	E-W(1):	0.410 *
Westbound	RT	1.00	29	1,600	0.000	E-W(2):	0.375
	TH	2.00	870	3,200	0.272		
	LT	1.00	92	1,600	0.058 *	V/C:	0.917
Northbound	RT	1.00	101	1,600	0.006	Lost Time:	0.100
	TH	3.00	1,354	4,800	0.282		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	0.00	215	0	0.000	ICU:	1.017
	TH	2.00	912	3,200	0.352 *		
	LT	1.00	165	1,600	0.103	LOS:	F

* = Critical Movement

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #6 Bellflower Bl/South St [Future (2020) w/ Project - PM Peak Hour]
******************************************************************************
Average Delay (sec/veh):      0.4   Worst Case Level Of Service:       D[ 25.4]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  2  0  0    0  0  1  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20 1371     0     0 1049    15     8    0    26     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   20 1371     0     0 1049    15     8    0    26     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    20 1371     0     0 1049    15     8    0    26     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    20 1371     0     0 1049    15     8    0    26     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.8 xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1064 xxxx xxxxx  xxxx xxxx xxxxx  1782 xxxx   532  xxxx xxxx xxxxx
Potent Cap.:  662 xxxx xxxxx  xxxx xxxx xxxxx    75 xxxx   497  xxxx xxxx xxxxx
Move Cap.:    662 xxxx xxxxx  xxxx xxxx xxxxx    73 xxxx   497  xxxx xxxx xxxxx
Volume/Cap:  0.03 xxxx  xxxx  xxxx xxxx  xxxx  0.11 xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:        0.1 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del: 10.6 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   B    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx  210 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.6 xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 25.4 xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    *     *     *    D     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             25.4           xxxxxx
ApproachLOS:        *                *                D                *
```

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #5 Bellflower Bl/South St [Future (2020) w/ Project - AM Peak Hour]
******************************************************************************
Average Delay (sec/veh):      0.6   Worst Case Level Of Service:       D[ 32.1]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        1  0  2  0  0    0  0  1  1  0    0  0  1! 0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1149     0     0 1129     7    15    0    25     0    0     0
Growth Adj:  1.00 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 1149     0     0 1129     7    15    0    25     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1149     0     0 1129     7    15    0    25     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1149     0     0 1129     7    15    0    25     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   6.8 xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  1707 xxxx   568  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx    84 xxxx   471  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx    84 xxxx   471  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.18 xxxx  0.05  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  172 xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx  0.9 xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 32.1 xxxxx xxxxx xxxx xxxxx
Shared LOS:    *    *     *     *    *     *     *    D     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx             32.1           xxxxxx
ApproachLOS:        *                *                D                *
```

```
------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #4 Bellflower Bl/Aviation Bl [Future (2020) w/ Project - PM Peak Ho
******************************************************************************
Average Delay (sec/veh):      0.4   Worst Case Level Of Service:       C[ 24.3]
******************************************************************************
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:        1  0  2  0  0    0  0  1  1  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12 1367     0     0 1038    24     9    0    26     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   12 1367     0     0 1038    24     9    0    26     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    12 1367     0     0 1038    24     9    0    26     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    12 1367     0     0 1038    24     9    0    26     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.8 xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1062 xxxx xxxxx  xxxx xxxx xxxxx  1758 xxxx   531  xxxx xxxx xxxxx
Potent Cap.:  664 xxxx xxxxx  xxxx xxxx xxxxx    78 xxxx   498  xxxx xxxx xxxxx
Move Cap.:    664 xxxx xxxxx  xxxx xxxx xxxxx    77 xxxx   498  xxxx xxxx xxxxx
Volume/Cap:  0.02 xxxx  xxxx  xxxx xxxx  xxxx  0.12 xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:        0.1 xxxx xxxxx xxxxx xxxx xxxxx   0.4 xxxx   0.2 xxxxx xxxx xxxxx
Stopped Del: 10.5 xxxx xxxxx xxxxx xxxx xxxxx  58.2 xxxx  12.6 xxxxx xxxx xxxxx
LOS by Move:   B    *     *     *    *     *     F    *     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             24.3           xxxxxx
ApproachLOS:        *                *                C                *
```

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

Intersection #3 Lakewood Bl/Central Plaza Dr [Future (2020) w/ Project - PM Peak

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: C[16.7]

