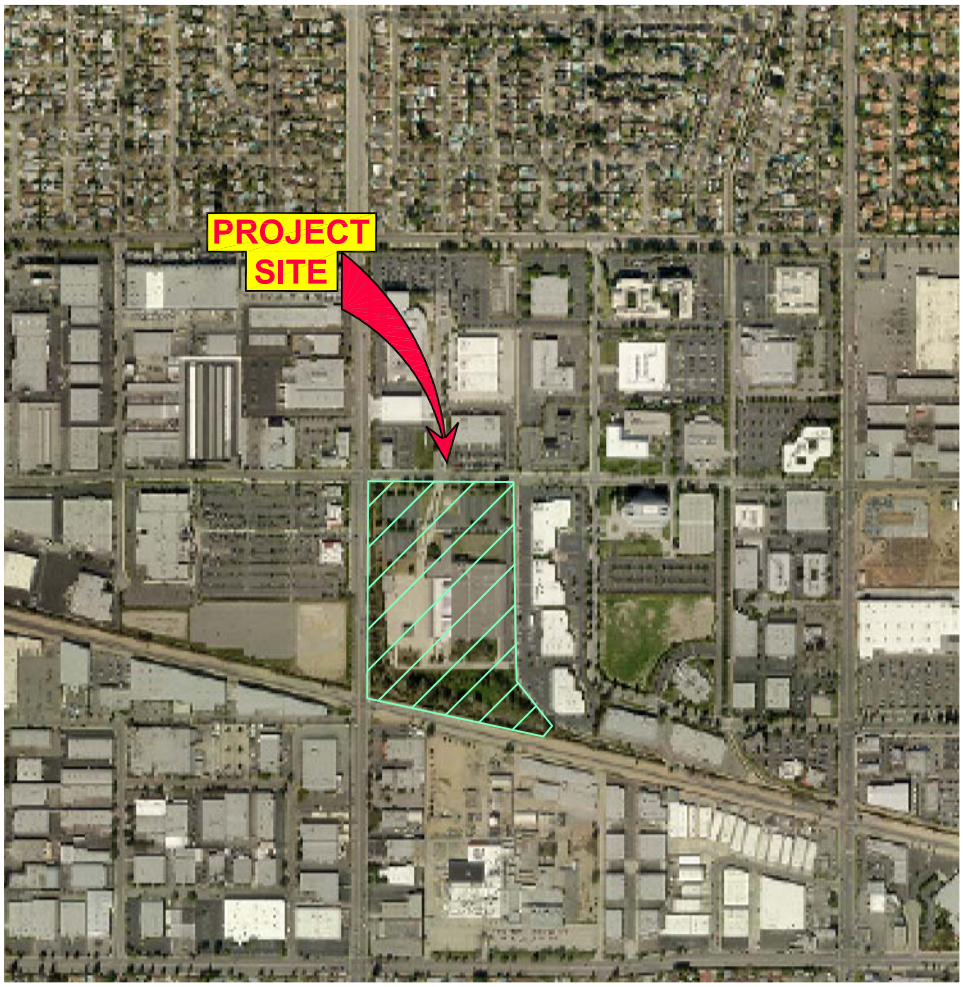
Overland Traffic Consultants, Inc.

TRAFFIC IMPACT ANALYSIS FOR MIXED - USE PROJECT

Located at 20000 Prairie Street
in the City of Los Angeles



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January 2014
revised October 2014

TRAFFIC IMPACT ANALYSIS FOR A PROPOSED MIXED – USE DEVELOPMENT

Located at southeast corner of

Winnetka Avenue and Prairie Street
In the City of Los Angeles

Prepared for:

Sky Tech Management & Construction

Prepared by:

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January 2014
Revised October 2014

EXECUTIVE SUMMARY

Purpose of Study

This report documents the results of a study evaluating potential traffic impacts created by a mixed-use project and recommends traffic mitigation measures to accommodate the future development. The study addresses traffic patterns, vehicle routing, roadway capacity and parking requirements.

The proposed project consisting of 700 apartments, 11,000 square feet of commercial retail use, 3,000 square feet of restaurant, 43,000 square feet of creative office and 212,815 square feet of light industrial to be used as a corporate headquarters for MGA Entertainment. The development is located at the southeast corner of Winnetka Avenue and Prairie Street. The project site is shown on the following aerial photograph.

Traffic Generation

It is estimated that the project would generate 8,157 daily vehicle trips with 788 morning and 860 afternoon peak hour trips. It is important to note that no traffic credits are available for the prior LA Times industrial building located on-site. Parking will be provided by 1,467 parking spaces in several parking structures and surface lots. Access to the parking is via two driveways on Prairie Street and one signalized driveway on Winnetka Avenue.

Project's Potential Traffic Impacts

The focus of this traffic study is to evaluate the potential traffic impact created by the development of the mixed - use project. This traffic study provides two baseline scenarios to evaluate the project's traffic impacts: (1) existing traffic conditions plus the project traffic volume ("Existing + Project") and (2) future 2019 cumulative traffic conditions plus the project traffic volume ("Future 2019 Cumulative + Project").

Project Traffic Impacts (Existing + Project)

Using criteria in the City of Los Angeles Traffic Study Guidelines, it has been determined that the changes in the existing traffic conditions caused by the project's traffic flow will significantly impact two study intersections:

1. Winnetka Avenue and Parthenia Street (#6) is significantly impacted during the weekday morning peak hour prior to implementing traffic mitigation measures.
2. The intersection of Corbin Avenue and Plummer Street (#8) is also significantly impacted during the weekday morning peak hour prior to implementing traffic mitigation measures.

Private Shuttle

To mitigate the project's existing traffic impacts, it is recommended that the project operate a peak hour private shuttle. This shuttle will be available to serve the site during mid-day and evening hours to provide residents and employees more mobility choices through out the day. This will allow residents and employees to be car-free if desired.

The shuttle route is targeted to Warner Center, the Metro Orange Line and the Chatsworth Metrolink Station. The peak hour routes will allow residents and employees to ride shuttles for work and non-work trips and provide connections to train and bus stations/stops at the Pierce College station, the Warner Center Owensmouth Transit Center and the Metro Chatsworth Orange Line / Metro link Station.

Street Improvements

In addition to the private shuttle, several street improvements have been selected to address localized traffic congestion in the study area. Listed below are the recommended roadway traffic mitigation measures.

1. Winnetka Avenue and Parthenia Street (#6) - It is recommended that Parthenia Street be restriped for a westbound right-turn only lane Street at Winnetka Avenue. Traffic signals will be upgraded to accommodate the new right turn lane and brought up to current traffic signal standards.

2. Corbin Avenue and Plummer Street (#8) - It is recommended that Corbin Avenue be restriped for a southbound right-turn only lane at Plummer Street. Traffic signals will be upgraded to accommodate the new right turn lane and brought up to current traffic signal standards.
3. Install a new traffic signal at the intersection of Winnetka Avenue and MGA Winnetka Avenue driveway.

Project Traffic Impacts (Future 2019 Cumulative + Project)

Based on the future traffic conditions analyses for 2019, five study intersections are significantly impacted by the project's traffic. The intersections and impacted time periods are:

1. Winnetka Avenue and Nordhoff Street (#5) during the morning peak hour;
2. Winnetka Avenue and Parthenia Street (#6) during both the morning and afternoon peak hours;
3. Winnetka Avenue and Roscoe Boulevard (#7) during the morning peak hour;
4. Corbin Avenue and Plummer Street (#8) during both the morning and afternoon peak hours; and
5. Corbin Avenue and Prairie Street (#9) during the morning peak hour.

Future cumulative traffic impacts with an expanded MGA Transportation Demand Management (TDM) program and the roadway improvements previously described will reduce the significant traffic impacts to less than significance at 3 of the 5 intersections. Significant traffic impacts, however, will remain at the intersections of Corbin Avenue and Plummer Street and at Corbin Avenue and Prairie Street. Listed below are the recommended traffic mitigation measures.

Transportation Demand Management (TDM)

Although roadway improvements will continue to be an important strategy for providing mobility, the focus of the transportation mitigation plan for the MGA mixed – use project is to develop a congestion avoidance program through trip reductions while maintaining and providing transportation mobility.

The MGA TDM program is designed to maximize the people-moving capability by increasing the number of person in a vehicle, or by influencing the time of, or need to, travel. To accomplish these types of changes in travel behavior, the TDM program elements must rely on incentives or disincentives to make these shifts in behavior attractive.

Employer – based TDM programs often are the most effective in reducing trips. TDM strategies can be chosen to meet a relatively narrow set of worksite and commuter demographic characteristics. Information dissemination can be targeted precisely to the employees and residents most likely to use the alternatives, and offered in a personalized manner that eases the transition to a different and possibly unfamiliar travel mode. Furthermore, it is very important the MGA establishes a "corporate culture" that affirms employees and residents decisions to use a commuting alternative.

Although employer support measures are very important in supporting TDM alternatives, they are not instruments that, in themselves, actually change behavior. A truly effective TDM program will implement incentives and disincentives that are clearly perceived by the individual making the decision to travel.

I. Improved Transit Alternatives

1. Private MGA Transit (shuttle service)

Continue to operate the private shuttle service targeted specifically to the needs of the MGA residents and employees. It is recommended that MGA provide a fixed-route shuttle route providing 30 - minute headways during the morning and afternoon peak hour to the nearby transit stations and work centers. Mid-day and off-peak schedules will be more demand-responsive providing viable and convenient transit options for MGA residents and employees.

- Warner Center / Chatsworth Orange Line Route - traveling along Winnetka Avenue to the Orange Line Pierce College Station then along Victory Boulevard to the Warner Center Station and lastly along Canoga Avenue to the Chatsworth Station, returning to the MGA site along Nordhoff Street.

- Shuttles will be equipped with bike racks to promote the bike usage program. Note that DASH service does not currently provide bike racks.

II. TDM Alternatives (carpool and bike with site improvements)

1. Carpool program
   - MGA contracts with local taxi company to provide a guaranteed ride home for late workers, workers who miss their ride or need to attend to a mid-day emergency.
   - MGA provides preferential parking for carpoolers and vanpoolers.
   - MGA assists in providing one-on-one employee and resident assistance in forming and maintaining rideshare arrangement.
2. Bicycle program
   - MGA will provide support facilities and services, such as bike parking and storage facilities, bike repair facilities, changing and shower facilities.
   - MGA will provide areas for bike displays from bicycle manufacturers and local shops at periodic bike fairs and promotional events.
3. MGA Multi-modal Site Improvements

A common objection to ridesharing is the need to have a car during the day to perform personal or job-related errands.

- MGA will provide on-site Day Care, retail and employee cafeteria to reduce trip making.
- MGA will establish a satellite remote work center for MGA residents who are non-MGA employees but choose to telecommute.
- MGA will provide an on-site designated rideshare friendly shuttle plaza and loading area.

III. Incentives and Disincentives

1. MGA Support Measures
   - o Corporate commitment to the overall level of support for the TDM program. Promote a corporate culture to reflect the willingness to devote resources to the program and provide tangible benefits to commute alternatives.
   - o Provide on-site TDM marketing features to disseminate information thru bulletin boards, new employee / resident orientation, news letters, promotional fairs, etc.
   - o Staff a TDM Coordinator to manage the programs development, implementation, marketing, administration and program evaluation. Services include personalize commute planning assistance.
   - o Support promotional activities such as fairs, clubs and awards that can increase commuters' interest in ridesharing.
2. Parking Management – Price of parking is the single most influential factor determining the share of commuters who drove to work. A reduced parking supply and chase-out parking at work can dramatically alter travel behavior and reduce solo drive-alone travel patterns.
   - o Provide monthly stipend for employees to use on whatever travel mode they wish, including driving alone. Implemented thru the daily cash out credit / debit tracking employee identification card.

     Daily Cash Out Program gives commuters a new choice, rewards the alternative to solo driving, reduces trips and treats all commuters equally. MGA will continue to offer subsidized parking but will broaden the offer to include the option to take the cash equivalent of the parking subsidy instead of the parking subsidy itself. The forgone cash mean

drivers in effect pay for their “free” parking. Parking cash out is a buy-back not a take-way, it rewards commuters for choosing the alternate to driving to work alone, rather than punishing them for solo driving. For example: under the program, MGA employees can park free at work on any day, but any commuter who brings a car will scan an employee ID card to enter the garage and receive a debit. All employees automatically earn a credit each day when they use their employee identification card to enter the office building. These accumulated credits and debits are tallied each month to determine the employee’s cash or cash equivalent transportation allowance. Each member of a carpool / vanpool receives a credit for reporting to work and the one whose identification card activates the parking lot gate incurs the debit, which can be credited back via carpool/ vanpool registration program.

3. Alternative Work Arrangements

Alternative Work Hours can reduce the number of days and thus the number of miles traveled commuting, and shift employees travel to a time outside normal daily peak periods. Because of these two factors, the alternative work hours program can be effective in reduce traffic congestion and air pollution.

- Staggered work hours – In a staggered work hour program, MGA employee’s start work times are scheduled at intervals so that different groups of employees (often by departments) begin work at different times.
- Compressed work hours – Compressed work week programs allow employees to work a full work week in fewer than the usual five days. The most common are: 4/10 with four 10-hour days; 3/36 with three 12-hour days and 9/80 with eight 9-hour days and one 8-hour day.

- Flexible work hours (flextime) – Flextime allows employees to set their own arrival and departure times within core hours during which all employees must be in the office.

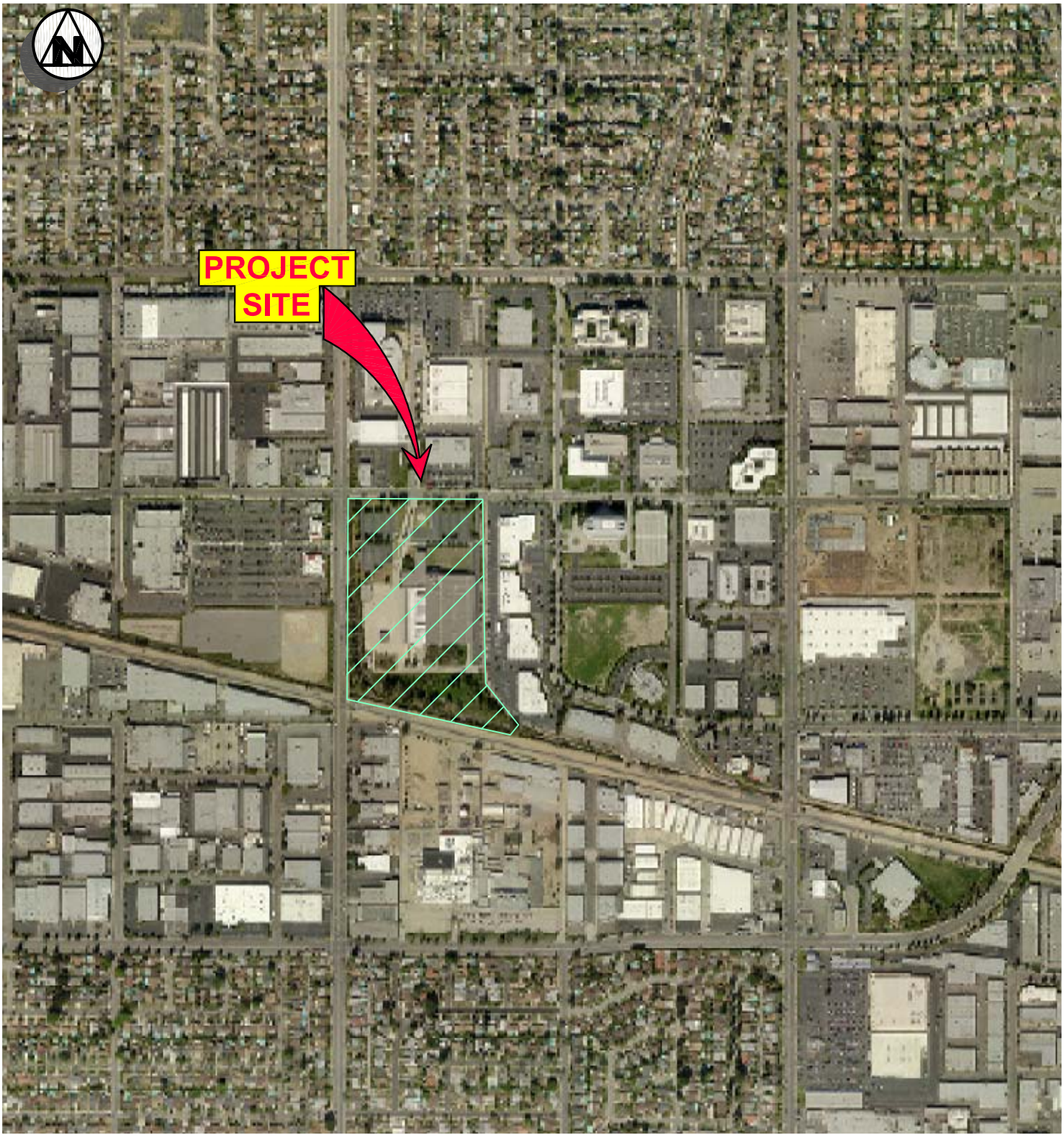
Trip cap monitoring agreement

The success of the TDM plan is dependent on the type and level of TDM strategies implemented. The key to developing an effective program is to determine what strategies the employees and residents of the MGA mixed -use project would be able to use and then build the program incentives around those strategies. . It is recommend that a 1 year trip count be conducted after occupancy of the MGA Corporate Headquarters building to establish the true impact and assist in targeting the most effective TDM measures with a second trip count after occupancy of the first 350 apartment units.

Note that large trip reductions may not be entirely necessary. The trip generation rates used by LADOT for this study are mainly based on the square footage for corporate headquarters. MGA will also have limited assembly, showroom space and production facilities. As a result the employee density is much lower and may generated significantly less traffic and less impact that estimated by LADOT's trip generation estimates based on gross floor area. It is recommend that a 1 year trip count evaluation at the projects driveways and TDM survey be conducted to establish the true impact and assist in targeting the most effective TDM measures.

Peak Parking Demand

Based on recommendations from the ULI database, the amount of parking needed for this mix – use project is primarily affected by the proportion of reserved parking for the residential units and the peak parking demand of the office uses. The peak parking demand estimated by this evaluation represents the total parking demand to serve the needs of customers, visitors and employees. The parking demand calculated for the MGA mixed – use project is 1,334 parking spaces using the ULI parking demand model. The project is providing 1,467 parking spaces.



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SETTING

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CHAPTER 1 INTRODUCTION

An evaluation of the potential traffic impacts created by the proposed project has been conducted as part of the project's environmental review. This traffic study was prepared using procedures adopted by the City of Los Angeles Department of Transportation (LADOT) to evaluate the potential traffic impacts of the proposed project. The impact of a development project is determined by comparing the changes in the traffic conditions at selected study intersections. The amount of new traffic added to an intersection by the proposed project determines the significance of the project traffic impact.

Potential traffic impacts caused by a development project that exceed limits established by the City of Los Angeles are deemed significant traffic impacts. All significantly impacted intersections are then evaluated for possible traffic mitigation measures.

The traffic impact of the proposed development has been calculated using the LADOT Critical Movement Analysis (CMA) method. The CMA analysis method quantifies the operating conditions of an intersection using a ratio of peak hour traffic volume to intersection capacity (V/C). According to the standards adopted by the City of Los Angeles, a traffic impact is considered significant if the related increase in the V/C value equals or exceeds the thresholds for each Level of Service (LOS) as shown in the table below.

City of Los Angeles Significance Thresholds

LOS	Final V/C Value	Increase in V/C Value
C	0.701 - 0.800	+ 0.040
D	0.801 - 0.900	+ 0.020
E and F	> 0.900	+ 0.010 or more

Eleven study intersections have been selected by LADOT for the project's traffic impact analysis. Only signalized intersections are included in the traffic impact analysis. The existing intersection of Prairie Street and Penfield Avenue has been evaluated for the potential installation of a new traffic signal.

1. Mason Avenue and Plummer Street;
2. Winnetka Avenue and Lassen Street;
3. Winnetka Avenue and Plummer Street;
4. Winnetka Avenue and Prairie Street;
5. Winnetka Avenue and Nordhoff Street;
6. Winnetka Avenue and Parthenia Street;
7. Winnetka Avenue and Roscoe Boulevard;
8. Corbin Avenue and Plummer Street;
9. Corbin Avenue and Prairie Street; and,
10. Corbin Avenue and Nordhoff Place;
11. Corbin Avenue and Nordhoff Street/Nordhoff Way; and
12. Penfield Avenue and Prairie Street (for traffic signal warrant).

The analysis of traffic flow has been conducted for existing and for future conditions. The future analysis documents traffic conditions with the proposed project and other potential land development projects near the study area. Pursuant to the LADOT's traffic study guidelines, the following steps have been taken to develop the traffic volume estimates:

(a) Existing traffic;

(b) Existing traffic + project traffic;

(c) Traffic in (b) + traffic mitigation, if necessary;

(d) Existing traffic + ambient growth to study year (added 1.5% per year);

(e) Traffic in (d) + other development "related" projects (without project scenario);

(f) Traffic in (e) + project traffic (with project scenario); and

(g) Traffic in (f) + traffic mitigation, if necessary.

CHAPTER 2 PROJECT DESCRIPTION

The project being proposed is a mixed-use project consisting of 700 apartment dwelling units, 11,000 square feet of commercial retail use, 3,000 square feet of restaurant, 43,000 square feet of creative office and 212,815 square feet of light industrial to be used as a corporate headquarters for MGA Entertainment. It is important to note that no traffic credits have been given for the prior LA Times industrial building. The project site is located at the southeast corner of Winnetka Avenue and Prairie Street, as shown in Figure 1.

A total of 1,467 parking spaces and a minimum of 274 bike parking spaces are being provided. Locations for additional bike parking have been identified at the southeast and southwest corners of the site. Access to the vehicular parking is via two driveways on Prairie Street and one signalized driveway on Winnetka Avenue. A new traffic signal is proposed for the project's Winnetka Avenue driveway. Figure 2 illustrates the proposed building locations, parking and access.

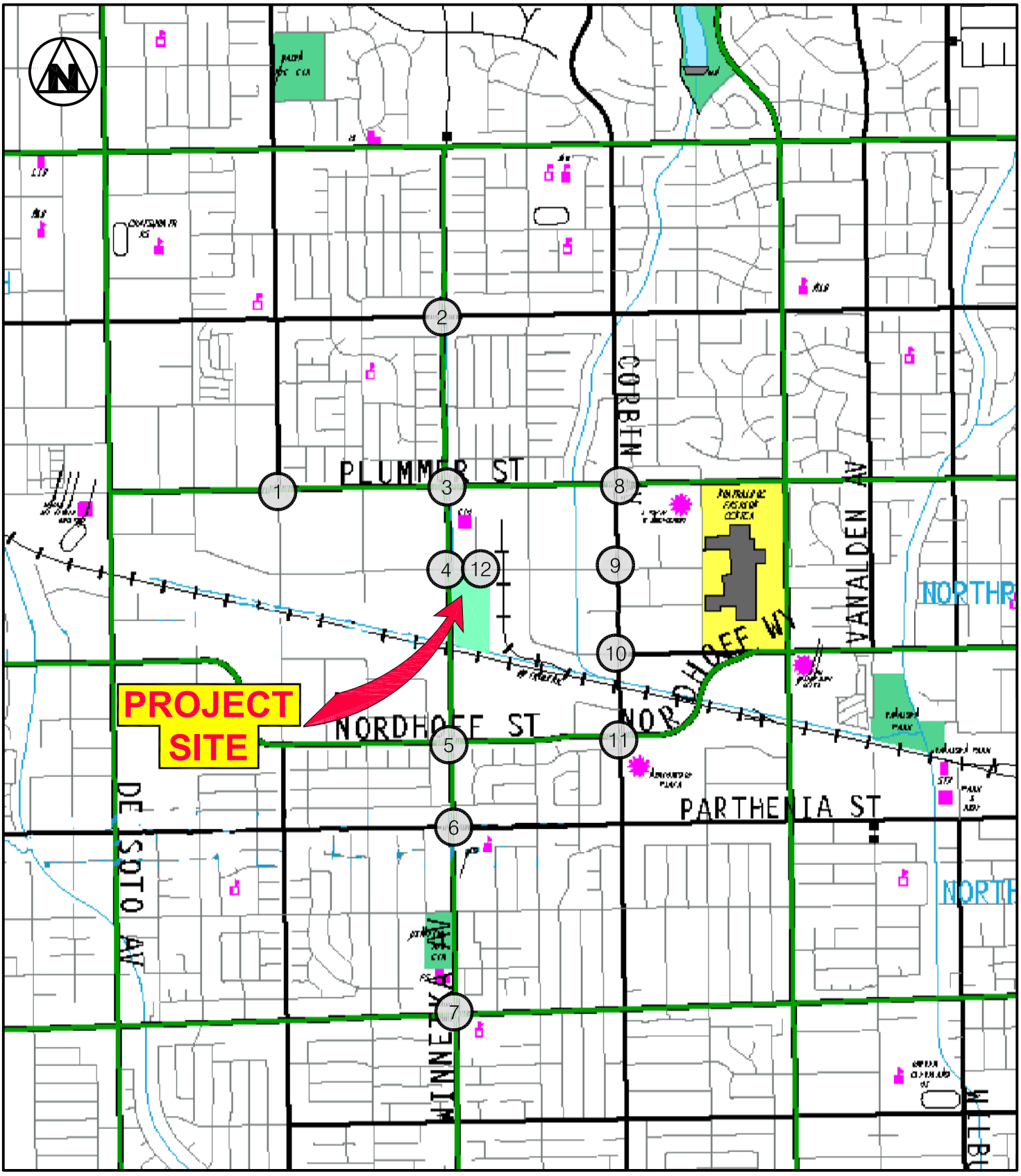

FIGURE 1

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PROJECT LOCATION AND STUDY INTERSECTIONS

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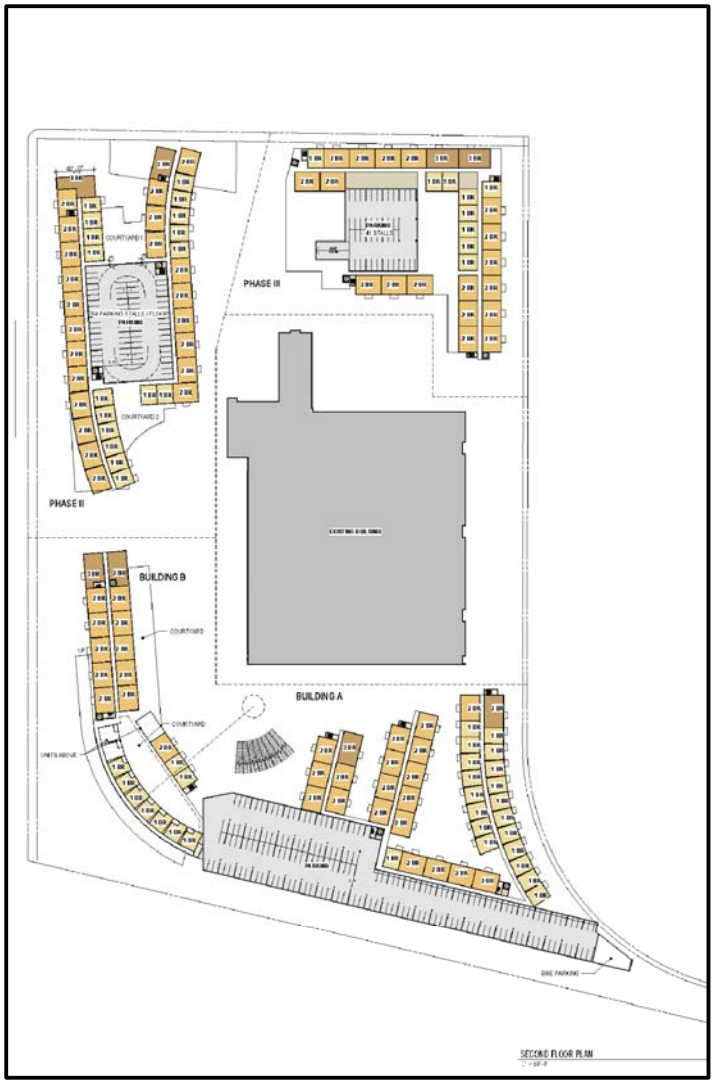

GROUND FLOOR

UPPER LEVELS

FIGURE 2

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CONCEPTUAL PROJECT SITE PLAN

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CHAPTER 3 ENVIRONMENTAL SETTING

Land Use

The project is located in the Chatsworth – Porter Ranch Community plan area located approximately 22 miles northwest of downtown Los Angeles. Industrial land uses surround the project site, with single -family residential land uses further to the north and south. Community land use maps for the study area are provided in Appendix A.

Transportation Facilities

The streets within the study area are under the jurisdiction of the City of Los Angeles. A map illustrating the community plan highway designations and Los Angeles street standards are included in Appendix B. The nearest regional facility serving the site is the Ronald Reagan Freeway (State Highway 118), which is under the jurisdiction of the California Department of Transportation (Caltrans).

In addition to collecting traffic volume data, field surveys were conducted to determine the roadway and intersection geometry and traffic signal operations. All of the intersections studied are controlled by traffic signals. Figure 3 illustrates the study locations, type of intersection traffic control and lane configurations. A brief description of the adjacent roadway facilities is provided below with street plans of all the study intersections and roadway geometrics provided in Appendix B.

The Ronald Reagan Freeway (State Highway 118) is located approximately 2.5 miles north of the project site. This east - west freeway provides four mixed-flow lanes and one high-occupancy lane (HOV) in each direction. Full access to the freeway is provided from De Soto Avenue and Tampa Avenue. Average daily traffic volume on the 118 Freeway east of De Soto Avenue is approximately 150,000 vehicles per day (ADT). Current non-directional peak hour traffic volume on the 118 Freeway is approximately 14,000 VPH per Caltrans. As reported by the Los Angeles County Congestion

Management Program (CMP), the 118 Freeway at Woodley Avenue is operating at LOS E in the morning peak hour and LOS D in the afternoon peak hour.

Winnetka Avenue, adjacent to the project site is a north-south class II major highway. Winnetka Avenue provides two lanes in the each direction, median channelization and bike lanes between Devonshire Street and Gault Street. The posted speed limit is 40 mph at Prairie Street. The street is developed with residential uses north of Plummer Street and industrial uses south of Plummer Street. The Pacific Theater complex and supporting retail center is located adjacent to the project site along the west side of Winnetka Avenue south of Prairie Street. On street parking is not allowed adjacent to the project site.

Corbin Avenue is a north-south secondary highway. The street is also developed with residential uses north of Plummer Street and industrial uses south of Plummer Street. In the vicinity of the project, Corbin Avenue provides two lanes in the each direction with left-turn channelization. A third northbound lane is added between Parthenia Street and Plummer Street. A third southbound lane is provided between Dearborn Street and Nordhoff Street/Nordhoff Way. The roadway width varies and on-street parking is permitted where the roadway width is sufficient. Bike lanes have been installed on Corbin Avenue north of Lassen Street.

Mason Avenue is a north-south secondary highway providing two lanes in the each direction and on-street parking. There is an at-grade rail crossing south of Prairie Street.

Prairie Street is an east-west collector street adjacent to the project site with a western terminus at De Soto Avenue; the roadway changes its name to Lurline Avenue west of Mason Avenue. The eastern terminus of Prairie Street is located at the Northridge Fashion Center at Shirley Avenue. The roadway provides one lane in each direction, median channelization and bike lanes. Bike lanes have been recently installed on Prairie Street as part of the City's Bike Master Plan.

Lassen Street is an east-west secondary highway providing two lanes in each direction, left turn channelization and on-street parking. The posted speed limit on Lassen Street is 40 MPH. The intersection with Winnetka Avenue is traffic signal controlled.

Plummer Street is an east-west secondary highway in the vicinity of the project. Plummer Street provides two lanes in each direction with left turn channelization and on street parking. Plummer Street is a designated bicycle route with a class II bikeway (bicycle lanes) east of Winnetka Avenue and a class III bikeway (shared facility) west of Winnetka Avenue.

Nordhoff Street is an east-west class II major highway. Nordhoff Street forms a jogged intersection at Corbin Avenue with the westerly leg approximately 0.25 miles south of the easterly leg. Nordhoff Street is striped for two lanes in the each direction with left turn channelization. West of Quartz Lane, an afternoon peak hour lane is provided in each direction. East of the Northridge Fashion Center's Sears driveway, Nordhoff Street provides three lanes in each direction and median channelization. The Nordhoff Way connector road provides a continuous bypass route for Nordhoff Street traffic, eliminating the need for east-west through traffic to negotiate the two jogged intersections of Nordhoff Street at Corbin Avenue. Bike lanes on Nordhoff Street are planned as part of the City 's Bike Maser Plan.

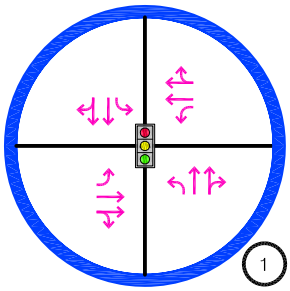
Roscoe Boulevard is an east-west class II major highway. In the vicinity of the project, the roadway provides two lanes in each direction with median channelization plus peak hour traffic lanes.

Figure 3 illustrates the lane configurations and traffic control at the study intersections.

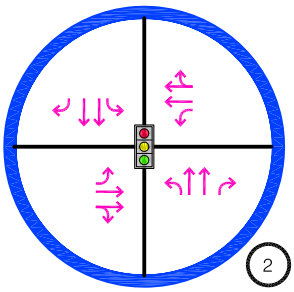
Transit Information

No direct transit access currently exists on Winnetka Avenue or on Prairie Street adjacent to the project site. LADOT provides a local shuttle line Northridge DASH east of the project. The nearest DASH stop is located at Nordhoff Street and Corbin Avenue. Northridge DASH serves the Northridge Metrolink Station, the Northridge Plaza and the Northridge Fashion Center. The Northridge DASH route along Prairie Street with stops near the project was discontinued.

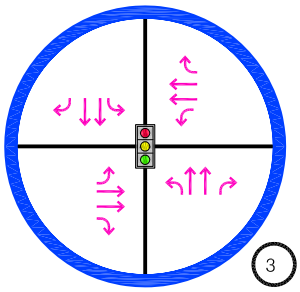
The nearest Metro transit stops for the project's transit users are located to the south at Winnetka Avenue at Nordhoff Street (approximately 1,500'), to the north at Winnetka Avenue at Plummer Street (approximately 1,300') and to the east at Corbin Avenue and Prairie Street (approximately 2,200'). The transit lines are illustrated in Appendix C.



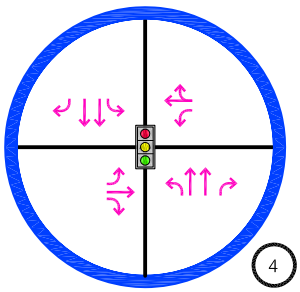
1 MASON AVE & PLUMMER ST



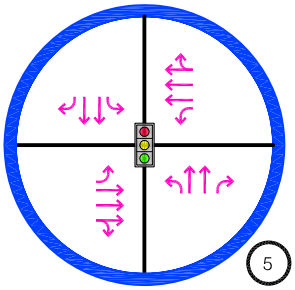
2 WINNETKA AVE & LASSEN ST



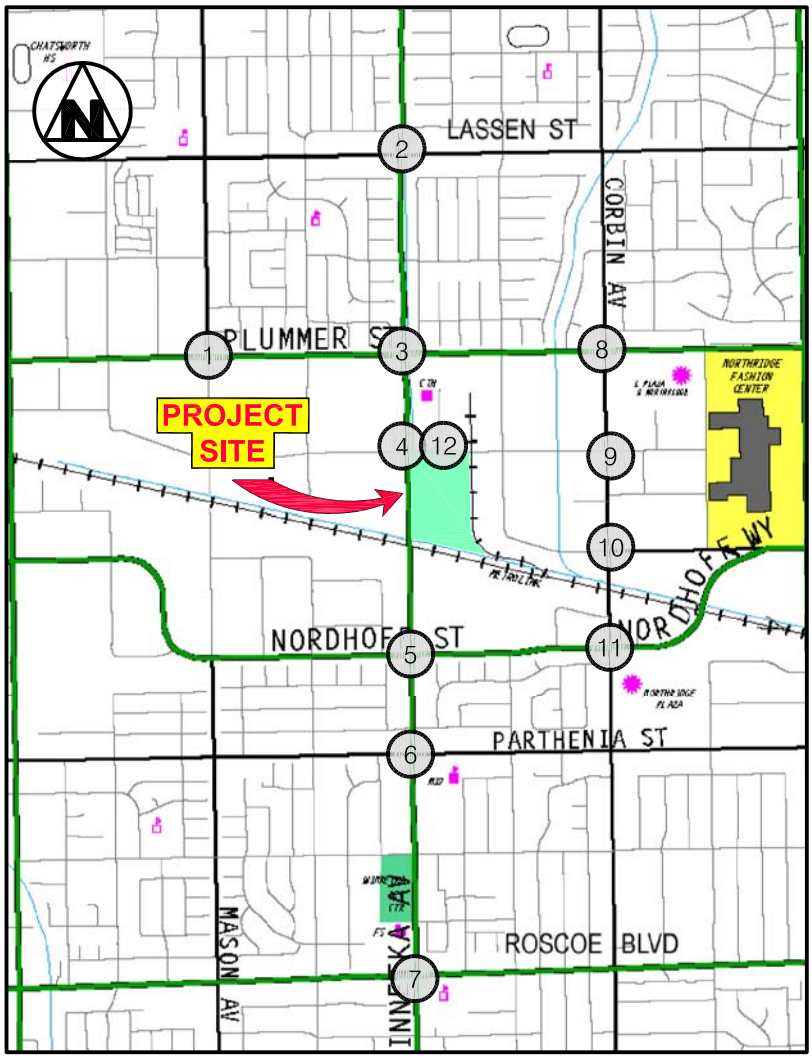
3 WINNETKA AVE & PLUMMER ST

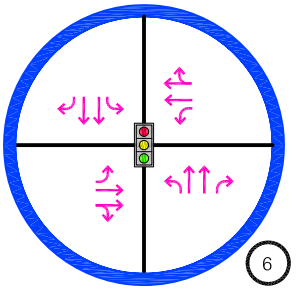


4 WINNETKA AVE & PRAIRIE ST

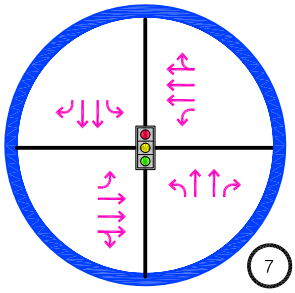


5 WINNETKA AVE & NORDHOFF ST

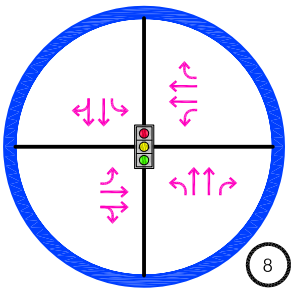




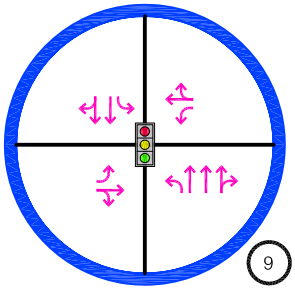
6 WINNETKA AVE & PARTHENIA ST



7 WINNETKA AVE & ROSCOE BLVD



8 CORBIN AVE & PLUMMER ST



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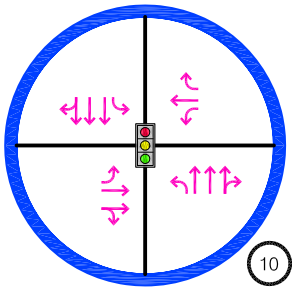
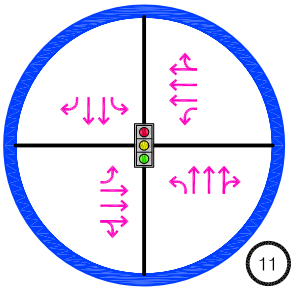
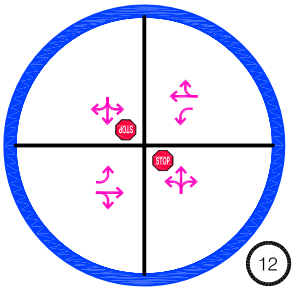


10 CORBIN AVE & NORDHOFF PL



11 CORBIN AVE & NORDHOFF ST / WAY



12 PENFIELD AVE & PRAIRIE ST

FIGURE 3

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PROJECT STUDY INTERSECTION CHARACTERISTICS

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CHAPTER 4 PROJECT TRAFFIC CHARACTERISTICS

Project Traffic Generation

Traffic generating characteristics of many land uses have been surveyed by the Institute of Transportation Engineers (ITE). The results of the traffic generation studies have been published in a handbook titled Trip Generation, 9th Edition. The ITE studies indicate that the uses associated with the proposed project generate traffic volume as shown by the traffic rates in Table 1.