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	1966		56		0	1599				0		0		0	0		0		90
Growth Adj:	1.00	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	1966		56		0	1599				0		0		0	0		0		90
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Volume:	0	1966		56		0	1599				0		0		0	0		0		90
Reduct Vol:	0	0		0		0	0				0		0		0	0		0		0
Final Vol.:	0	1966		56		0	1599				0		0		0	0		0		90
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			6.9
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			683
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			396
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	xxxx			396
Volume/Cap:	xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx		xxxx		xxxx	xxxx			0.23
Level Of Service Module:																				
Queue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			0.9
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	xxxx			16.7
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					16.7				
ApproachLOS:	*					*					*					C				

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                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #2 Bellflower Bl/Aviation Bl [Future (2020) w/ Project - AM Peak Ho
******************************************************************************
Average Delay (sec/veh):      0.7   Worst Case Level Of Service:       D[ 34.2]
******************************************************************************
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:        1  0  2  0  0    0  0  1  1  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       3 1161     0     0 1111    11    20    0    25     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    3 1161     0     0 1111    11    20    0    25     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     3 1161     0     0 1111    11    20    0    25     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     3 1161     0     0 1111    11    20    0    25     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:  4.1 xxxx xxxxx xxxxx xxxx xxxxx   6.8 xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:  2.2 xxxx xxxxx xxxxx xxxx xxxxx   3.5 xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1122 xxxx xxxxx  xxxx xxxx xxxxx  1703 xxxx   561  xxxx xxxx xxxxx
Potent Cap.:  630 xxxx xxxxx  xxxx xxxx xxxxx    84 xxxx   476  xxxx xxxx xxxxx
Move Cap.:    630 xxxx xxxxx  xxxx xxxx xxxxx    84 xxxx   476  xxxx xxxx xxxxx
Volume/Cap:  0.00 xxxx  xxxx  xxxx xxxx  xxxx  0.24 xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:        0.0 xxxx xxxxx xxxxx xxxx xxxxx   0.8 xxxx   0.2 xxxxx xxxx xxxxx
Stopped Del: 10.7 xxxx xxxxx xxxxx xxxx xxxxx  60.7 xxxx  13.0 xxxxx xxxx xxxxx
LOS by Move:   B    *     *     *    *     *     F    *     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             34.2           xxxxxx
ApproachLOS:        *                *                D                *
```

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #1 Lakewood Bl/Central Plaza Dr [Future (2020) w/ Project - AM Peak
******************************************************************************
Average Delay (sec/veh):      0.1   Worst Case Level Of Service:       B[ 12.5]
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  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 1463    52     0 1139     0     0    0     0     0    0    28
Growth Adj:  1.00 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 1463    52     0 1139     0     0    0     0     0    0    28
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0 1463    52     0 1139     0     0    0     0     0    0    28
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1463    52     0 1139     0     0    0     0     0    0    28
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9
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   514
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   511
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   511
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   0.2
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  12.5
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             12.5
ApproachLOS:        *                *                *                 B
```

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: DISCOVERY ALLEY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN A

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.410 *
	TH	3.00	1,039	4,800	0.216	N-S(2):	0.216
	LT	1.00	177	1,600	0.111 *	E-W(1):	0.033 *
Westbound	RT	1.00	84	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	52	1,600	0.033 *	V/C:	0.443
Northbound	RT	0.00	102	0	0.000	Lost Time:	0.100
	TH	3.00	1,334	4,800	0.299 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.543
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.574 *
	TH	3.00	1,402	4,800	0.292	N-S(2):	0.292
	LT	1.00	274	1,600	0.171 *	E-W(1):	0.132 *
Westbound	RT	1.00	268	1,600	0.000	E-W(2):	0.000
	TH	0.00	0	0	0.000		
	LT	1.00	211	1,600	0.132 *	V/C:	0.706
Northbound	RT	0.00	111	0	0.000	Lost Time:	0.100
	TH	3.00	1,821	4,800	0.403 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.806
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000	LOS:	D

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: MARKET STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS - ACCESS PLAN A