Table 1
ITE Trip Generation Rates

			AM Peak Hour			PM Peak Hour		
Land Use	ITE Code	Daily	Total	In	Out	Total	In	Out
Apartments	220	6.65	0.51	20 %	80 %	0.62	65 %	35 %
Light Industrial *	710	11.03	1.56	88 %	12 %	1.49	17 %	83 %
Shopping Center	820	42.70	0.96	62 %	38 %	3.71	48 %	52 %
Restaurant (HT)	932	127.15	10.81	55 %	45 %	9.85	60 %	40 %
Corporate Headquarters	714	7.98	1.52	93 %	7 %	1.41	10 %	90 %

* General Office rates applied to MGA headquarters and creative office to be more conservative.

Table 2 provides an estimate of the project traffic. It is estimated that the project would generate 8,157 daily vehicle trips with 788 morning and 860 afternoon peak hour trips.

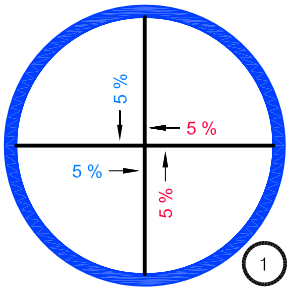
Table 2
Estimated Project Traffic Generation

	Daily	AM Peak Hour			PM Peak Hour		
Proposed Project	Traffic	Total	In	Out	Total	In	Out
212,815 s.f. MGA Headquarters	2,347	332	292	40	317	54	263
43,000 s.f. Creative Office	474	67	59	8	64	11	53
11,000 s.f. Retail	470	11	7	4	41	20	21
3,000 s,f, Restaurant	381	32	18	14	30	18	12
Restaurant Pass-by (20%)	- 76	- 6	- 3	- 3	- 6	- 4	- 2
Retail Pass-by (50%)	- 94	- 5	- 3	- 2	- 20	- 10	- 10
700 unit Apartment	4,655	357	71	286	434	282	152
Total	8,157	788	441	347	860	371	489

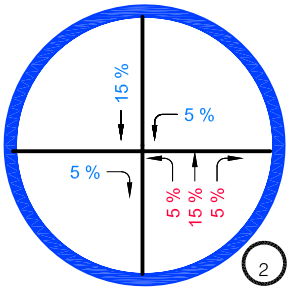
Trip Distribution and Assignment of Project Traffic

A primary factor affecting trip direction is the spatial distribution of population and employment that would generate project trip origins and destinations. The estimated project directional trip distribution is also based on the study area roadway network, traffic flow patterns in and out of this area of Chatsworth / Northridge.

Figure 4 shows the estimated project traffic percentages detailed at each of the study intersections as reviewed and approved by LADOT. Using the traffic assignment at each intersection and the estimated peak hour traffic volume as provided in the Table 2, peak hour traffic volumes at each study location have been calculated and are shown in Figures 5 and 6 for the am and pm peak hours, respectively. This estimated assignment of the project traffic flow provides the information necessary to analyze the potential traffic impacts generated by the project at the study intersections.



MASON AVE &
PLUMMER ST



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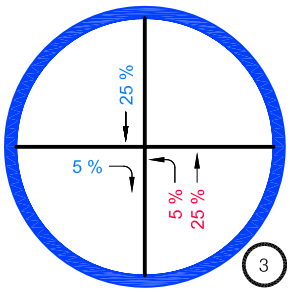

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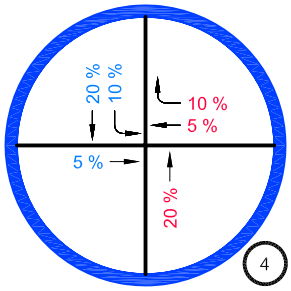

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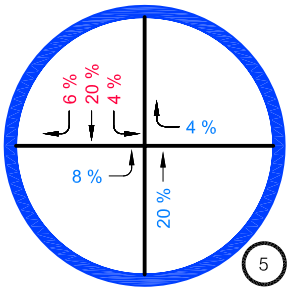
PRAIRIE ST



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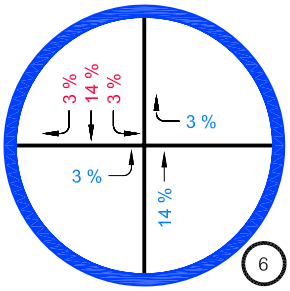
NORDHOFF ST



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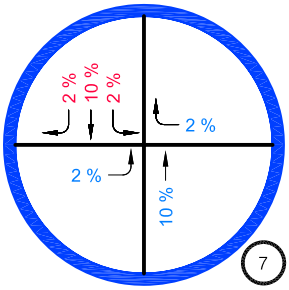
PARTHENIA ST



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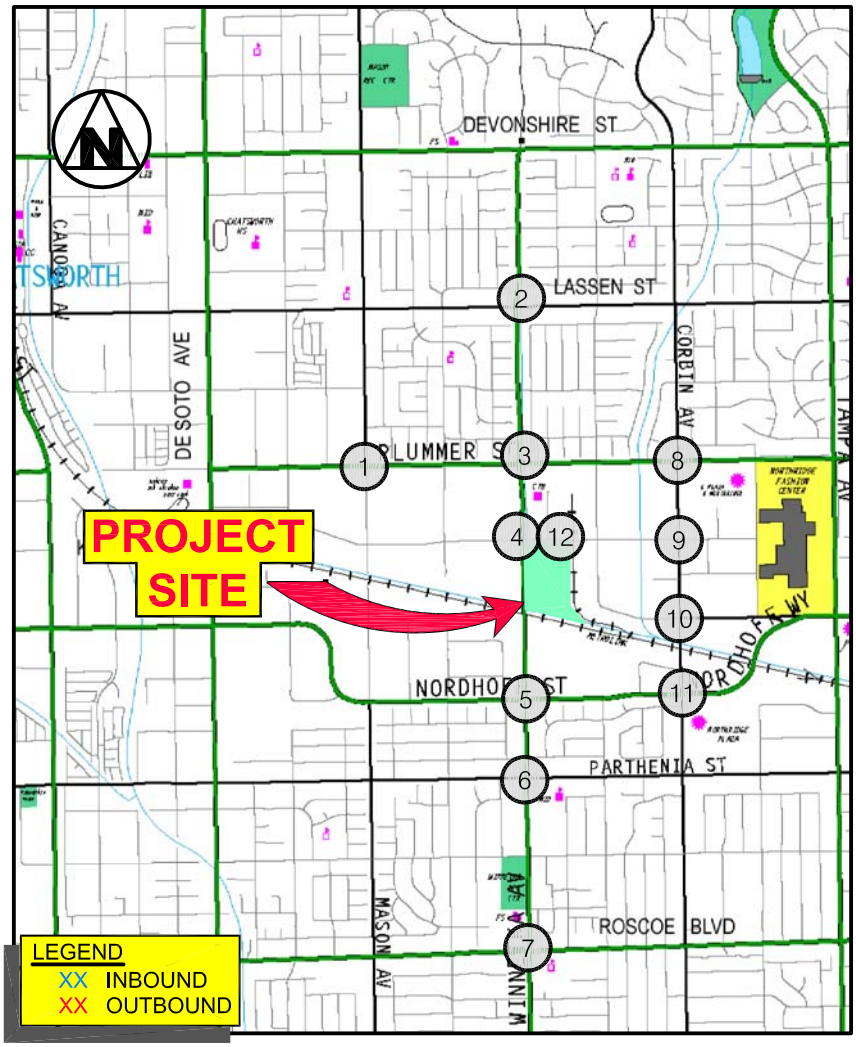
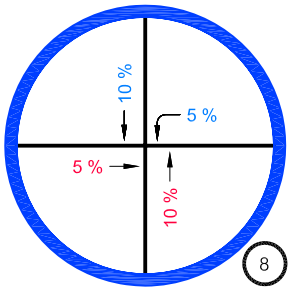
ROSCOE BLVD





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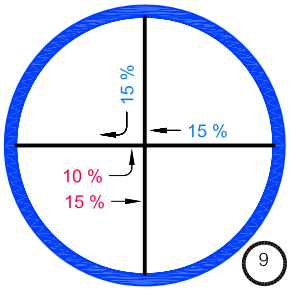
PLUMMER ST



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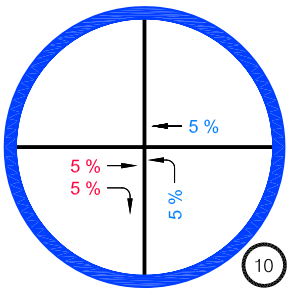
PRAIRIE ST



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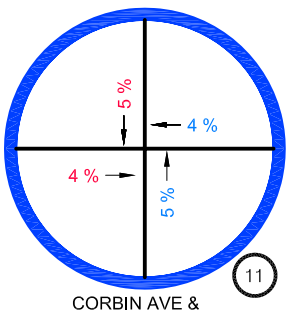
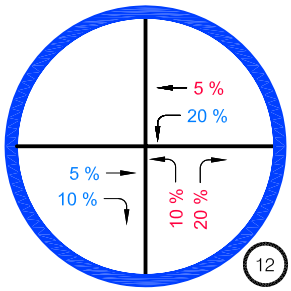
NORDHOFF PL



CORBIN AVE &
NORDHOFF ST / WAY



PENFIELD AVE &
PRAIRIE ST

FIGURE 4

1/2013

PROJECT TRAFFIC ASSIGNMENT PERCENTAGES
PEAK HOUR

Overland Traffic Consultants, Inc.
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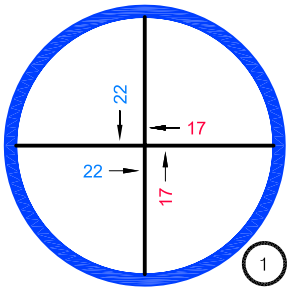
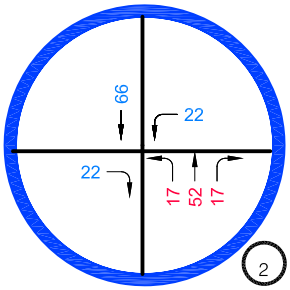
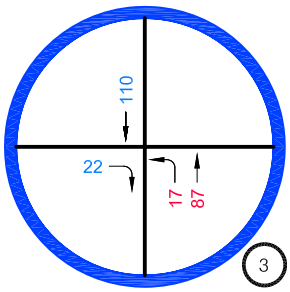


MASON AVE &
PLUMMER ST



WINNETKA AVE &
LASSEN ST



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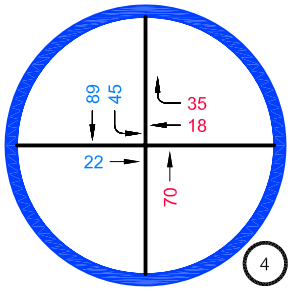

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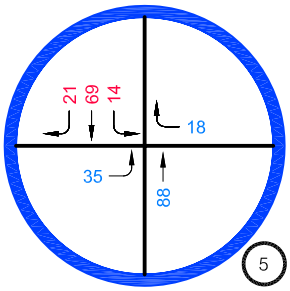

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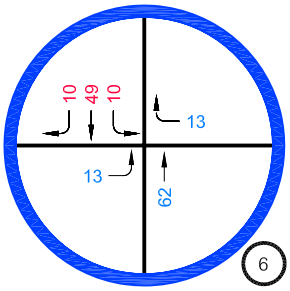

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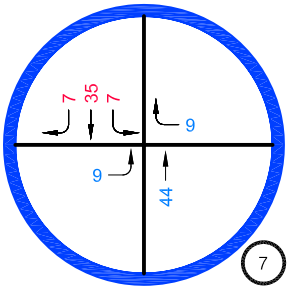
PARTHENIA ST



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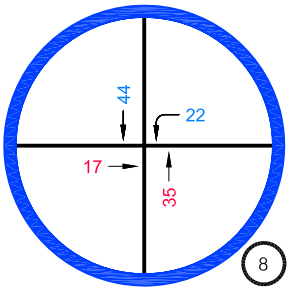
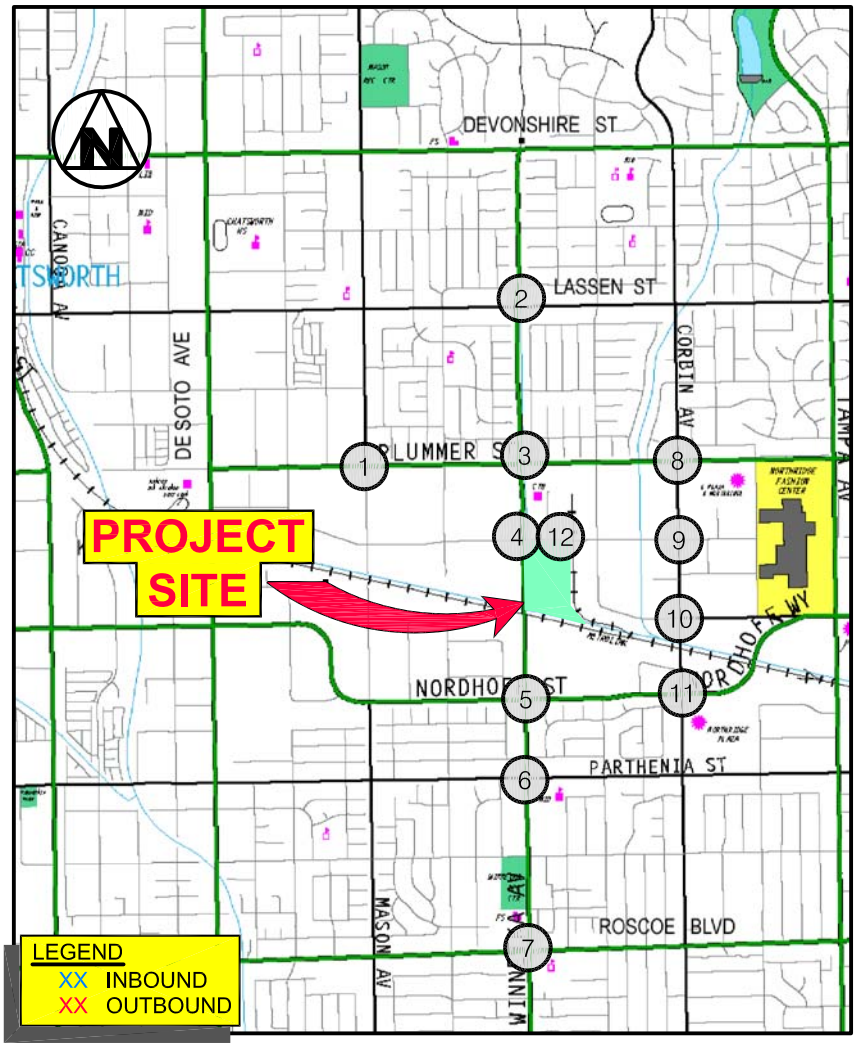
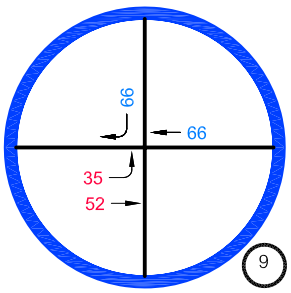
ROSCOE BLVD



CORBIN AVE &
PLUMMER ST





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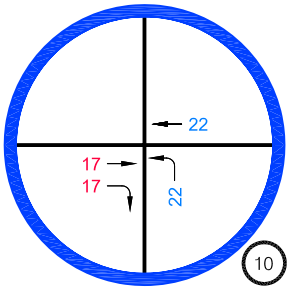

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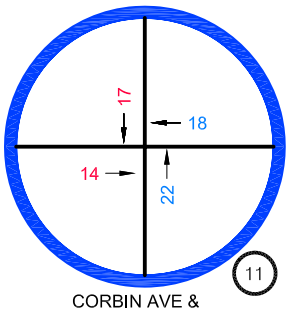
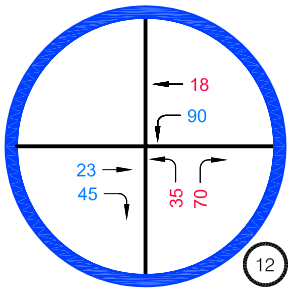


CORBIN AVE &
NORDHOFF ST / WAY



PENFIELD AVE &
PRAIRIE ST

FIGURE 5

1/15/2014

PROJECT TRAFFIC VOLUME ASSIGNMENT
AM PEAK HOUR

Overland Traffic Consultants, Inc.
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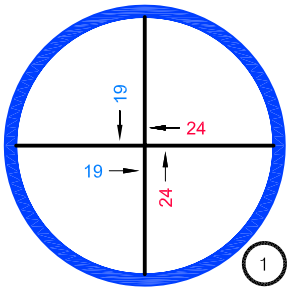
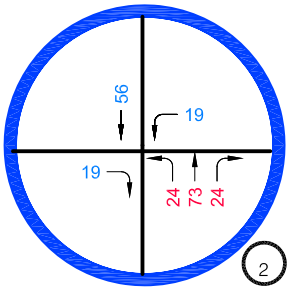
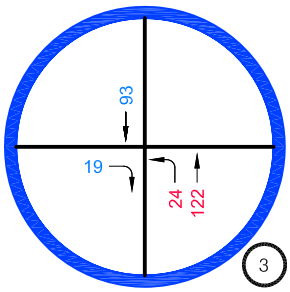


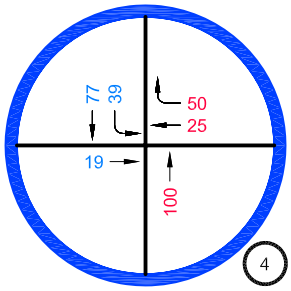
MASON AVE &
PLUMMER ST



WINNETKA AVE &
LASSEN ST



WINNETKA AVE &
PLUMMER ST



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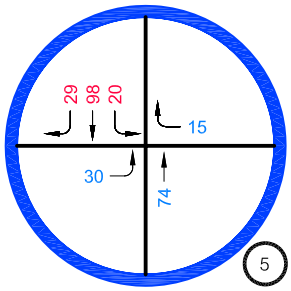
PRAIRIE ST



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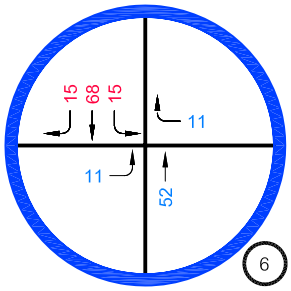

WINNETKA AVE &
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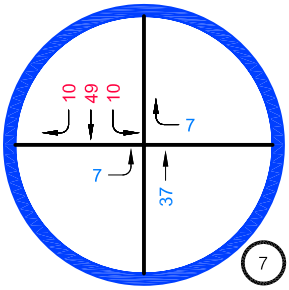