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.320 *
	TH	3.00	1,021	4,800	0.213	N-S(2):	0.213
	LT	1.00	118	1,600	0.074 *	E-W(1):	0.022
Westbound	RT	1.00	450	1,600	0.208 *	E-W(2):	0.208 *
	TH	0.00	0	0	0.000		
	LT	1.00	35	1,600	0.022	V/C:	0.528
Northbound	RT	0.00	116	0	0.000	Lost Time:	0.100
	TH	3.00	1,065	4,800	0.246 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.628
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	B

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	0	0	0.000	N-S(1):	0.420 *
	TH	3.00	1,414	4,800	0.295	N-S(2):	0.295
	LT	1.00	185	1,600	0.116 *	E-W(1):	0.088
Westbound	RT	1.00	684	1,600	0.312 *	E-W(2):	0.312 *
	TH	0.00	0	0	0.000		
	LT	1.00	140	1,600	0.088	V/C:	0.732
Northbound	RT	0.00	123	0	0.000	Lost Time:	0.100
	TH	3.00	1,338	4,800	0.304 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	0.00	0	0	0.000	ICU:	0.832
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *	LOS:	D

* = Critical Movement

ACCESS LOCATIONS

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: I-605 SOUTHBOUND RAMPS
East/West Street: FIRESTONE BOULEVARD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS WITH MITIGATION

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	603	3,200	0.188 *	N-S(1):	0.079
	TH	0.00	0	0	0.000	N-S(2):	0.188 *
	LT	1.00	127	1,600	0.079	E-W(1):	0.510
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.543 *
	TH	2.00	1,736	3,200	0.543 *		
	LT	2.00	321	2,880	0.111	V/C:	0.731
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000		
	LT	0.00	0	0	0.000 *		
Eastbound	RT	1.00	626	1,600	0.391	ICU:	0.831
	TH	2.00	1,278	3,200	0.399		
	LT	0.00	0	0	0.000 *	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	2.00	518	3,200	0.162	N-S(1):	0.173 *
	TH	0.00	0	0	0.000	N-S(2):	0.162
	LT	1.00	277	1,600	0.173 *	E-W(1):	0.721 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.591
	TH	2.00	1,890	3,200	0.591		
	LT	2.00	177	2,880	0.061 *	V/C:	0.894
Northbound	RT	0.00	0	0	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000 *		
	LT	0.00	0	0	0.000		
Eastbound	RT	1.00	903	1,600	0.564	ICU:	0.994
	TH	2.00	2,113	3,200	0.660 *		
	LT	0.00	0	0	0.000	LOS:	E

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: GALLATIN ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS WITH MITIGATION

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	Y
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	233	0	0.000	N-S(1):	0.562 *
	TH	2.00	1,095	3,200	0.415	N-S(2):	0.462
	LT	1.00	132	1,600	0.083 *	E-W(1):	0.401 *
Westbound	RT	0.00	207	0	0.000	E-W(2):	0.000
	TH	1.00	154	1,600	0.226 *		
	LT	1.00	127	1,600	0.079	V/C:	0.963
Northbound	RT	0.00	104	0	0.000	Lost Time:	0.100
	TH	2.00	1,428	3,200	0.479 *		
	LT	1.00	75	1,600	0.047		
Eastbound	RT	1.00	87	1,600	0.008	ICU:	1.063
	TH	0.59	149	944	0.158		
	LT	1.41	356	2,030	0.175 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	271	0	0.000	N-S(1):	0.672 *
	TH	2.00	1,405	3,200	0.524	N-S(2):	0.570
	LT	1.00	238	1,600	0.149 *	E-W(1):	0.320 *
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.000
	TH	1.00	116	1,600	0.137 *		
	LT	1.00	101	1,600	0.063	V/C:	0.992
Northbound	RT	0.00	95	0	0.000	Lost Time:	0.100
	TH	2.00	1,577	3,200	0.523 *		
	LT	1.00	73	1,600	0.046		
Eastbound	RT	1.00	75	1,600	0.001	ICU:	1.092
	TH	0.65	172	1,046	0.164		
	LT	1.35	354	1,938	0.183 *	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: BELLFLOWER BOULEVARD
East/West Street: IMPERIAL HIGHWAY