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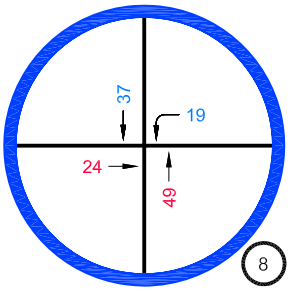
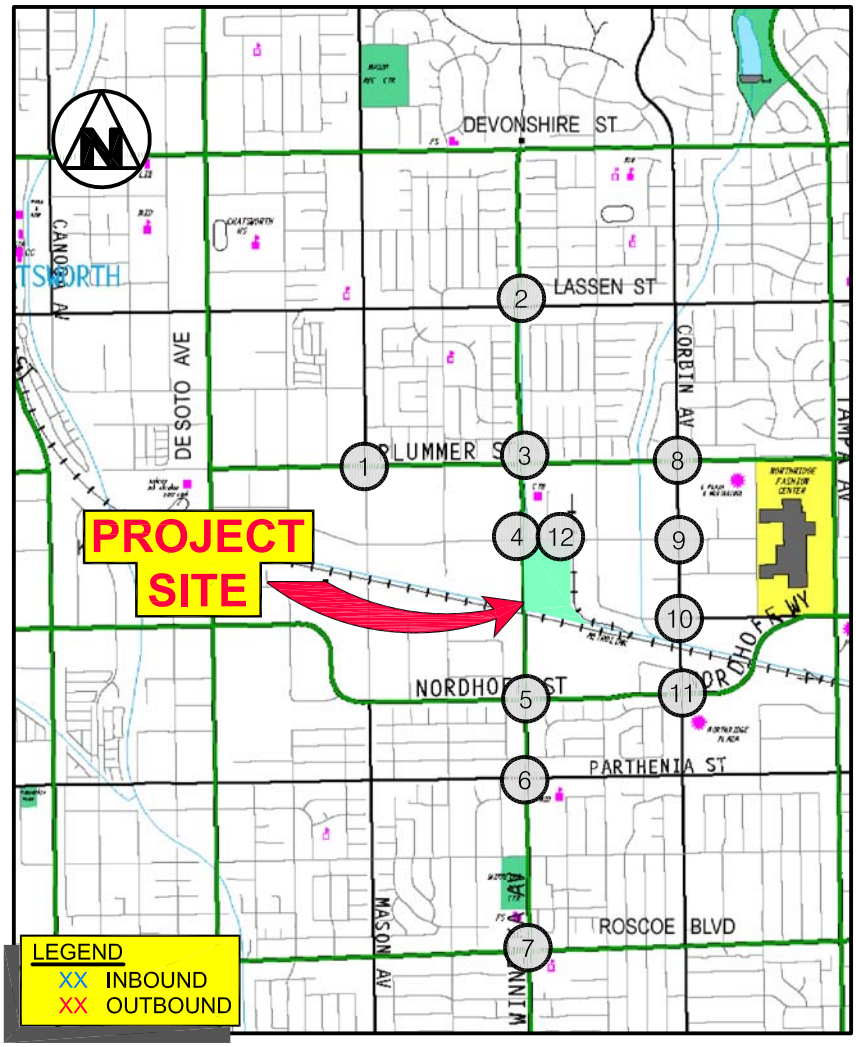
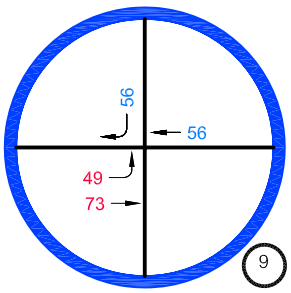
ROSCOE BLVD



CORBIN AVE &
PLUMMER ST





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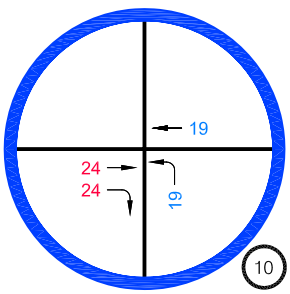
PRAIRIE ST



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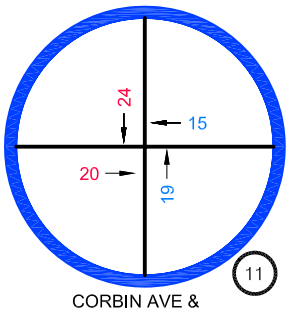
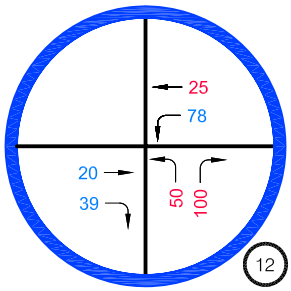
NORDHOFF PL



CORBIN AVE &
NORDHOFF ST / WAY



PENFIELD AVE &
PRAIRIE ST

FIGURE 6

1/2014

PROJECT TRAFFIC VOLUME ASSIGNMENT
PM PEAK HOUR

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CHAPTER 5 TRAFFIC CONDITIONS ANALYSIS

Analysis of Existing Traffic Conditions

The traffic conditions analysis was conducted using the Critical Movement Analysis (CMA) method. The study intersections were evaluated using this methodology pursuant to criteria established by the LADOT. The existing peak hour traffic counts were used along with intersection lane configurations and traffic controls to determine the intersection's current operating condition.

The CMA procedure uses a ratio of the intersection's traffic volume to its capacity for rating an intersection's congestion level. The highest combinations of conflicting traffic volume (V) divided by the intersection's capacity (C) value represents the intersection V/C ratio. Intersection capacity represents the maximum volume of vehicles passing through an intersection in one hour under typical traffic flow conditions. This volume-to-capacity (V/C) ratio defines the proportion of an hour necessary to accommodate all the traffic moving through the intersection assuming all approaches were operating at full capacity.

For planning purposes, the CMA ratio method provides an ideal means for quantifying intersection operating characteristics. For example, if an intersection has a CMA value of 0.700, the intersection is operating at 70% capacity with 30% unused capacity.

Once the volume-to-capacity ratio has been calculated, operating characteristics are assigned a level of service grade (A through F) to estimate the level of congestion and stability of the traffic flow. The term, Level of Service (LOS) is used by traffic engineers to describe the quality of the traffic flow. Definitions of the LOS grades are provided in Table 3.

Table 3

Level of Service Definitions

Level of Service	Description of Operating Condition	Equivalent CMA
A	Free flow conditions with low traffic density.	0.000 - 0.600
B	A stable flow of traffic.	0.601 - 0.700
C	Light congestion but stable, occasional backups behind left-turning vehicles.	0.701 - 0.800
D	Approaching instability, drivers are restricted in freely changing lanes. Vehicles may be required to wait through more than one cycle.	0.801 - 0.900
E	At or near capacity with possible long queues for left-turning vehicles. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	0.901 - 1.000
F	Jammed conditions with stoppages of long duration.	> 1.000

Traffic volume data used in the following peak hour intersection analyses were based on traffic counts conducted by The Traffic Solution, an independent traffic data collection company. Traffic counts were conducted on a typical weekday in March and April 2013. Existing peak hour traffic volumes at the study intersections are depicted in Figure 7 for the morning peak hour and Figure 8 for the afternoon peak hour. Traffic volume data for the peak hour counts are contained in Appendix D.

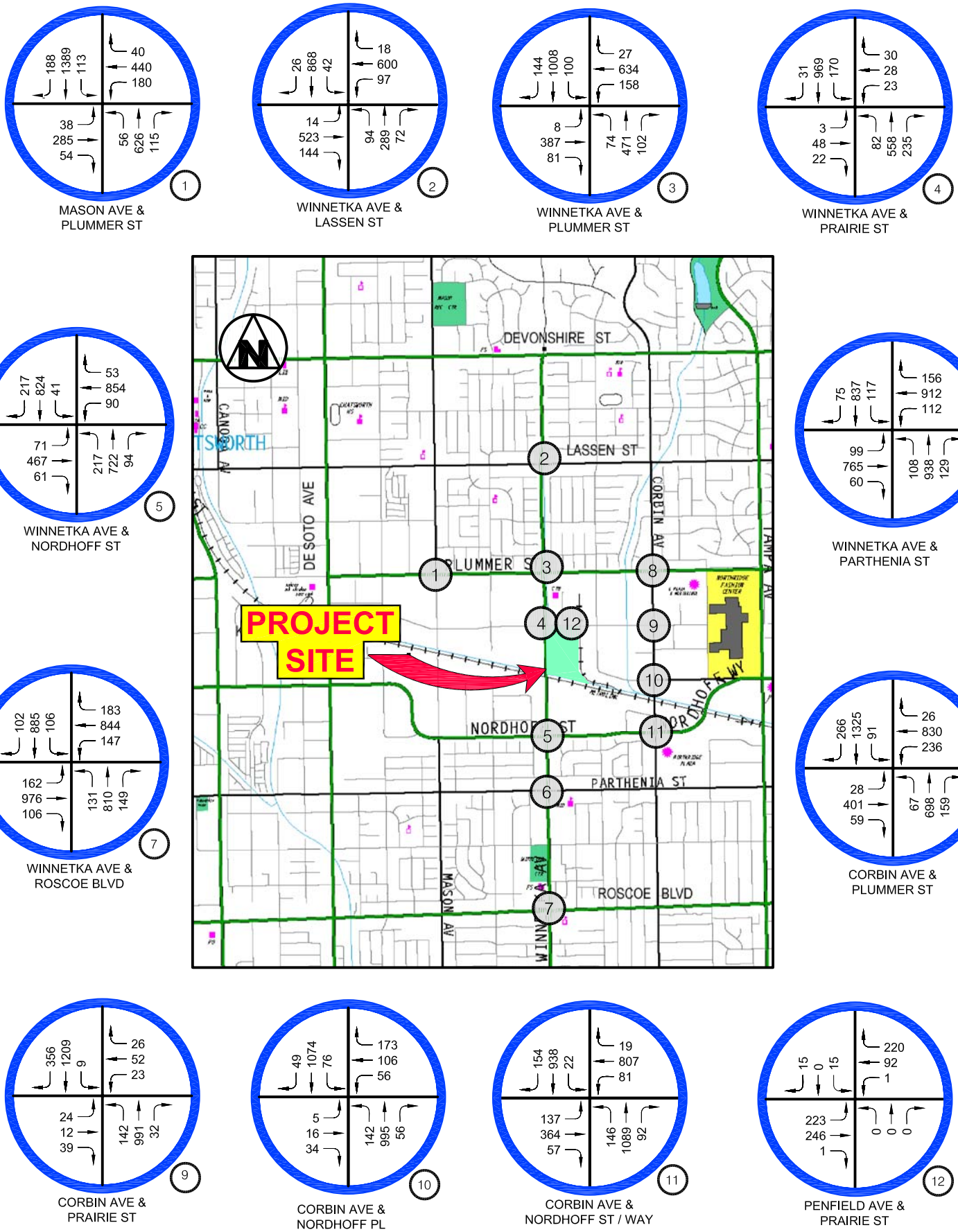

FIGURE 7

8/2013

EXISTING (2013) TRAFFIC VOLUME
AM PEAK HOUR

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(661)799-8423, OTC@overlandtraffic.com

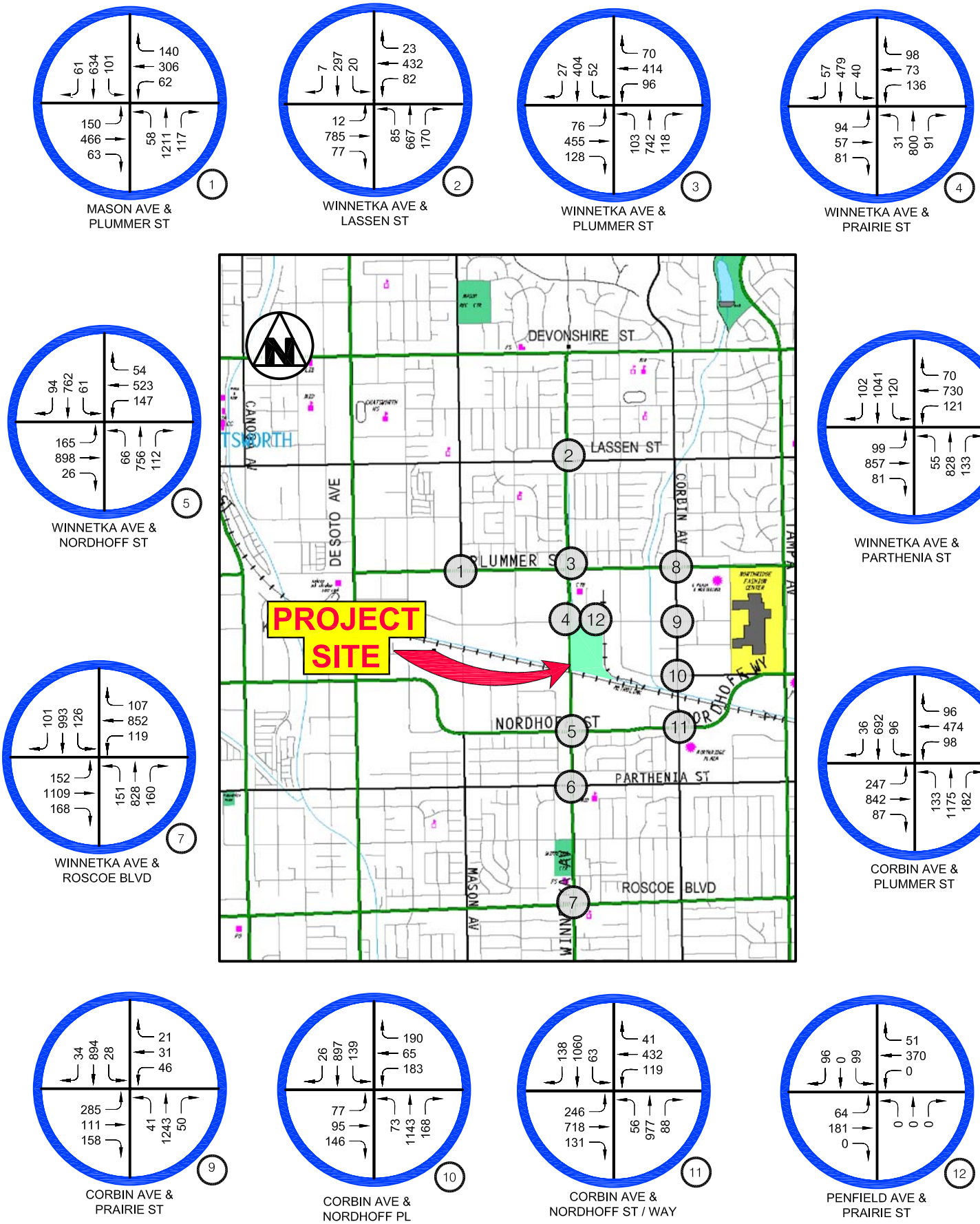

FIGURE 8

8/2013

EXISTING (2013) TRAFFIC VOLUME
PM PEAK HOUR

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(661)799-8423, OTC@overlandtraffic.com

By applying the CMA procedures to the intersection data, the V/C values and the corresponding Levels of Service (LOS) for existing traffic conditions were determined. The LOS values are summarized in Table 4. Supporting capacity worksheets are contained in Appendix E of this report.

Table 4
Existing Traffic Conditions Summary

No	Intersection	AM Peak Hour CMA	AM Peak Hour LOS	PM Peak Hour CMA	PM Peak Hour LOS
1.	Mason Av. & Plummer St.	0.697	B	0.659	B
2.	Winnetka Av. & Lassen St.	0.539	A	0.478	A
3.	Winnetka Av. & Plummer St.	0.547	A	0.398	A
4.	Winnetka Av. & Prairie St.	0.325	A	0.370	A
5.	Winnetka Av. & Nordhoff St.	0.629	B	0.556	A
6.	Winnetka Av. & Parthenia St.	0.713	C	0.677	B
7.	Winnetka Av. & Roscoe Bd.	0.687	B	0.768	C
8.	Corbin Av. & Plummer Av.	0.786	C	0.731	C
9.	Corbin Av. & Prairie St.	0.585	A	0.461	A
10.	Corbin Av. & Nordhoff Pl.	0.337	A	0.479	A
11.	Corbin Av. & Nordhoff St./Nordhoff Way	0.621	B	0.595	A

Analysis of Existing + Project Traffic Conditions

Traffic volume projections have been developed to analyze the existing traffic conditions after completion of the proposed project. Pursuant to the City of Los Angeles traffic impact guidelines, the potential traffic impact of the project's traffic volume on existing traffic conditions has been analyzed. No changes to the existing intersection operating conditions have been made.

By applying the CMA procedures, the V/C ratios and the corresponding LOS for "existing + project" traffic conditions were determined for each intersection. The V/C intersection ratios and the corresponding LOS values are summarized in Table 5.

Comparing changes in the traffic conditions between the different scenarios provides the necessary information to determine if the traffic increases create a significant impact at a study intersection. According to the standards adopted by the City of Los Angeles, a traffic impact is considered significant if the related increase in the V/C value equals or exceeds the thresholds shown in the table below.

LOS	Final V/C Value	Increase in V/C Value
C	0.701 - 0.800	+ 0.040
D	0.801 - 0.900	+ 0.020
E and F	> 0.901	+ 0.010 or more

As shown in Table 5 below, two of the study intersections would be significantly impact by the project's traffic in the morning peak hour in the "existing + project " conditions. The intersections significantly are: Winnetka Avenue and Parthenia Street (#6) and Corbin Avenue and Plummer Street (#8).

Existing + project peak hour traffic volumes at the study intersections are illustrated in Figure 9 for the morning peak hour and Figure 10 for the afternoon peak hour.

Table 5
Existing + Project Traffic Conditions

No.	Intersection	Peak Hour	Existing CMA	Existing LOS	Existing With Project CMA	Existing With Project LOS	Impact
1.	Mason Av. & Plummer St.	AM	0.697	B	0.711	C	+ 0.014
		PM	0.659	B	0.675	B	+ 0.016
2.	Winnetka Av. & Lassen St.	AM	0.539	A	0.594	A	+ 0.055
		PM	0.478	A	0.521	A	+ 0.043
3.	Winnetka Av. & Plummer St.	AM	0.547	A	0.602	A	+ 0.055
		PM	0.398	A	0.439	A	+ 0.041
4.	Winnetka Av. & Prairie St.	AM	0.325	A	0.383	A	+ 0.058
		PM	0.370	A	0.479	A	+ 0.109
5.	Winnetka Av. & Nordhoff St.	AM	0.629	B	0.684	B	+ 0.055
		PM	0.556	A	0.592	A	+ 0.036
6.	Winnetka Av. & Parthenia St.	AM	0.713	C	0.753	C	+ 0.040 *
		PM	0.677	B	0.700	B	+ 0.023
7.	Winnetka Av. & Roscoe Bd.	AM	0.687	B	0.705	C	+ 0.018
		PM	0.768	C	0.785	C	+ 0.017
8.	Corbin Av. & Plummer St.	AM	0.786	C	0.820	D	+ 0.034 *
		PM	0.731	C	0.768	C	+ 0.037
9.	Corbin Av. & Prairie St.	AM	0.585	A	0.674	B	+ 0.089
		PM	0.461	A	0.550	A	+ 0.089
10.	Corbin Av. & Nordhoff Pl.	AM	0.337	A	0.352	A	+ 0.015
		PM	0.479	A	0.489	A	+ 0.011
11.	Corbin Av. & Nordhoff St. / Way	AM	0.621	B	0.631	B	+ 0.010
		PM	0.595	A	0.607	B	+ 0.012

* Indicates significant traffic impact per City of Los Angeles Department of Transportation

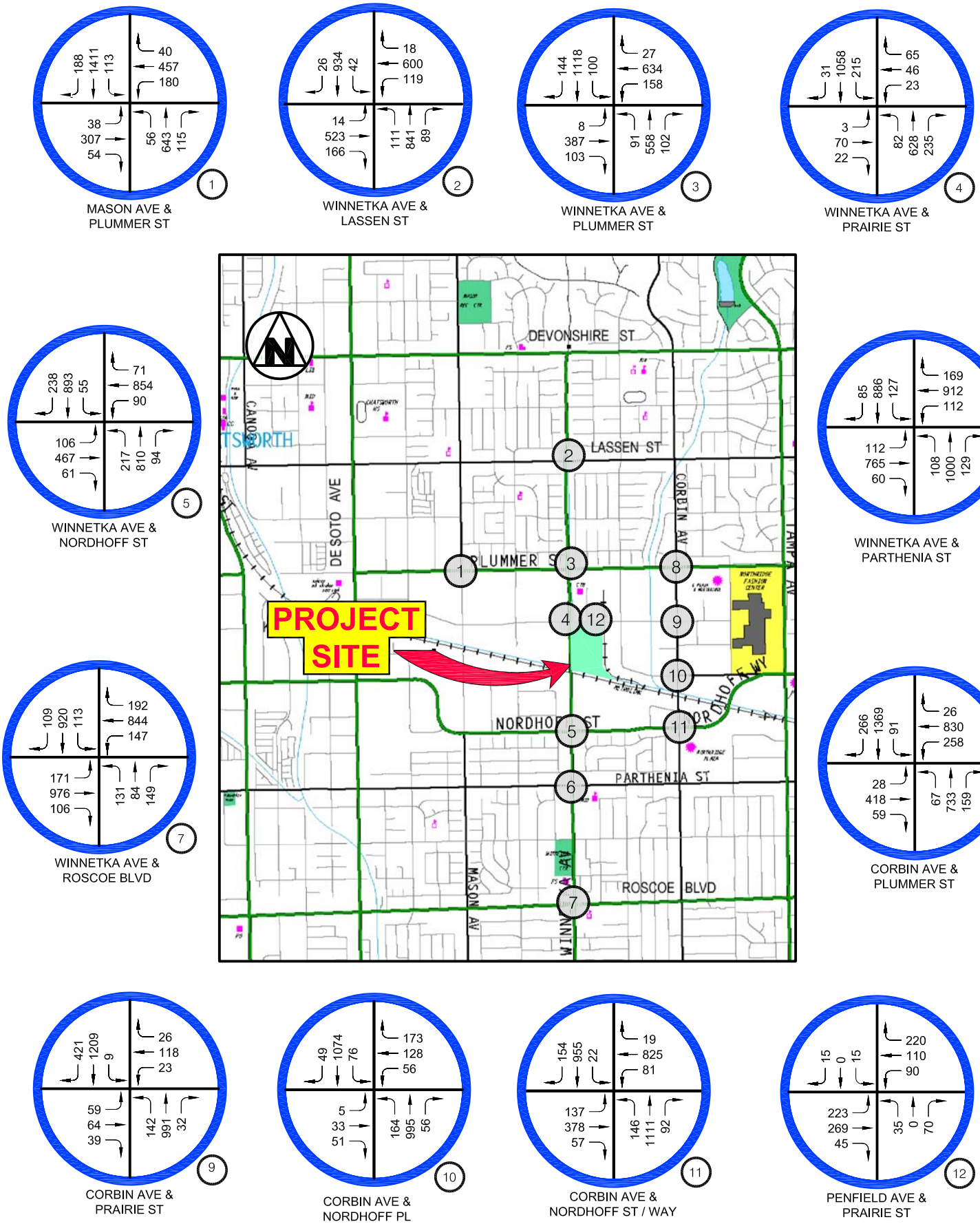

FIGURE 9

1/2014

EXISTING + PROJECT (2013) TRAFFIC VOLUME
AM PEAK HOUR

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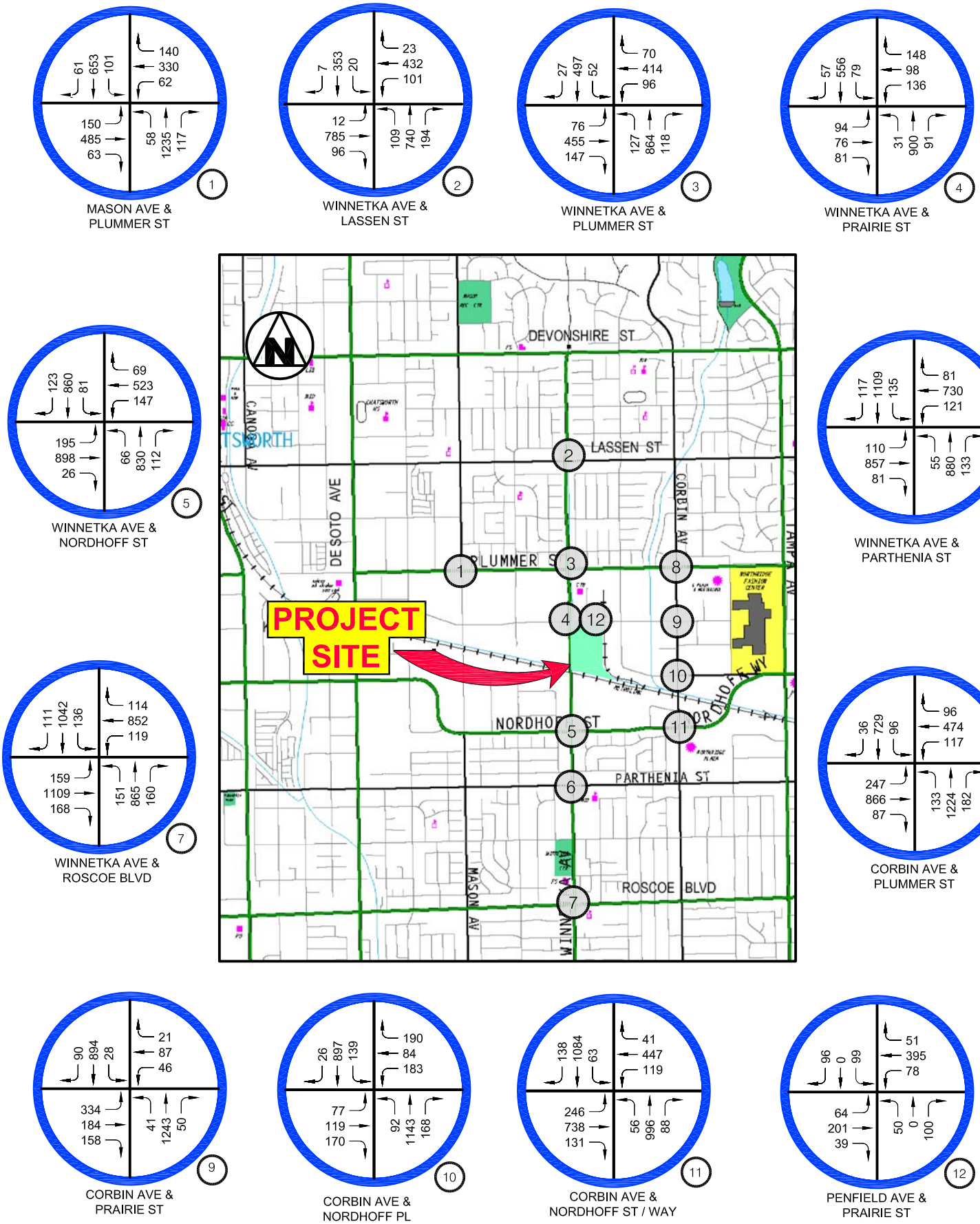

FIGURE 10

1/2014

EXISTING + PROJECT (2013) TRAFFIC VOLUME
PM PEAK HOUR

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Analysis of Future Traffic Conditions

Future traffic volume projections have been developed to analyze the traffic conditions after completion of other planned land developments including the proposed project. Pursuant to the City of Los Angeles traffic impact guidelines, the following steps have been taken to develop the future traffic volume estimates:

(a) Existing traffic + ambient growth (1.5% per year)
(b) Traffic in (a) + related projects (without project scenario);
(c) Traffic in (b) with the proposed project traffic (with project scenario);
(d) Traffic in (c) + the proposed traffic mitigation, if necessary.

The future cumulative analysis includes other development projects located within the study area either under construction or planned. As part of this analysis, the related project information was obtained from the City of Los Angeles Department of Transportation. It should be noted that this project, or any actions taken by the City regarding this project, does not have a direct bearing on these other proposed related projects.

Table 6 provides the description of the related projects used in this analysis. To evaluate future traffic conditions with related projects, estimates of the peak hour trips generated by the related projects were developed. The potential net increase in traffic from the related projects is shown in Table 7. The locations of nine (9) related projects used in this study are shown in Figure 11. Appendix F contains the related project traffic flow maps.

Future cumulative “without project” peak hour traffic volume estimates are shown in Figures 12 and 13 for the morning and afternoon peak hours, respectively.

Table 6
Related Projects Descriptions

No	Location	Size	Units	Description
1	9733 Mason Avenue	525	du	Townhomes
		24,463	sf	Retail
2	9010 Reseda Boulevard	7,800	sf	Retail
3	19401 Parthenia Street	312	du	Apartments
		35,694	sf	Retail
		7,470	sf	Storage
4	19600 Plummer Street	368	du	Condominiums (occupied)
		10,000	sf	Retail
		5,000	sf	Restaurant
5	7911 Winnetka Avenue	375	Students	Private School
6	20439 Nordhoff Street	13,000	sf	Government Office
		10,400	sf	Warehouse
7	8544 Winnetka Avenue	73	du	Single Family
8	Kaiser Permanente Chatsworth MOB	83,000	sf	Medical Office
		-42,030	sf	Retail
9	19501 Nordhoff Street (vtt63625-m5)	20,475	sf	Retail
		617	du	Apartments

Table 7
Related Project Trip Generation

			AM Peak Hour			PM Peak Hour		
No	Location	Daily	In	Out	Total	In	Out	Total
1	9733 Mason Avenue	1,847	20	192	212	164	39	203
2	9010 Reseda Boulevard	335	69	69	138	18	13	31
3	19401 Parthenia Street	3,627	20	192	212	163	39	202
4	19600 Plummer Street	1,065	92	73	165	44	44	88
5	7911 Winnetka Avenue	930	185	119	304	28	36	64
6	20439 Nordhoff Street	933	66	13	79	6	13	19
7	8544 Winnetka Avenue	699	14	41	55	47	27	74
8	Kaiser Permanente Chatsworth MOB	2,699	140	38	178	75	192	267
9	19501 Nordhoff Street (vtt63625-m5)	879	12	8	20	37	39	76
		4,103	62	253	315	247	136	383

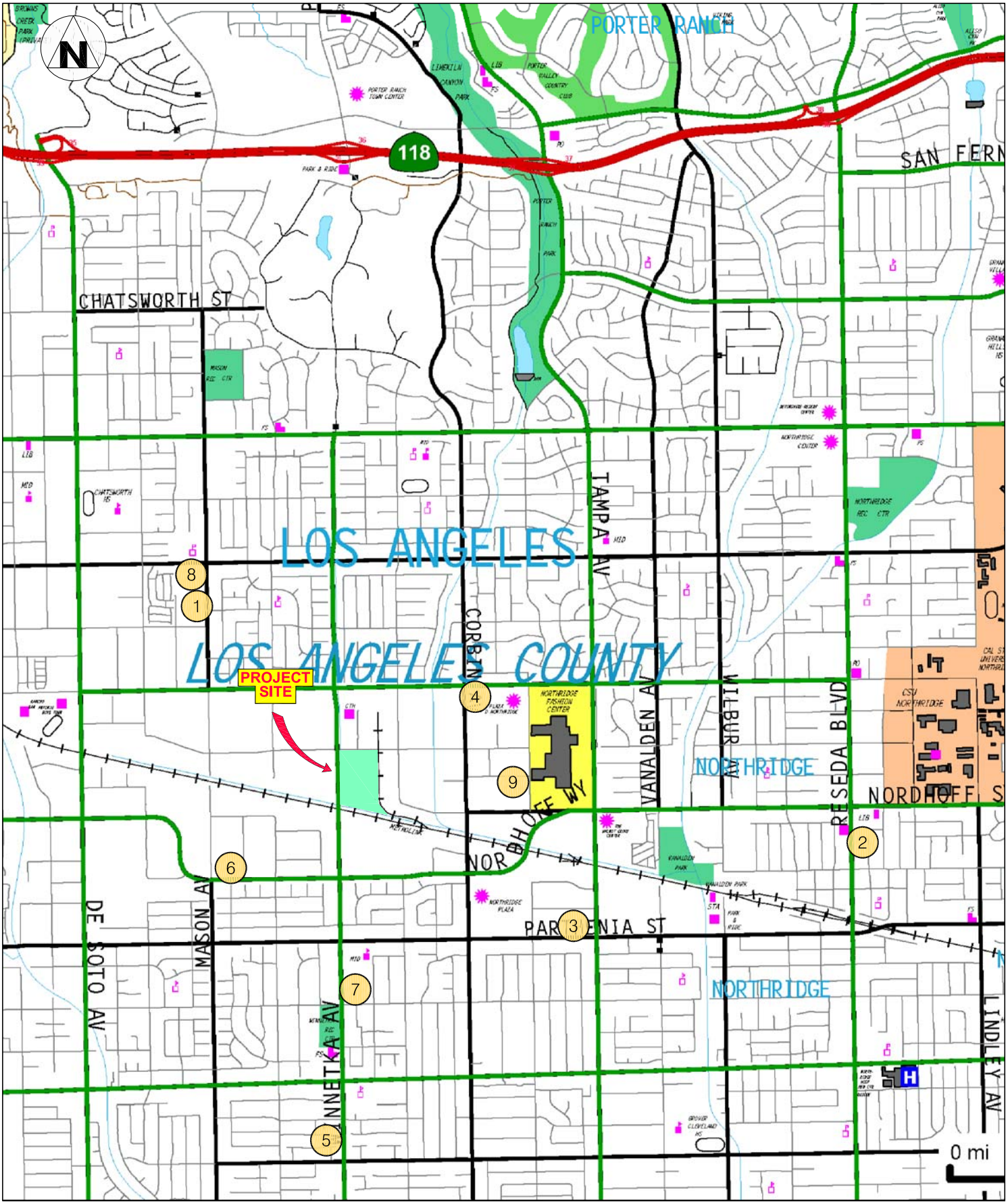

FIGURE 11

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RELATED PROJECT LOCATIONS

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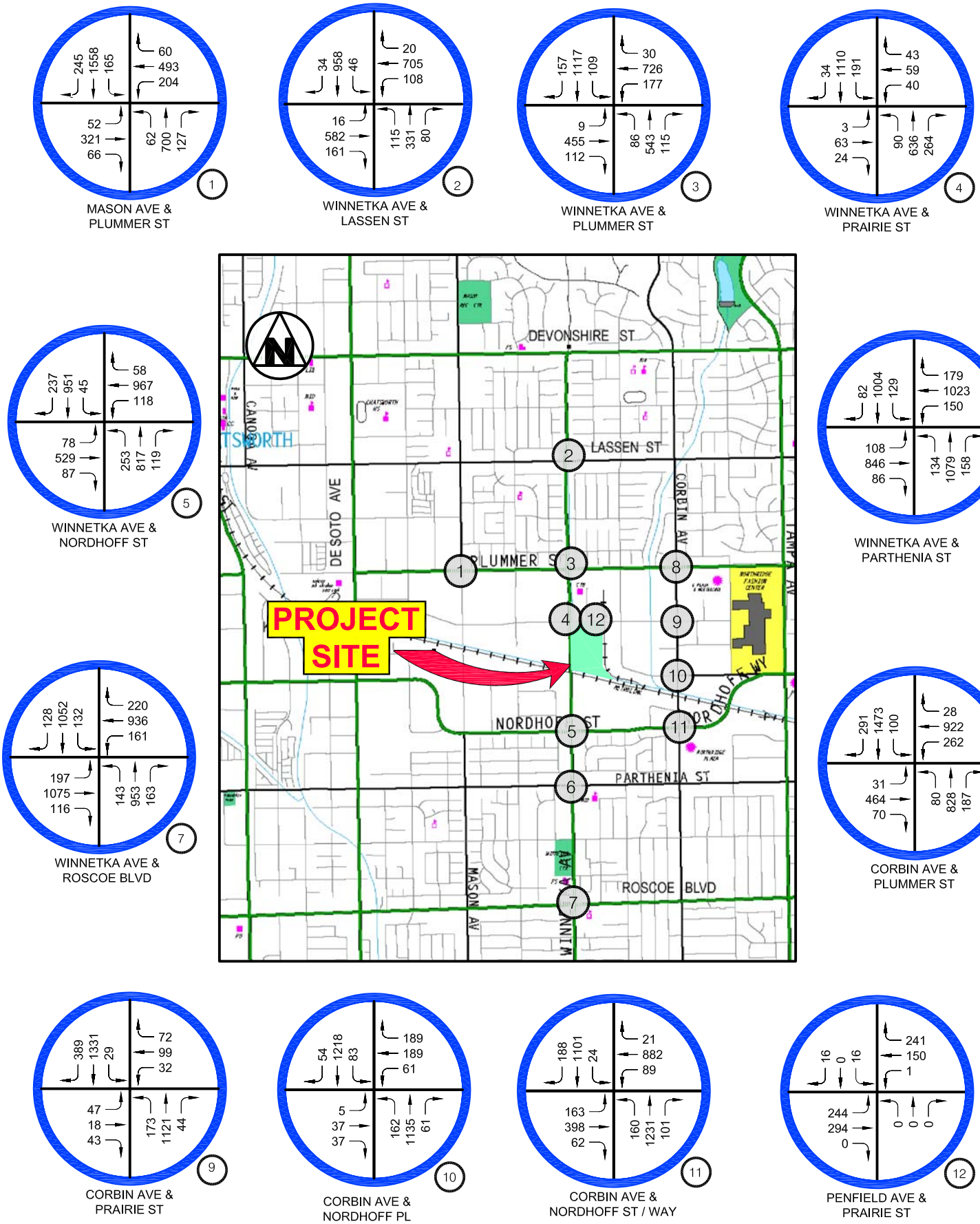

FIGURE 12

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FUTURE (2019) TRAFFIC VOLUME
WITHOUT PROJECT
AM PEAK HOUR

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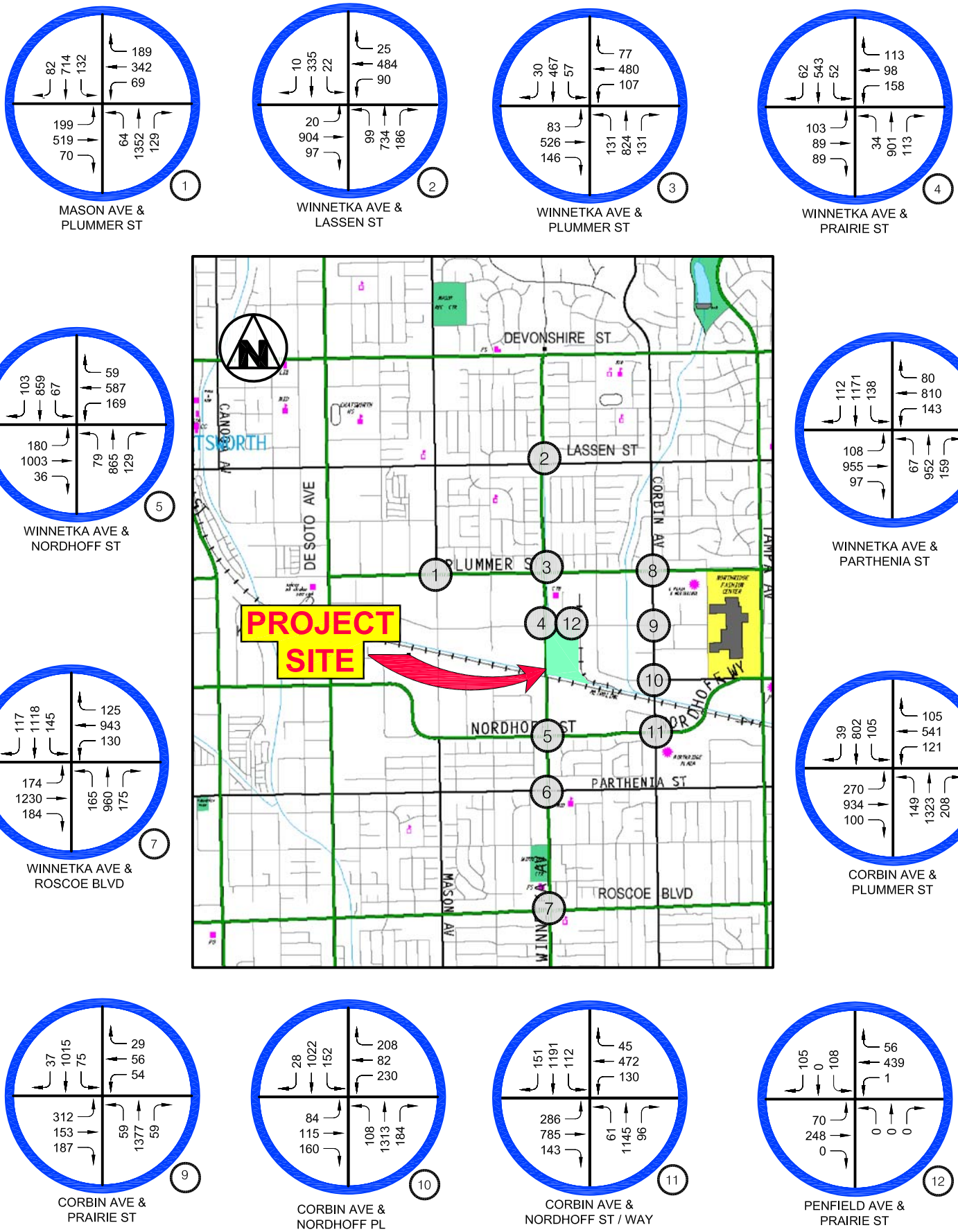

FIGURE 13

10/2014

FUTURE (2019) TRAFFIC VOLUME
WITHOUT PROJECT
PM PEAK HOUR

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The future cumulative traffic conditions are shown below in Table 8.