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS WITH MITIGATION

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	48	1,600	0.000	N-S(1):	0.536 *
	TH	2.00	879	3,200	0.275	N-S(2):	0.487
	LT	2.00	174	2,880	0.060 *	E-W(1):	0.474
Westbound	RT	0.00	149	0	0.000	E-W(2):	0.570 *
	TH	3.00	1,805	4,800	0.407 *		
	LT	1.00	316	1,600	0.198	V/C:	1.106
Northbound	RT	1.00	190	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,522	3,200	0.476 *		
	LT	2.00	611	2,880	0.212		
Eastbound	RT	1.00	111	1,600	0.000	ICU:	1.206
	TH	3.00	1,326	4,800	0.276		
	LT	1.00	261	1,600	0.163 *	LOS:	F

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	1.00	105	1,600	0.000	N-S(1):	0.552
	TH	2.00	1,383	3,200	0.432 *	N-S(2):	0.585 *
	LT	2.00	427	2,880	0.148	E-W(1):	0.643 *
Westbound	RT	0.00	120	0	0.000	E-W(2):	0.413
	TH	3.00	1,251	4,800	0.286		
	LT	1.00	375	1,600	0.234 *	V/C:	1.228
Northbound	RT	1.00	163	1,600	0.000	Lost Time:	0.100
	TH	2.00	1,294	3,200	0.404		
	LT	2.00	440	2,880	0.153 *		
Eastbound	RT	1.00	202	1,600	0.000	ICU:	1.328
	TH	3.00	1,961	4,800	0.409 *		
	LT	1.00	203	1,600	0.127	LOS:	F

* = Critical Movement

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: STEWART AND GRAY ROAD

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS WITH MITIGATION

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	66	0	0.000	N-S(1):	0.276
	TH	3.00	981	4,800	0.218 *	N-S(2):	0.377 *
	LT	1.00	130	1,600	0.081	E-W(1):	0.341 *
Westbound	RT	1.00	57	1,600	0.000	E-W(2):	0.228
	TH	2.00	598	3,200	0.187		
	LT	1.00	101	1,600	0.063 *	V/C:	0.718
Northbound	RT	1.00	70	1,600	0.000	Lost Time:	0.100
	TH	3.00	936	4,800	0.195		
	LT	1.00	255	1,600	0.159 *		
Eastbound	RT	1.00	163	1,600	0.000	ICU:	0.818
	TH	2.00	891	3,200	0.278 *		
	LT	1.00	65	1,600	0.041	LOS:	D

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	96	0	0.000	N-S(1):	0.439
	TH	3.00	1,216	4,800	0.273 *	N-S(2):	0.507 *
	LT	1.00	235	1,600	0.147	E-W(1):	0.343
Westbound	RT	1.00	29	1,600	0.000	E-W(2):	0.346 *
	TH	2.00	870	3,200	0.272 *		
	LT	1.00	92	1,600	0.058	V/C:	0.853
Northbound	RT	1.00	101	1,600	0.006	Lost Time:	0.100
	TH	3.00	1,401	4,800	0.292		
	LT	1.00	374	1,600	0.234 *		
Eastbound	RT	1.00	215	1,600	0.000	ICU:	0.953
	TH	2.00	912	3,200	0.285		
	LT	1.00	118	1,600	0.074 *	LOS:	E

* = Critical Movement

FUTURE (2020) WITH PROJECT WITH MITIGATION

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                      Level Of Service Computation Report
             2000 HCM 4-Way Stop Method (Base Volume Alternative)
******************************************************************************
Intersection #103 Erickson Av/Imperial Hwy EB Ramps [Future (2020) with Project
******************************************************************************
Cycle (sec):        100                Critical Vol./Cap. (X):        0.156
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):         8.3
Optimal Cycle:        0                Level Of Service:                  A
******************************************************************************
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        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  1  1  0    1  0  2  0  0    1  0  0  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  126   103    85  169     0     7    8    41     0    0     0
Growth Adj:  1.00 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  126   103    85  169     0     7    8    41     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  126   103    85  169     0     7    8    41     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  126   103    85  169     0     7    8    41     0    0     0
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  126   103    85  169     0     7    8    41     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 1.10  0.90  1.00 2.00  0.00  1.00 0.16  0.84  0.00 0.00  0.00
Final Sat.:     0  809   748   635 1395     0   563  111   568     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx 0.16  0.14  0.13 0.12  xxxx  0.01 0.07  0.07  xxxx xxxx  xxxx
Crit Moves:        ****        ****                  ****
Delay/Veh:    0.0  8.4   7.6   9.1  8.5   0.0   8.8  8.0   8.0   0.0  0.0   0.0
Delay Adj:   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  8.4   7.6   9.1  8.5   0.0   8.8  8.0   8.0   0.0  0.0   0.0
LOS by Move:   *    A     A     A    A     *     A    A     A     *    *     *
ApproachDel:       8.0              8.7              8.1           xxxxxx
Delay Adj:        1.00             1.00             1.00            xxxxx
ApprAdjDel:        8.0              8.7              8.1           xxxxxx
LOS by Appr:        A                A                A                *
******************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #102 Erickson Av/Imperial Hwy WB Ramps [Future (2020) with Project