Table 8
Future Cumulative Traffic Conditions Without Project

No.	Intersection	Peak Hour	Existing CMA	Existing LOS	Future Without Project CMA	Future Without Project LOS	Impact
1.	Mason Av. &	AM	0.697	B	0.808	D	+ 0.111
	Plummer St.	PM	0.659	B	0.792	C	+ 0.133
2.	Winnetka Av. &	AM	0.539	A	0.616	B	+ 0.077
	Lassen St.	PM	0.478	A	0.553	A	+ 0.075
3.	Winnetka Av. &	AM	0.547	A	0.600	A	+ 0.053
	Plummer St.	PM	0.398	A	0.459	A	+ 0.061
4.	Winnetka Av. &	AM	0.325	A	0.397	A	+ 0.072
	Prairie St.	PM	0.370	A	0.445	A	+ 0.075
5.	Winnetka Av. &	AM	0.629	B	0.839	D	+ 0.210
	Nordhoff St.	PM	0.556	A	0.758	C	+ 0.202
6.	Winnetka Av. &	AM	0.713	C	0.819	D	+ 0.106
	Parthenia St.	PM	0.677	B	0.781	C	+ 0.104
7.	Winnetka Av. &	AM	0.687	B	0.810	D	+ 0.123
	Roscoe Bd.	PM	0.768	C	0.864	D	+ 0.096
8.	Corbin Av. &	AM	0.786	C	0.894	D	+ 0.108
	Plummer Av.	PM	0.731	C	0.837	D	+ 0.106
9.	Corbin Av. &	AM	0.585	A	0.667	B	+ 0.082
	Prairie St.	PM	0.461	A	0.570	A	+ 0.109
10.	Corbin Av. &	AM	0.337	A	0.393	A	+ 0.056
	Nordhoff Pl.	PM	0.479	A	0.564	A	+ 0.085
11.	Corbin Av. &	AM	0.621	B	0.823	D	+ 0.202
	Nordhoff St. / Way	PM	0.595	A	0.728	C	+ 0.133

Traffic conditions after completion of the project have been calculated by adding the project volumes to the future 2019 cumulative “without traffic” volumes.

The traffic impacts of the added project traffic at the study intersections are shown in Table 9. As shown in Table 9, five of the study intersections are impacted by project traffic volume in the future cumulative 2019 scenario using the significant impact criteria established by LADOT. The significantly impacted intersections are:

1. Winnetka Avenue and Nordhoff Street (#5) during the morning peak hour;
2. Winnetka Avenue and Parthenia Street (#6) during both the morning and afternoon peak peak hours;
3. Winnetka Avenue and Roscoe Boulevard (#7) during the morning peak hour;
4. Corbin Avenue and Plummer Street (#8) during both the morning and afternoon peak hours:
5. Corbin Avenue and Prairie Street (#9) during the morning peak hour.

Future cumulative “with project” peak hour traffic volumes are shown in Figures 14 and 15 for the morning and afternoon, respectively.

Table 9
Future Cumulative Traffic Conditions With Project

No.	Intersection	Peak Hour	Future Without CMA	Future Without LOS	Future With Project CMA	Future With Project LOS	Impact
1.	Mason Av. &	AM	0.808	D	0.823	D	+ 0.015
	Plummer St.	PM	0.792	C	0.808	D	+ 0.016
2.	Winnetka Av. &	AM	0.616	B	0.671	B	+ 0.055
	Lassen St.	PM	0.553	A	0.597	A	+ 0.044
3.	Winnetka Av. &	AM	0.600	A	0.648	B	+ 0.048
	Plummer St.	PM	0.459	A	0.500	A	+ 0.041
4.	Winnetka Av. &	AM	0.397	A	0.462	A	+ 0.065
	Prairie St.	PM	0.445	A	0.554	A	+ 0.109
5.	Winnetka Av. &	AM	0.839	D	0.889	D	+ 0.050 *
	Nordhoff St.	PM	0.758	C	0.793	C	+ 0.035
6.	Winnetka Av. &	AM	0.819	D	0.859	D	+ 0.040 *
	Parthenia St.	PM	0.781	C	0.804	D	+ 0.023 *
7.	Winnetka Av. &	AM	0.810	D	den32	D	+ 0.022 *
	Roscoe Bd.	PM	0.864	D	0.882	D	+ 0.018
8.	Corbin Av. &	AM	0.894	D	0.929	E	+ 0.035 *
	Plummer Av.	PM	0.837	D	0.873	D	+ 0.036 *
9.	Corbin Av. &	AM	0.667	B	0.757	C	+ 0.090 *
	Prairie St.	PM	0.570	A	0.659	B	+ 0.089
10.	Corbin Av. &	AM	0.393	A	0.416	A	+ 0.023
	Nordhoff Pl.	PM	0.564	A	0.580	A	+ 0.016
11.	Corbin Av. &	AM	0.823	D	0.835	D	+ 0.012
	Nordhoff St. / Way	PM	0.728	C	0.743	C	+ 0.015

* Indicates significant traffic impact per City of Los Angeles Department of Transportation

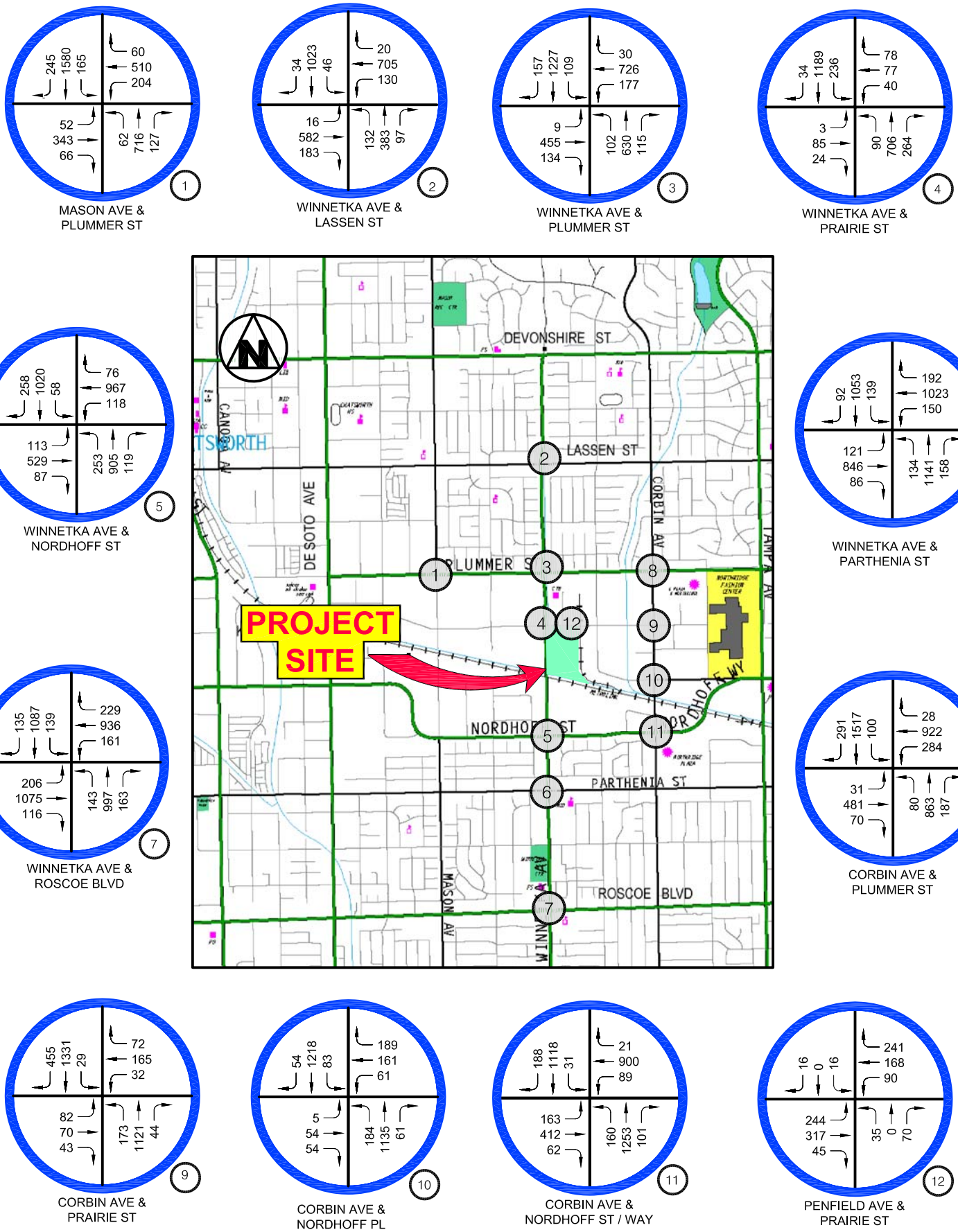

FIGURE 14

10/2014

FUTURE (2019) TRAFFIC VOLUME WITH PROJECT AM PEAK HOUR

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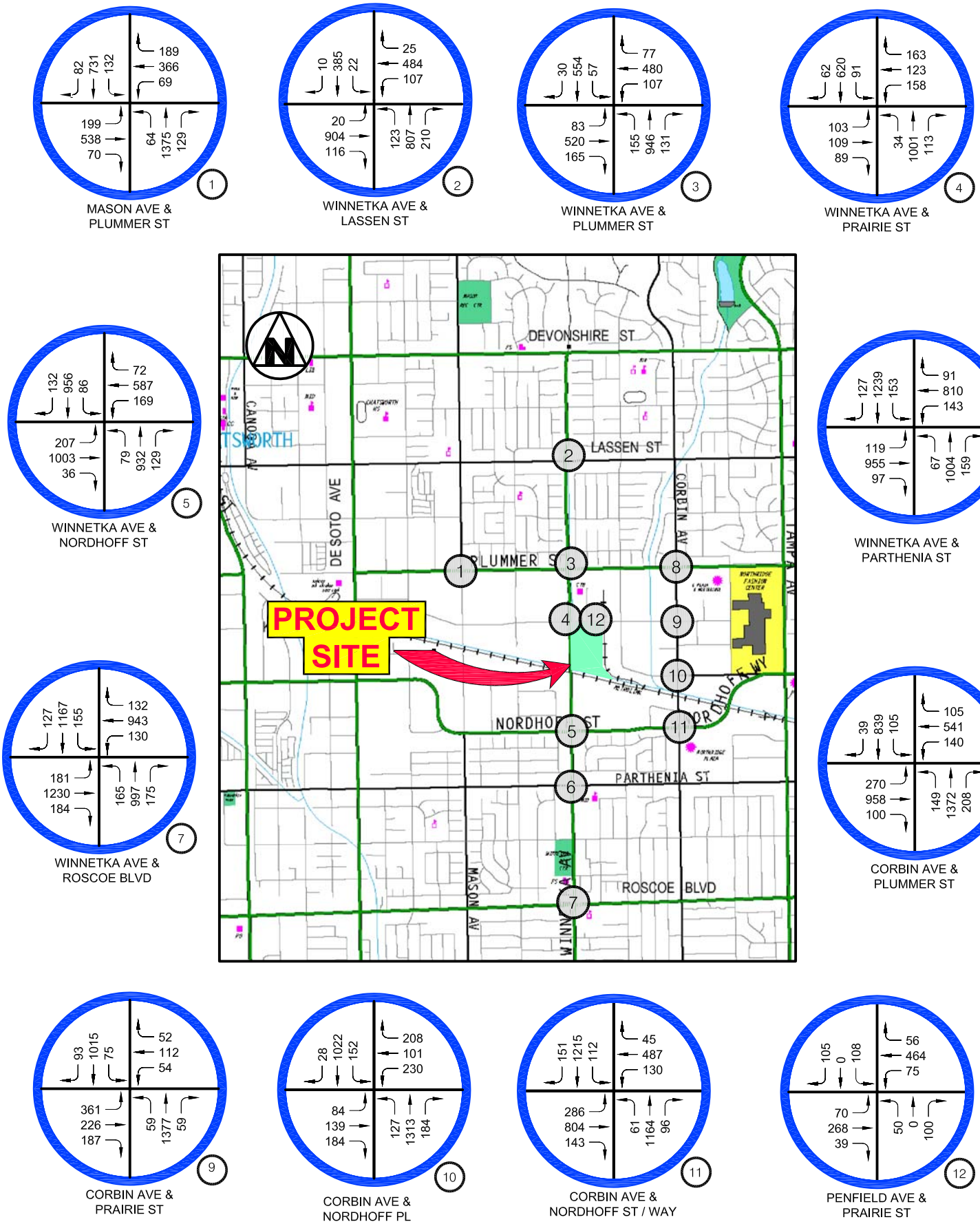

FIGURE 15

1/2014

FUTURE (2019) TRAFFIC VOLUME WITH PROJECT PM PEAK HOUR

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Impacts on Regional Transportation System

The Congestion Management Program (CMP) was adopted to monitor regional traffic growth and related transportation improvements. The CMP designated a transportation network including all state highways and some arterials within the County to be monitored by of local jurisdictions. If LOS standards deteriorate on the CMP network, then local jurisdictions must prepare a deficiency plan to be in conformance with the program. Local jurisdictions found to be in nonconformance with the CMP risk the loss of state gas tax funding.

For purposes of the CMP LOS analysis, a substantial change in freeway segments are defined as an increase or decrease of 0.10 in the demand to capacity ratio and a change in LOS. A CMP traffic impact analysis is required if a project will add 150 or more trips to a freeway segment in either direction during either the AM or PM weekday peak hour. An analysis is also required at all CMP monitoring intersections where a project would add 50 or more peak hour trips. As shown in Figures 5 and 6, the proposed project does not exceed these CMP traffic growth limits. Therefore, no additional CMP traffic analysis is necessary.

CHAPTER 6 MITIGATION MEASURES

Based on the analysis in this study, it has been determined that the added traffic generated by the proposed project will significant impact two (2) intersections in the existing + project" scenario and five (5) intersections in the future 2019 cumulative scenario. The recommended traffic mitigation program combines a mix of roadway capacity enhancements to improve traffic flow and traffic management programs to alter travel patterns and reduce trip making. Project traffic impacts and the MGA traffic mitigation program are described below:

Project traffic impacts (Existing + Project)

Using criteria in the City's TIA Guidelines, it has been determined that the changes in the existing traffic conditions caused by the project - generated traffic flow will significantly impact two study intersections.

1. Winnetka Avenue and Parthenia Street (#6) is significantly impacted during the weekday morning peak hour prior to implementing traffic mitigation measures. As shown in Table 5, the morning traffic impact is an increase in the CMA value by + 0.040 at LOS C.
2. The intersection of Corbin Avenue and Plummer Street (#8) is also significantly impacted during the weekday morning peak hour prior to implementing traffic mitigation measures. As shown in Table 5, the morning traffic impact is calculated at + 0.034 at LOS D.

Although Metro transit and LADOT DASH no longer serve the project site, the foundation of the start-up multi-mode program for MGA is to create a site-serving transit service by the implementation of a private shuttle route to connect residents and employees to nearby employment centers, transit stations and commercial retail centers. The goal of full Transportation Demand Management program will be to create a multi-mobile hub at the MGA campus with bike and car share programs and other TDM programs for both MGA residents and employees. These measures are described in more detail later in this chapter.

To mitigate the project's existing traffic impacts, it is recommended that the project operate a peak hour private shuttle. This shuttle will then be available to serve the site during mid-day and evening hours to provide residents and employees more mobility choices through out the day. This will allow residents and employees to be car-free if desired.

The shuttle route is targeted to Warner Center, the Metro Orange Line and the Chatsworth Metrolink Station. The peak hour routes will allow residents and employees to take shuttles for work and non-work trips and provide connections to train and bus stations/stops at the Pierce College station, the Warner Center Owensmouth Transit Center and the Metro Chatsworth Orange Line / Metro link Station.

In addition, several street improvements have been selected to address localized traffic congestion in the study area. Listed below are the recommended roadway traffic mitigation measures.

1. Winnetka Avenue and Parthenia Street (#6) - It is recommended that Parthenia Street be restriped to install a westbound right-turn only lane on Parthenia Street at Winnetka Avenue, conceptual traffic mitigation plans illustrated in Figure 16. Traffic signals will be upgraded to accommodate the new right turn lane and brought up to current traffic signal standards.
2. Corbin Avenue and Plummer Street (#8) - It is recommended that Corbin Avenue be restriped to install a southbound right-turn only lane on Corbin Avenue at Plummer Street, conceptual traffic mitigation plans illustrated in Figure 17. Traffic signals will be upgraded to accommodate the new right turn lane and brought up to current traffic signal standards.
3. New traffic signal at the intersection of Winnetka Avenue and MGA driveway, see Appendix H for the traffic signal peak hour signal warrant justification.

As a result of these measures, the project's significant traffic impacts on existing conditions will be reduced to less than significance as shown in Table 10.