Cycle (sec): 100 Critical Vol./Cap. (X): 0.144
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.6
Optimal Cycle: 0 Level Of Service: A

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				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	2	0 0	0	0	1	1 0	0	0	0	0 0	1	0	0	1 0
Volume Module:																
Base Vol:	81	44	0	0	154	30	0	0	0	87	10	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:	81	44	0	0	154	30	0	0	0	87	10	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	81	44	0	0	154	30	0	0	0	87	10	13				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	81	44	0	0	154	30	0	0	0	87	10	13				
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.:	81	44	0	0	154	30	0	0	0	87	10	13				
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.00	2.00	0.00	0.00	1.67	0.33	0.00	0.00	0.00	1.00	0.43	0.57				
Final Sat.:	619	1351	0	0	1221	244	0	0	0	606	309	402				
Capacity Analysis Module:																
Vol/Sat:	0.13	0.03	xxxx	xxxx	0.13	0.12	xxxx	xxxx	xxxx	0.14	0.03	0.03				
Crit Moves:	****				****					****						
Delay/Veh:	9.2	8.1	0.0	0.0	8.2	8.0	0.0	0.0	0.0	9.3	7.7	7.7				
Delay Adj:	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:	9.2	8.1	0.0	0.0	8.2	8.0	0.0	0.0	0.0	9.3	7.7	7.7				
LOS by Move:	A	A	*	*	A	A	*	*	*	A	A	A				
ApproachDel:	8.8				8.2		xxxxxx			9.0						
Delay Adj:	1.00				1.00		xxxxx			1.00						
ApprAdjDel:	8.8				8.2		xxxxxx			9.0						
LOS by Appr:	A				A		*			A						

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

Intersection #67 Rives Av/Imperial Highway [Future (2020) with Project - PM Peak

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: C[15.5]

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	1	0	0	0	0	1	1	0	3	0	1	0	0	2	1	0
Volume Module:																				
Base Vol:	0	0	75	0	0	141	133	1548	7	0	1183	263								
Growth Adj:	1.00	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	75	0	0	141	133	1548	7	0	1183	263								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	75	0	0	141	133	1548	7	0	1183	263								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	0	0	75	0	0	141	133	1548	7	0	1183	263								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	516	xxxx	xxxx	526	1446	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	509	xxxx	xxxx	502	475	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	509	xxxx	xxxx	502	475	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.15	xxxx	xxxx	0.28	0.28	xxxx	xxxx	xxxx	xxxx	xxxx								
Level Of Service Module:																				
Queue:	xxxxx	xxxx	0.5	xxxxx	xxxx	1.1	1.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Stopped Del:	xxxxx	xxxx	13.3	xxxxx	xxxx	15.0	15.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	B	*	*	B	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:	13.3			15.0			xxxxxx			xxxxxx										
ApproachLOS:	B			B			*			*										