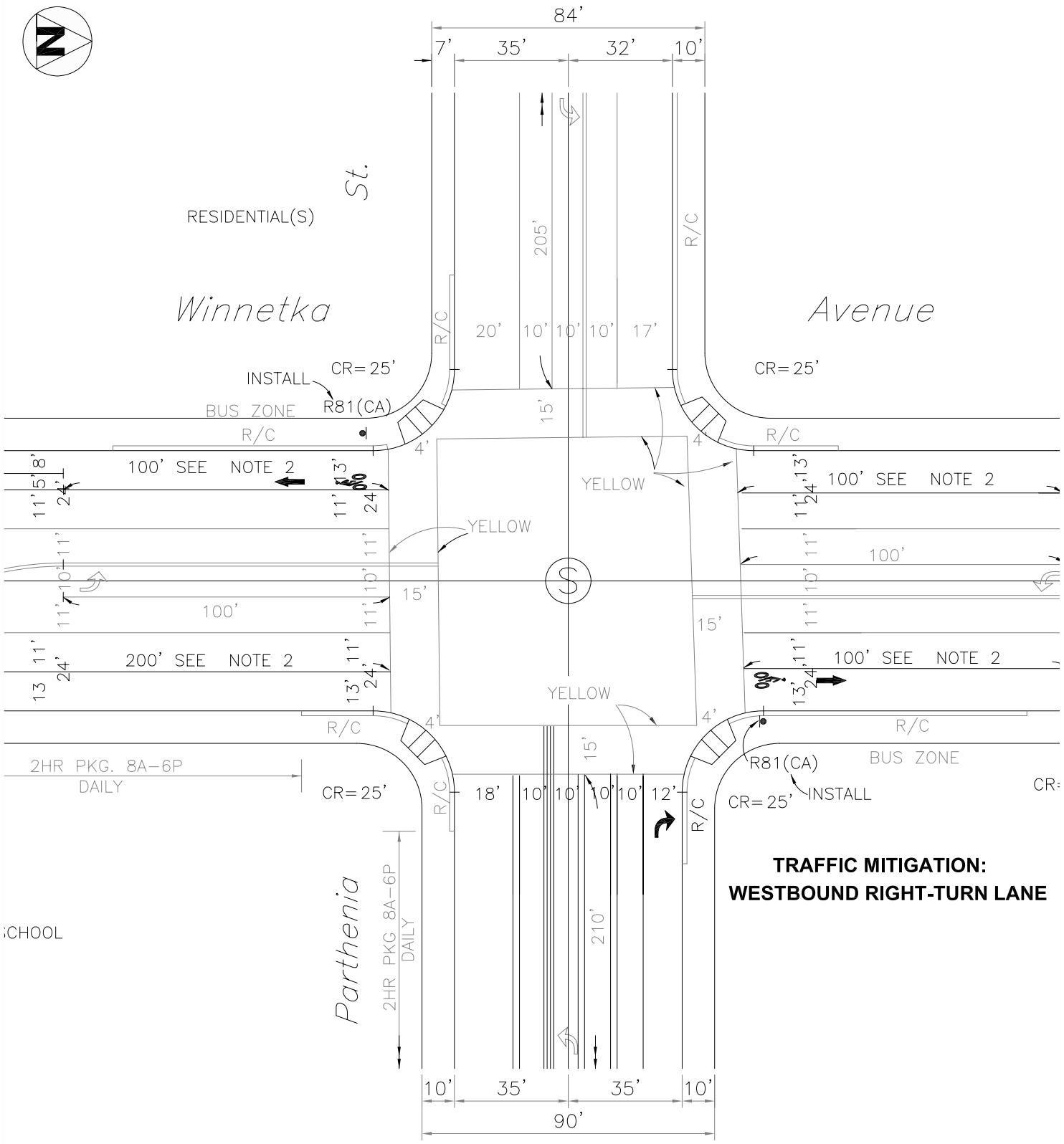

FIGURE 16

11/2013

CONCEPTUAL TRAFFIC MITIGATION
PARTHENIA STREET AND WINNETKA AVENUE
WESTBOUND RIGHT - TURN LANE

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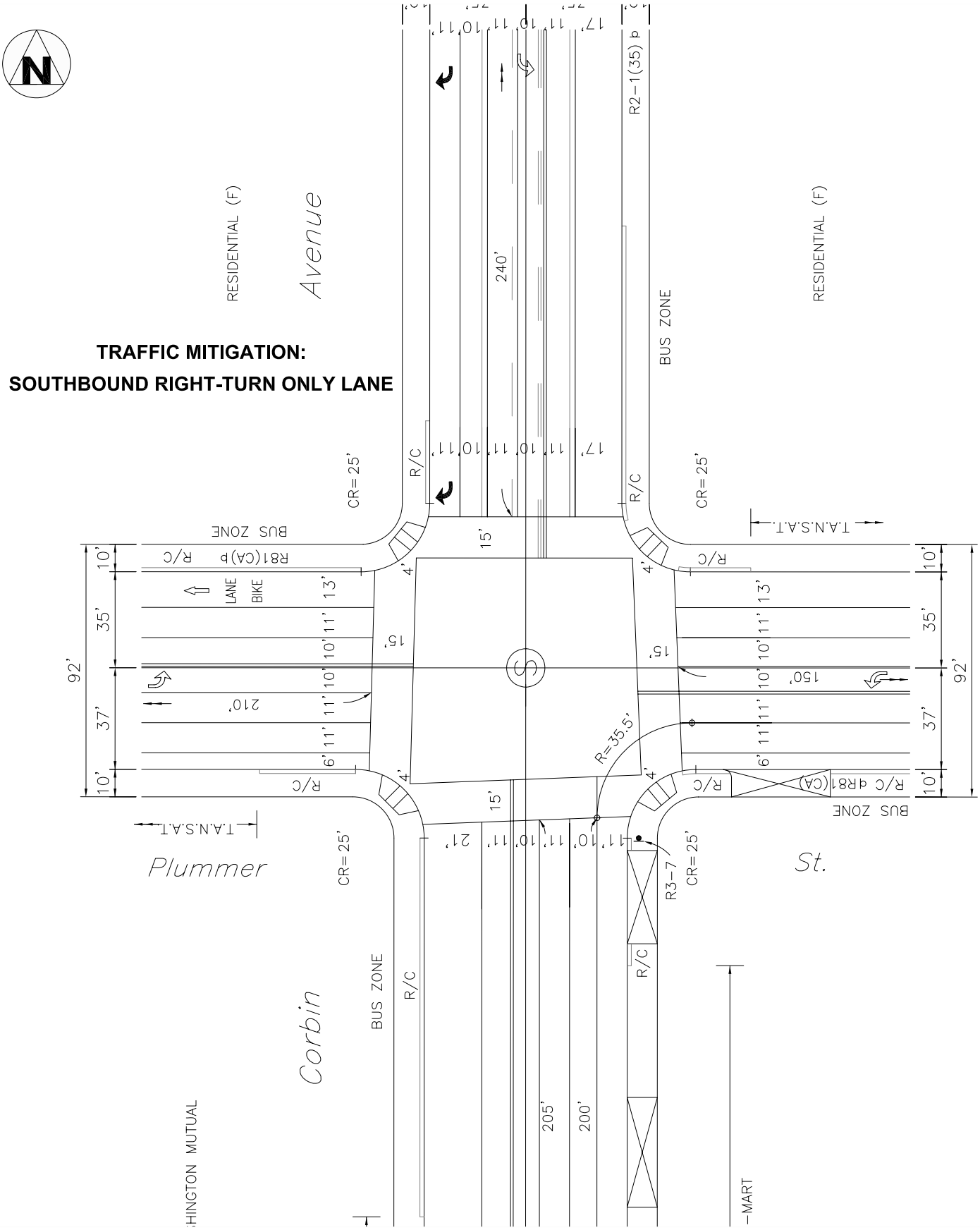

FIGURE 17

11/2013

CONCEPT TRAFFIC MITIGATION
CORBIN AVENUE AT PLUMMER STREET
SOUTHBOUND RIGHT-TURN ONLY LANE

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Table 10

Existing + Project Traffic Conditions With Mitigation

No.	Intersection	Peak Hour	Existing CMA	Existing LOS	Existing With Project Mitigation CMA	Existing With Project Mitigation LOS	Existing With Project Mitigation Impact
6.	Winnetka Av. & Parthenia St.	AM	0.713	C	0.741	C	+ 0.028
		PM	0.677	B	0.689	B	+ 0.012
8.	Corbin Av. & Plummer Av.	AM	0.786	C	0.731	C	- 0.055
		PM	0.731	C	0.765	C	+ 0.034

Project traffic impacts (Future 2019 Cumulative + Project)

Based on the future traffic conditions analysis for 2019, five (5) intersections are significantly impacted by the project's traffic. The intersections and impacted time periods are:

1. Winnetka Avenue and Nordhoff Street (#5) during the morning peak hour;
2. Winnetka Avenue and Parthenia Street (#6) during both the morning and afternoon peak hours;
3. Winnetka Avenue and Roscoe Boulevard (#7) during the morning peak hour;
4. Corbin Avenue and Plummer Street (#8) during both the morning and afternoon peak hours;
5. Corbin Avenue and Prairie Street (#9) during the morning peak hour.

Future cumulative traffic impacts with an expanded MGA Transportation Demand Management Program (TDM) and the roadway improvements, as described below, will reduce the significant traffic impacts to less than significance at 3 of the 5 intersections. Significant traffic impacts, however, will remain at the intersections of Corbin Avenue and Plummer Street and at Corbin Avenue and Prairie Street.

Transportation Demand Management (TDM)

Although roadway improvements will continue to be an important strategy for providing mobility, the focus of the transportation mitigation plan for the MGA mixed – use project is to develop a congestion avoidance program through trip reductions while maintaining and providing transportation mobility.

The MGA TDM program is designed to maximize the people-moving capability by increasing the number of person in a vehicle, or by influencing the time of, or need to, travel. To accomplish these types of changes in travel behavior, the TDM program elements must rely on incentives or disincentives to make these shifts in behavior attractive.

Employer – based TDM programs often are the most effective in reducing trips. TDM strategies can be chosen to meet a relatively narrow set of worksite and commuter demographic characteristics. Information dissemination can be targeted precisely to the employees and residents most likely to use the alternatives, and offered in a personalized manner that eases the transition to a different and possibly unfamiliar travel mode. Furthermore, it is very important the MGA establishes a "corporate culture" that affirms employees and residents decisions to use a commuting alternative.

Although employer support measures are very important in supporting TDM alternatives, they are not instruments that, in themselves, actually change behavior. A truly effective TDM program will implement incentives and disincentives that are clearly perceived by the individual making the decision to travel.

I. Improved Transit Alternatives

1. Private MGA Transit (shuttle service)

Continue to operate the private shuttle service targeted specifically to the needs of the MGA residents and employees. It is recommended that MGA provide a fixed-route shuttle route providing 30 - minute headways during the morning and afternoon peak hour to the nearby transit stations and work centers. Mid-day and off-peak schedules will be more demand-responsive providing viable and convenient transit options for MGA residents and employees.

- Warner Center / Chatsworth Orange Line Route - traveling along Winnetka Avenue to the Orange Line Pierce College Station then along Victory Boulevard to the Warner Center Station and lastly along Canoga Avenue to the Chatsworth Station, returning to the MGA site along Nordhoff Street, see Figure 18.

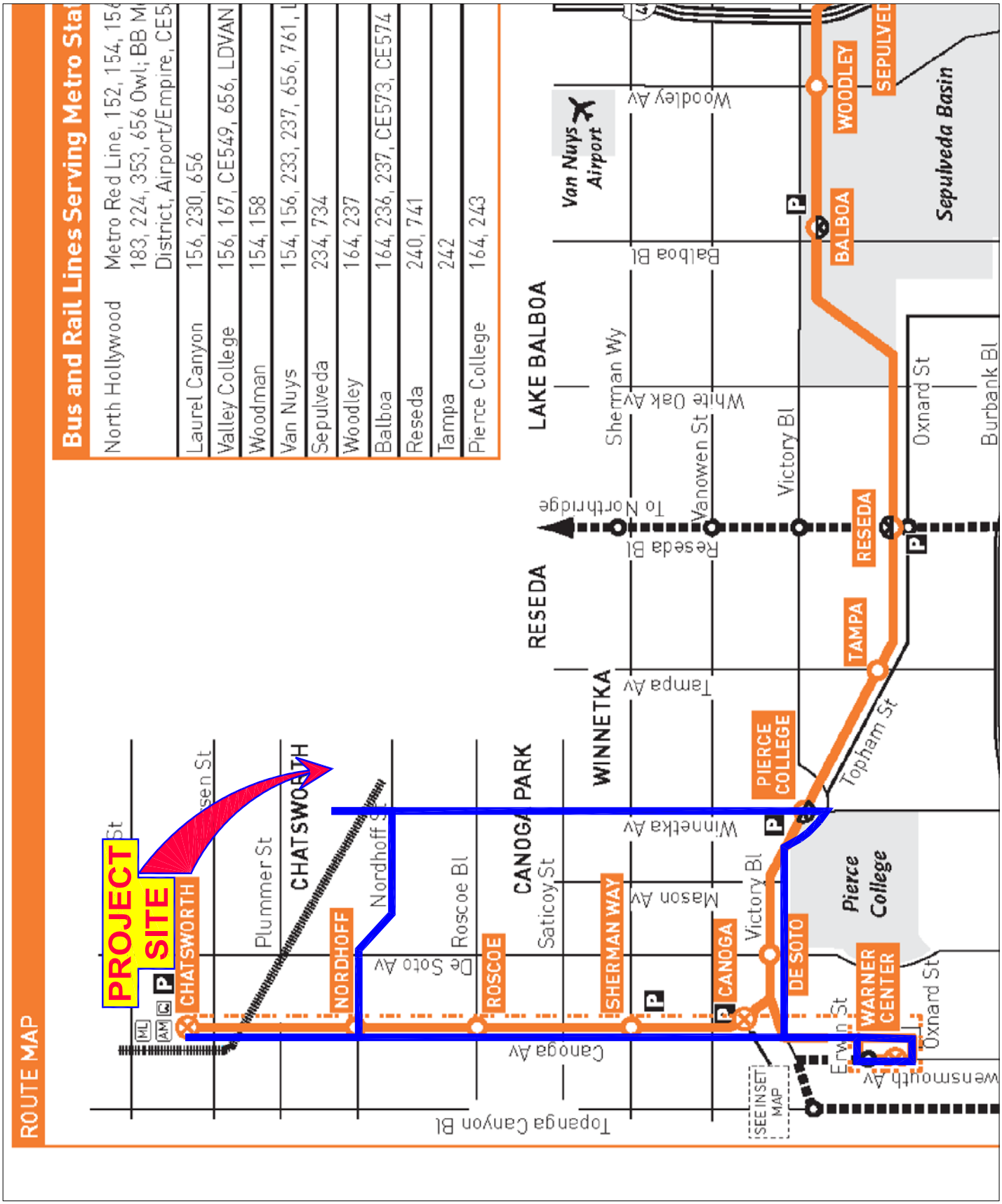

FIGURE 18

10/2013

POTENTIAL MGA PRIVATE SHUTTLE
WEST ROUTE

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- Shuttle will be equipped with bike racks to promote the bike usage program. Note that DASH service does not currently provide bike racks.

II. TDM Alternatives (carpool and bike with site improvements)

1. Carpool program
    - MGA contracts with local taxi company to provide a guaranteed ride home for late workers, workers who miss their ride or need to attend to a mid-day emergency.
    - MGA provides preferential parking for carpoolers and vanpoolers.
    - MGA assists in providing one-on-one employee and resident assistance in forming and maintaining rideshare arrangement.
2. Bicycle program
    - MGA will provide support facilities and services, such as bike parking and storage facilities, bike repair facilities, changing and shower facilities.
    - MGA will provide areas for bike displays from bicycle manufacturers and local shops at periodic bike fairs and promotional events.
3. MGA Multi-modal Site Improvements

A common objection to ridesharing is the need to have a car during the day to perform personal or job-related errands.

- MGA will provide on-site Day Care, retail and employee cafeteria to reduce trip making.
- MGA will establish a satellite remote work center for MGA residents who are non-MGA employees but choose to telecommute.
- MGA will provide an on-site designated rideshare friendly shuttle plaza and loading area.

III. Incentives and Disincentives

1. MGA Support Measures

   - Corporate commitment to the overall level of support for the TDM program. Promote a corporate culture to reflect the willingness to devote resources to the program and provide tangible benefits to commute alternatives.
   - Provide on-site TDM marketing features to disseminate information thru bulletin boards, new employee / resident orientation, news letters, promotional fairs, etc.
   - Staff a TDM Coordinator to manage the programs development, implementation, marketing, administration and program evaluation. Services include personalize commute planning assistance.
   - Support promotional activities such as fairs, clubs and awards that can increase commuters' interest in ridesharing.

2. Parking Management – Price of parking is the single most influential factor determining the share of commuters who drove to work. A reduced parking supply and chase-out parking at work can dramatically alter travel behavior and reduce solo drive-alone travel patterns.

   - Provide monthly stipend for employees to use on whatever travel mode they wish, including driving alone. Implemented thru the daily cash out credit / debit tracking employee identification card
   - Daily Cash Out Program gives commuters a new choice, rewards the alternative to solo driving, reduces trips and treats all commuters equally. MGA will continue to offer subsidized parking but will broaden the offer to include the option to take the cash equivalent of the parking subsidy instead of the parking subsidy itself. The forgone cash mean drivers in effect pay for their "free" parking. Parking cash out is a buy-

back not a take-way, it rewards commuters for choosing the alternate to driving to work alone, rather than punishing them for solo driving. For example: under the program, MGA employees can park free at work on any day, but any commuter who brings a car will scan an employee ID card to enter the garage and receive a debit. All employees automatically earn a credit each day when they use their employee identification card to enter the office building. These accumulated credits and debits are tallied each month to determine the employee's cash or cash equivalent transportation allowance. Each member of a carpool / vanpool receives a credit for reporting to work and the one whose identification card activates the parking lot gate incurs the debit, which can be credited back via carpool/ vanpool registration program.

3. Alternative Work Arrangements

Alternative Work Hours can reduce the number of days and thus the number of miles traveled commuting, and shift employees travel to a time outside normal daily peak periods. Because of these two factors, the alternative work hours program can be effective in reduce traffic congestion and air pollution.

- Staggered work hours – In a staggered work hour program, MGA employee's start work times are scheduled at intervals so that different groups of employees (often by departments) begin work at different times.
- Compressed work hours – Compressed work week programs allow employees to work a full work week in fewer than the usual five days. The most common are: 4/10 with four 10-hour days; 3/36 with three 12-hour days and 9/80 with eight 9-hour days and one 8-hour day.
- Flexible work hours (flextime) – Flextime allows employees to set their own arrival and departure times within core hours during which all employees must be in the office.

Table 11 contains the level of service values and effectiveness for the cumulative traffic mitigation program. A 6 % TDM trip reduction has been assumed for the calculation.

Table 11
Future + Project Traffic Conditions With Mitigation

No.	Intersection	Peak Hour	Future W/O CMA	Future W/O LOS	With Project Mitigation CMA	With Project Mitigation LOS	With Project Mitigation Impact
5.	Winnetka Av. & Nordhoff St.	AM	0.839	D	0.853	D	+ 0.014
		PM	0.758	C	0.781	C	+ 0.023
6.	Winnetka Av. & Parthenia St.	AM	0.819	D	0.783	C	- 0.036
		PM	0.781	C	0.793	C	+ 0.012
7.	Winnetka Av. & Roscoe Bd.	AM	0.810	D	0.820	D	+ 0.010
		PM	0.864	D	0.870	D	+ 0.006
8.	Corbin Av. & Plummer Av.	AM	0.894	D	0.831	D	- 0.063
		PM	0.837	D	0.871	D	+ 0.034 *
9.	Corbin Av. & Prairie St.	AM	0.667	B	0.729	C	+ 0.062 *
		PM	0.570	A	0.654	B	+ 0.084

* Indicates significant traffic impact per City of Los Angeles Department of Transportation

Trip cap monitoring agreement

The success of the TDM plan is dependent on the type and level of TDM strategies implemented. The key to developing an effective program is to determine what strategies the employees and residents of the MGA mixed -use project would be able to use and then build the program incentives around those strategies. It is recommend that a 1 year trip count be conducted after occupancy of the MGA Corporate Headquarters building to establish the true impact and assist in targeting the most effective TDM measures with a second trip count after occupancy of the first 350 apartment units.

Note that large trip reductions may not be entirely necessary. The trip generation rates used by LADOT for this study are mainly based on the square footage for corporate headquarters. MGA will also have limited assembly, showroom space and production facilities. As a result the employee density is much lower and may generated significantly less traffic and less impact that estimated by LADOT's trip generation estimates based on gross floor area.

City of Los Angeles Municipal Code Parking Requirements

Municipal Code Section 13.15 authorizes the City to establish a special "Modified Parking Requirement District ("MPR District")" for unique properties at least 5 acres in size (LAMC §13.15B). The MGA Campus Project includes a complementary mix of residential, commercial and light industrial uses with various shared amenities across a 24 acre site. As such, to promote efficient site planning, the Applicant proposes an MPR District to allow for appropriately tailored parking ratios and shared parking usage throughout the Campus Project. In total, the Campus Project would provide 1,467 parking spaces for the uses.

Urban Land Institute (ULI) Parking Requirement

Based on recommendations from the ULI database, the amount of parking needed for this mix – use project is primarily affected by the proportion of reserved parking for the residential units and the peak parking demand of the commercial uses. The peak parking demand estimated by this evaluation represents the total parking demand to serve the needs of residents, customers, visitors and employees.

For this analysis at least the first parked vehicle per residential unit (700 spaces) was allocated as reserved parking. The remaining peak hour spaces would be considered as residential parking that can be shared with other uses. Because of the low employee density for the MGA corporate headquarters and the creative office use, the parking demand was based on 500 office employees.

The parking demand calculated for the MGA mixed – use project is 1,334 parking spaces using the ULI parking demand model: the parking model provides 700 spaces reserved for the residential, 346 spaces reserved for the commercial and 288 spaces will be unassigned, i.e., open for sharing with the residential, commercial and guests. The estimated hourly parking demand is shown in Table 12.