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                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #58 Paramount Bl/I-5 Southbound Ramps [Future (2020) with Project -
******************************************************************************
Average Delay (sec/veh):    904.0   Worst Case Level Of Service:       F[30604.4
******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Ignore           Include          Ignore           Include
Lanes:        0  0  2  0  1    1  0  2  0  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1664   266   290 2066     0   122    0   492     0    0     0
Growth Adj:  1.00 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 1664   266   290 2066     0   122    0   492     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0 1664     0   290 2066     0   122    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1664     0   290 2066     0   122    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   6.8 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1664 xxxx xxxxx  3478 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   392 xxxx xxxxx     5 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   392 xxxx xxxxx     2 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.74 xxxx  xxxx 61.16 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx   5.9 xxxx xxxxx  17.6 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx  36.2 xxxx xxxxx 30604 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     E    *     *     F    *     *     *    *     *
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           xxxxxx
ApproachLOS:        *                *                F                *
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                      Level Of Service Computation Report
             2000 HCM 4-Way Stop Method (Base Volume Alternative)
********************************************************************************
Intersection #103 Erickson Av/Imperial Hwy EB Ramps [Future (2020) with Project
********************************************************************************
Cycle (sec):        100                Critical Vol./Cap. (X):        0.214
Loss Time (sec):      0 (Y+R =  4 sec) Average Delay (sec/veh):         8.9
Optimal Cycle:        0                Level Of Service:                  A
********************************************************************************
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        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  1  1  0    1  0  2  0  0    1  0  0  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  152    40    52  226     0    22    9   139     0    0     0
Growth Adj:  1.00 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  152    40    52  226     0    22    9   139     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  152    40    52  226     0    22    9   139     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  152    40    52  226     0    22    9   139     0    0     0
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  152    40    52  226     0    22    9   139     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.00 1.58  0.42  1.00 2.00  0.00  1.00 0.06  0.94  0.00 0.00  0.00
Final Sat.:     0 1078   293   597 1304     0   565   42   649     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     xxxx 0.14  0.14  0.09 0.17  xxxx  0.04 0.21  0.21  xxxx xxxx  xxxx
Crit Moves:        ****             ****                     ****
Delay/Veh:    0.0  8.6   8.4   9.1  9.1   0.0   9.0  8.9   8.9   0.0  0.0   0.0
Delay Adj:   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  8.6   8.4   9.1  9.1   0.0   9.0  8.9   8.9   0.0  0.0   0.0
LOS by Move:   *    A     A     A    A     *     A    A     A     *    *     *
ApproachDel:       8.6              9.1              8.9           xxxxxx
Delay Adj:        1.00             1.00             1.00            xxxxx
ApprAdjDel:        8.6              9.1              8.9           xxxxxx
LOS by Appr:        A                A                A                *
********************************************************************************
```

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #102 Erickson Av/Imperial Hwy WB Ramps [Future (2020) with Project

Cycle (sec): 100 Critical Vol./Cap. (X): 0.399
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 0 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:	Stop Sign				Stop Sign				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 2	0	0	0	0 1	1	0	0	0 0	0	0	1	0 0	1	0
Volume Module:																
Base Vol:	59	128	0	0	34	6	0	0	0	252	12	66				
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Initial Bse:	59	128	0	0	34	6	0	0	0	252	12	66				
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
PHF Volume:	59	128	0	0	34	6	0	0	0	252	12	66				
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0				
Reduced Vol:	59	128	0	0	34	6	0	0	0	252	12	66				
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.:	59	128	0	0	34	6	0	0	0	252	12	66				
Saturation Flow Module:																
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Lanes:	1.00	2.00	0.00	0.00	1.70	0.30	0.00	0.00	0.00	1.00	0.15	0.85				
Final Sat.:	573	1246	0	0	1054	190	0	0	0	632	120	657				
Capacity Analysis Module:																
Vol/Sat:	0.10	0.10	xxxx	xxxx	0.03	0.03	xxxx	xxxx	xxxx	0.40	0.10	0.10				
Crit Moves:	****				****					****						
Delay/Veh:	9.4	8.8	0.0	0.0	8.4	8.2	0.0	0.0	0.0	11.8	7.7	7.7				
Delay Adj:	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:	9.4	8.8	0.0	0.0	8.4	8.2	0.0	0.0	0.0	11.8	7.7	7.7				
LOS by Move:	A	A	*	*	A	A	*	*	*	B	A	A				
ApproachDel:	9.0				8.3		xxxxxx			10.9						
Delay Adj:	1.00				1.00		xxxxx			1.00						
ApprAdjDel:	9.0				8.3		xxxxxx			10.9						
LOS by Appr:	A				A		*			B						

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #67 Rives Av/Imperial Highway [Future (2020) with Project - AM Peak
******************************************************************************
Average Delay (sec/veh):      1.5   Worst Case Level Of Service:       C[ 15.1]
******************************************************************************
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  1    0  0  0  0  1    1  0  3  0  1    0  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0    27     0    0   176    99 1150    19     0 1176   196
Growth Adj:  1.00 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    27     0    0   176    99 1150    19     0 1176   196
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    27     0    0   176    99 1150    19     0 1176   196
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0    27     0    0   176    99 1150    19     0 1176   196
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx   6.9   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   383  xxxx xxxx   490  1372 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   621  xxxx xxxx   529   507 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   621  xxxx xxxx   529   507 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.04  xxxx xxxx  0.33  0.20 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx   0.1 xxxxx xxxx   1.4   0.7 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx  11.1 xxxxx xxxx  15.1  13.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     B     *    *     C     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:      11.1             15.1           xxxxxx           xxxxxx
ApproachLOS:        B                C                *                *
```

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------------------------------------------------------------------------------
------------------------------------------------------------------------------
                      Level Of Service Computation Report
            2000 HCM Unsignalized Method (Base Volume Alternative)
******************************************************************************
Intersection #58 Paramount Bl/I-5 Southbound Ramps [Future (2020) with Project -
******************************************************************************
Average Delay (sec/veh):     40.7   Worst Case Level Of Service:       F[2113.3]
******************************************************************************
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:           Ignore           Include          Ignore           Include
Lanes:        0  0  2  0  1    1  0  2  0  0    1  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1794   529   187 1247     0    61    0   194     0    0     0
Growth Adj:  1.00 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 1794   529   187 1247     0    61    0   194     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:     0 1794     0   187 1247     0    61    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0 1794     0   187 1247     0    61    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   4.1 xxxx xxxxx   6.8 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   2.2 xxxx xxxxx   3.5 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  1794 xxxx xxxxx  2518 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   349 xxxx xxxxx    24 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   349 xxxx xxxxx    14 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.54 xxxx  xxxx  4.46 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx   3.0 xxxx xxxxx   8.6 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx  26.6 xxxx xxxxx  2113 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:   *    *     *     D    *     *     F    *     *     *    *     *
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           2113.3           xxxxxx
ApproachLOS:        *                *                F                *
```

Project: TIERRA LUNA SPECIFIC PLAN PROJECT (SUPPLEMENTAL ANALYSIS)

North/South Street: LAKEWOOD BOULEVARD
East/West Street: 3RD STREET-STONEWOOD STREET

Scenario: FUTURE (2020) WITH PROJECT CONDITIONS

Thru Lane:	1600 vph	N-S Split Phase :	N
Left-Turn Lane:	1600 vph	E-W Split Phase :	N
Dual LT Penalty:	10 %	Lost Time (% of cycle) :	10

Peak Period: AM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	10	0	0.000	N-S(1):	0.289 *
	TH	3.00	1,175	4,800	0.247	N-S(2):	0.269
	LT	1.00	35	1,600	0.022 *	E-W(1):	0.041 *
Westbound	RT	1.00	12	1,600	0.000	E-W(2):	0.036
	TH	1.00	0	1,600	0.030		
	LT	0.00	48	1,600	0.030 *	V/C:	0.330
Northbound	RT	1.00	68	1,600	0.013	Lost Time:	0.100
	TH	3.00	1,282	4,800	0.267 *		
	LT	1.00	35	1,600	0.022		
Eastbound	RT	0.00	9	0	0.000	ICU:	0.430
	TH	1.00	0	1,600	0.011 *		
	LT	0.00	9	1,600	0.006	LOS:	A

Peak Period: PM PEAK HOUR

Approach	Movement	Lanes	Volume	Capacity	V/C	ICU ANALYSIS	
Southbound	RT	0.00	6	0	0.000	N-S(1):	0.385 *
	TH	3.00	1,398	4,800	0.293	N-S(2):	0.337
	LT	1.00	137	1,600	0.086 *	E-W(1):	0.132 *
Westbound	RT	1.00	100	1,600	0.000	E-W(2):	0.127
	TH	1.00	4	1,600	0.123		
	LT	0.00	193	1,600	0.121 *	V/C:	0.517
Northbound	RT	1.00	253	1,600	0.038	Lost Time:	0.100
	TH	3.00	1,433	4,800	0.299 *		
	LT	1.00	71	1,600	0.044		
Eastbound	RT	0.00	10	0	0.000	ICU:	0.617
	TH	1.00	0	1,600	0.011 *		
	LT	0.00	7	1,600	0.004	LOS:	B

* = Critical Movement