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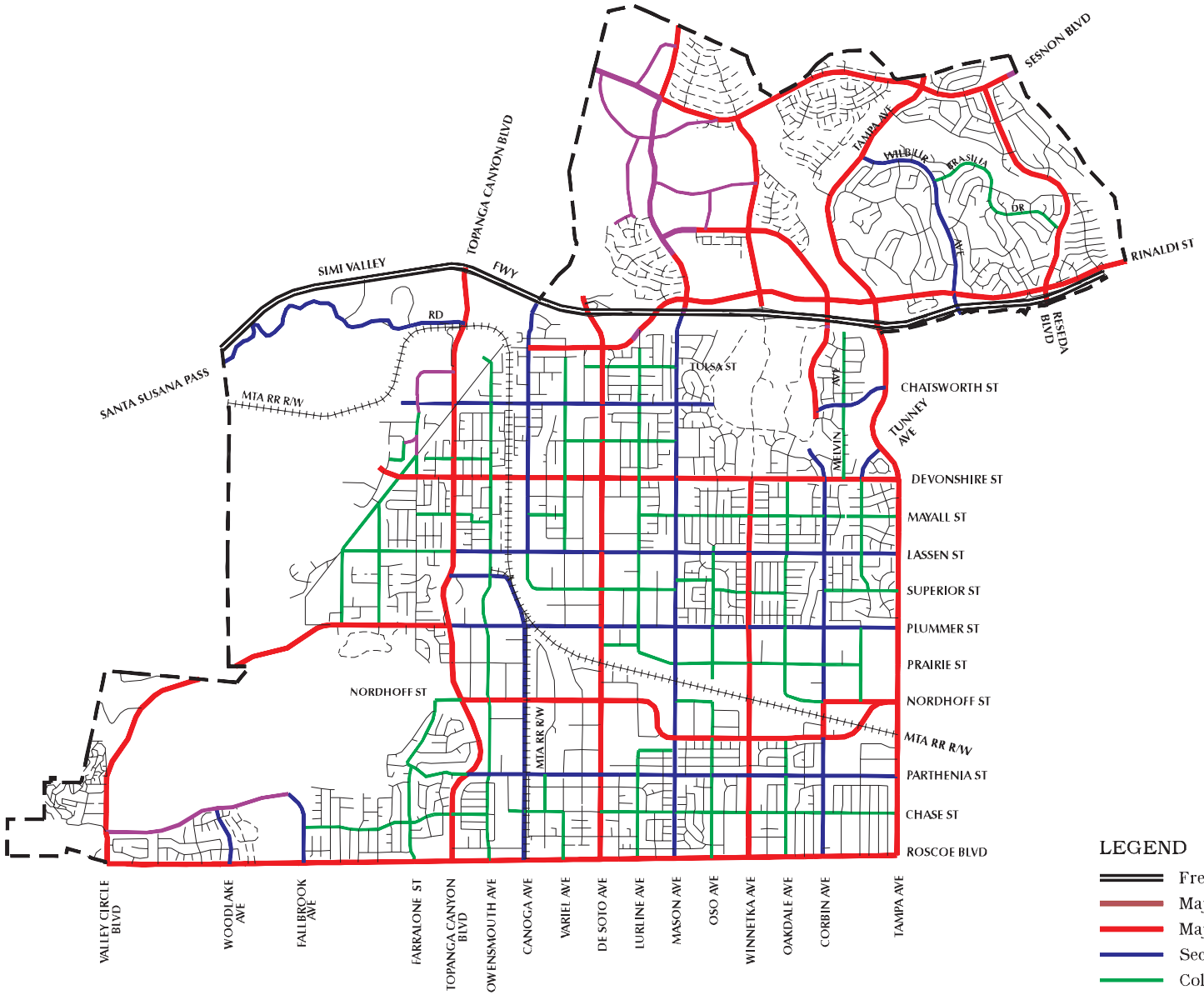
Table 12
Hourly Parking Demand Values MGA Campus

	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	12 AM
Retail	-	1	3	6	12	16	19	21	21	21	20	18	17	16	14	11	6	2	-
Retail Employee	1	1	3	5	6	7	7	7	7	7	7	7	7	7	6	5	3	1	-
Restaurant	4	9	11	13	15	16	18	16	9	8	8	13	14	14	14	11	10	9	4
Employee	3	4	5	5	5	5	5	5	5	4	4	5	5	5	5	4	3	3	2
Residential, Rental, Shared	302	272	257	241	227	211	196	211	211	211	226	257	272	293	296	299	302	302	302
Residential Reserved	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700	700
Residential Guests	-	11	21	21	21	21	21	21	21	21	21	42	63	105	105	105	105	84	53
Office Guests	-	-	6	17	29	13	4	13	29	13	4	3	1	1	-	-	-	-	-
Employees, assumes 500	10	96	240	303	319	319	287	287	319	319	287	160	80	32	22	10	3	-	-
TOTAL DEMAND	1,020	1,094	1,246	1,311	1,334	1,308	1,257	1,281	1,322	1,304	1,277	1,205	1,159	1,173	1,162	1,145	1,132	1,101	1,061

APPENDIX A

COMMUNITY PLAN LAND USE INFORMATION



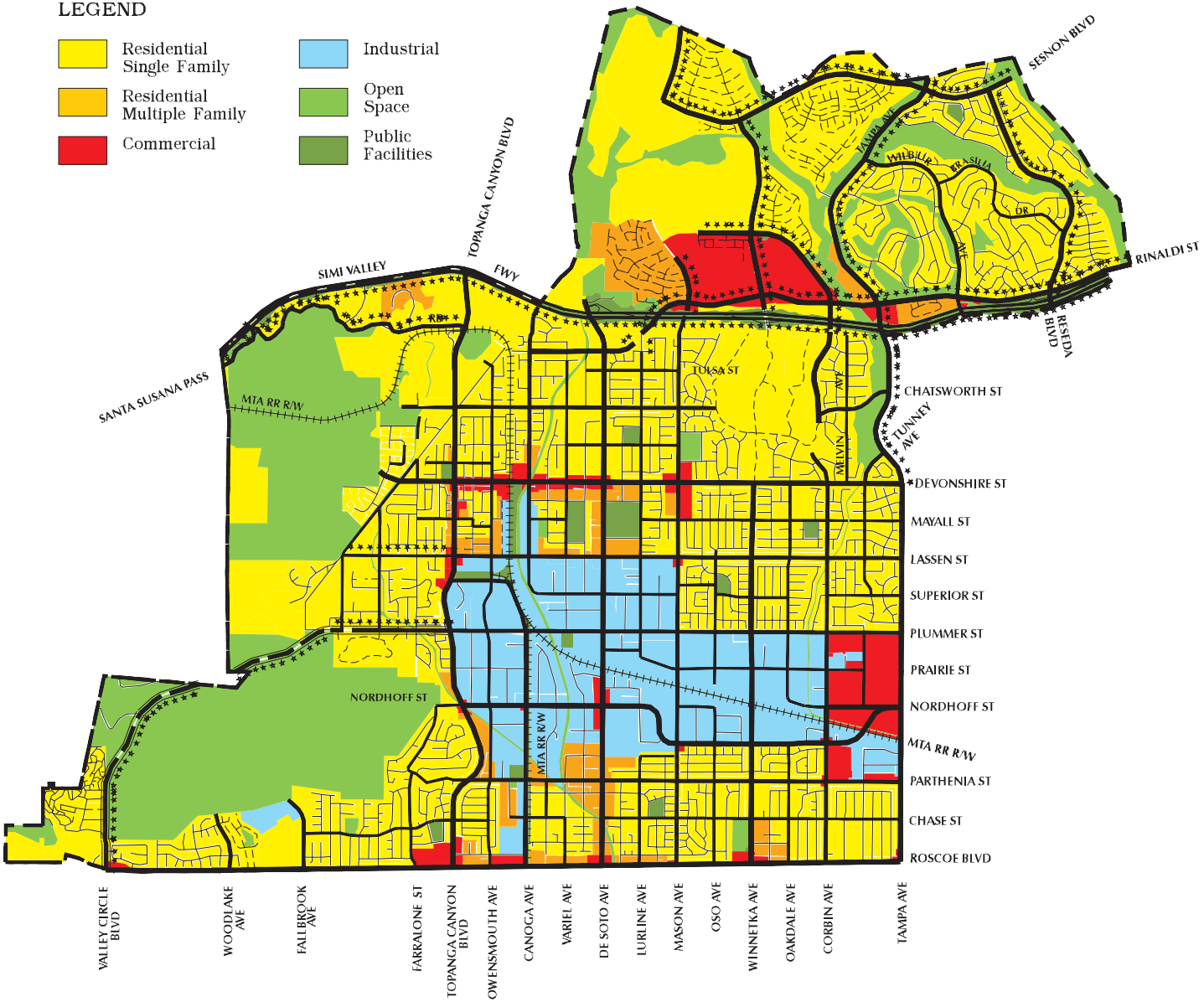
LEGEND

- Freeway
- Major Highway Class I
- Major Highway Class II
- Secondary
- Collector
- Proposed
- Local

GENERALIZED CIRCULATION
CHATSWORTH - PORTER RANCH

NORTH

as of: October 26 2005-CPC04-4325ZC/GPA PLT:04/18/07



GENERALIZED LAND USE
CHATSWORTH - PORTER RANCH

NORTH

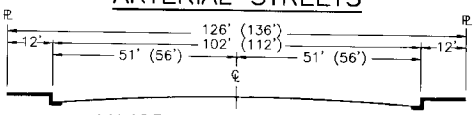
as of: October 26 2005-CPC04-4325ZC/GPA PLT:04/18/07

APPENDIX B

CIRCULATION MAPS, STREET STANDARDS & STREET PLANS

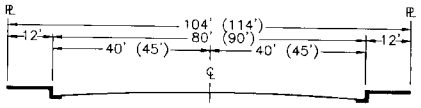
B-4428

ARTERIAL STREETS



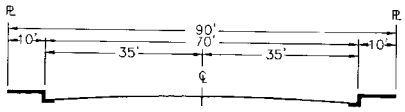
MAJOR HIGHWAY—CLASS I

At intersections with other Major Highways, the larger widths shown in parentheses should be provided, as determined by LADOT, utilizing a Standard Flare Section.



MAJOR HIGHWAY—CLASS II

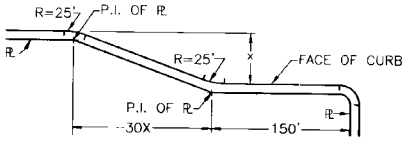
At intersections where LADOT has determined that dual left turn lanes are required, the larger widths shown in parentheses shall be provided, utilizing a Standard Flare Section.



SECONDARY HIGHWAY

TRANSITIONAL EXTENSIONS

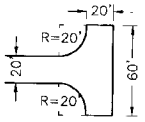
Where a designated Major Highway (Class I or II) or a Secondary Highway crosses another designated arterial street and then changes in designation to a street of lesser standard width, the street of lesser standard width shall be widened on both sides from the intersection to the width of the higher designation and tapered in a Standard Flare Section, as shown below, to provide an orderly transition.



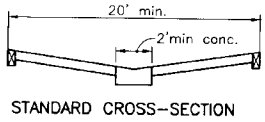
Dimensions shall be measured angle point to angle point.

STANDARD FLARE SECTION
(Plan View)

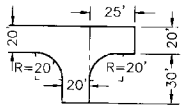
ALLEYS



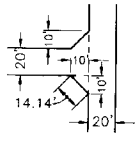
STANDARD TURNING AREA
(Plan View)



STANDARD CROSS-SECTION



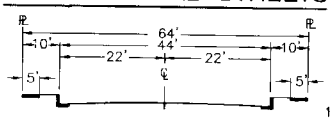
MINIMUM TURNING AREA
(Plan View)



STANDARD CUT-CORNERS
FOR 90° INTERSECTION
(Plan View)

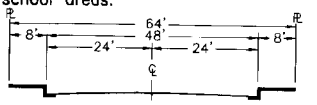
NOTE: Dimensions shown hereon are not to scale.

NON-ARTERIAL STREETS



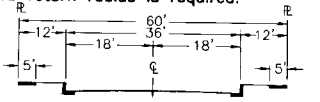
COLLECTOR STREET

For use in quarter mile streets and school areas.



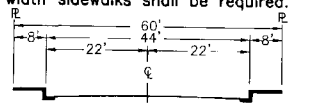
INDUSTRIAL COLLECTOR STREET

For use in industrial areas to assist the flow of local truck traffic within those areas to adjacent arterial streets. A 35' curb return radius is required.



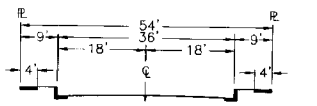
LOCAL STREET

In commercial and multiple residential areas, a 40-foot roadway with 10-foot parkways, and full-width sidewalks shall be required.



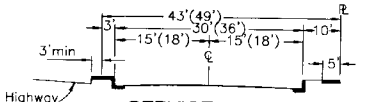
INDUSTRIAL LOCAL STREET

For use in industrial areas. A 35' curb return radius is required.



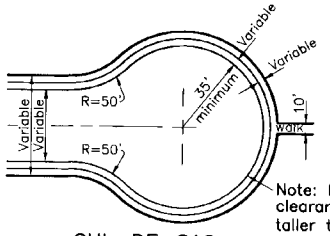
NONCONTINUOUS LOCAL STREET

May include cul-de-sac, loop streets and short connector streets. Where an approved internal pedestrian system is provided the parkway on one side may be reduced to 3-feet.



SERVICE ROAD

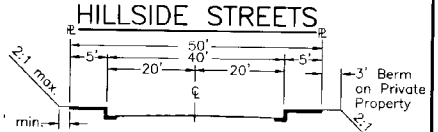
For use on adjoining major or secondary highways, except that the larger widths shown in parentheses shall be provided in multiple residential zones.



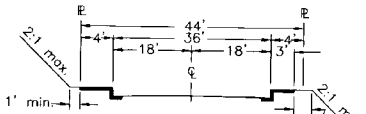
CUL-DE-SAC
(Plan View)
MAY BE UNSYMMETRICAL

Note: For fire truck clearance, no obstruction taller than 6" shall be permitted within 3 ft. of the curb. On-street parking shall be prohibited.

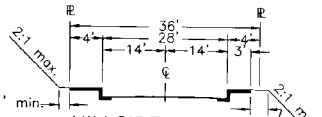
HILLSIDE STREETS



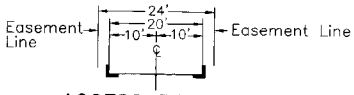
HILLSIDE COLLECTOR STREET



HILLSIDE STREET
LOCAL
2'min.



HILLSIDE STREET
LIMITED
2'min.
(Parking on one side only)



ACCESS ROADWAY
CONDITIONAL

(Limited to 4 dwelling units, and a maximum length of 300 feet. Private Street only)

STANDARD WALKWAY
CROSS - SECTION

PREPARED IN COOPERATION WITH THE DEPARTMENTS OF TRANSPORTATION AND CITY PLANNING

BUREAU OF ENGINEERING — DEPARTMENT OF PUBLIC WORKS — CITY OF LOS ANGELES

STANDARD STREET DIMENSIONS

STANDARD PLAN S-470-0

SUPERSEDES	REFERENCES
D-22549	

VAULT INDEX NUMBER B-4428

SHEET 1 OF 2 SHEETS

SUBMITTED March 25 1999
Clark W. Robins
ENGINEER OF DESIGN
Rodney Hanan
DEPUTY ENGINEER

APPROVED March 31 1999
Thomas Conner
CITY ENGINEER

DESIGNED BY	DRAWN BY	CHECKED BY
M.F.D., D.L.F., J.E.F., A.D.R.	R. TANABE	L. GANAJA

REGISTERED PROFESSIONAL ENGINEER — THOMAS K. CONNER — NO. 23788 — EXP. 12/31/2001 — CIVIL — STATE OF CALIFORNIA

APPROVED Frances Beaujon 4.6.99
GENERAL MANAGER, DEPT. OF TRANSPORTATION DATE

Coulowe 4/6/99
DIRECTOR OF PLANNING DATE

ADOPTED MAY 13, 1999
CITY PLANNING COMISSION DATE

BUREAU OF ENGINEERING — CITY OF LOS ANGELES — FOUNDED 1781 — OFFICIAL RECORD

THIS STANDARD PLAN BECOMES EFFECTIVE ON NOVEMBER 10, 1999

B-4428

B-4428

STANDARD STREET CONDITIONS

1. City Council may, by ordinance, adopt specific standards for individual streets which differ from these official standard street dimensions. Community Plans should be reviewed for designation of Pedestrian Priority Street Segments of arterial streets which would require wider sidewalks than those indicated on this Standard Plan.

2. Sidewalk widths for non-arterial streets shall be the minimum shown hereon. Greater widths, up to full width between curb and property line, with tree wells, shall be required where commercial and multiple residential frontage, schools, areas of heavy pedestrian traffic or other special circumstances indicate the need.

3. Except for special conditions or as otherwise provided, sidewalk shall be placed as close to the property line as possible.

4. Where sidewalk is constructed adjacent to the curb it shall have a minimum width of 10 feet inclusive of curb thickness except for hillside streets, noncontinuous local streets and industrial streets.

5. Where sidewalk is constructed on the fill or low side of a hillside street, a berm may be required on private property.

6. Easements may be required in addition to the widths shown hereon, where necessary for the installation of public utilities or for widened sidewalks (minimum 15-foot width) adjacent to transit stations.

7. Fifty-foot curb radii (instead of the standard 35' curb radii) shall be provided for cul-de-sacs in industrial areas.

8. Private street development should conform to the standard public street dimensions shown on this sheet, where appropriate. Variations may be approved on a case-by-case basis.

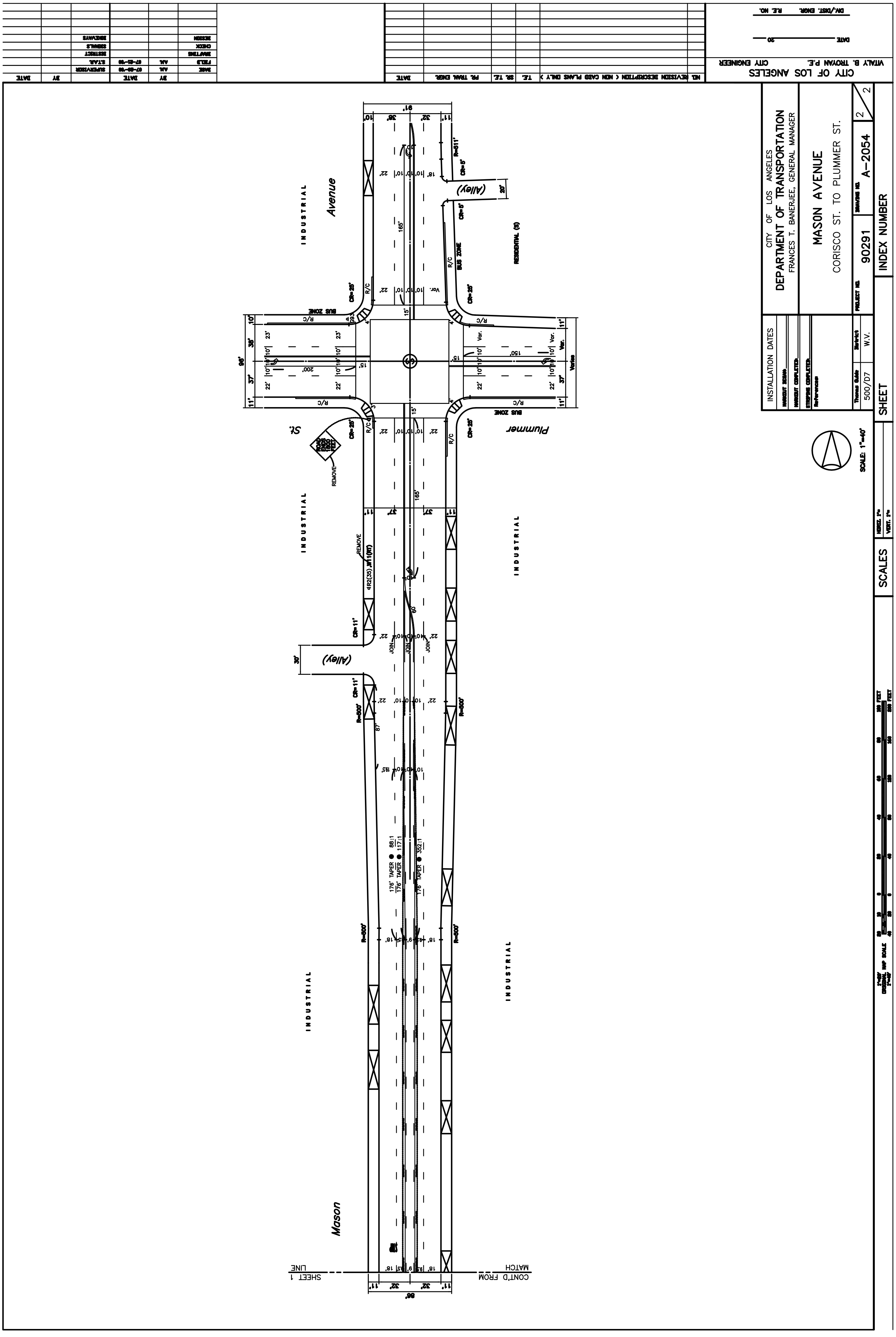
9. For intersections of streets the following dedications shall apply:
   a. Intersections of arterial streets with any other street: 15'x15' cut corner OR 20' curved corner radius.
   b. Intersections of non-arterial and/or hillside streets: 10'x10' cut corner OR 15' curved corner radius.

10. Hillside Collector Streets. In hillside areas where topography or other environmental considerations, documented to the satisfaction of the City Engineer, would render full street improvements infeasible, the roadway width of the hillside collector street may be reduced to no less than 32 feet, provided that parking is limited to one side only.

BUREAU OF ENGINEERING
CITY OF LOS ANGELES
FOUNDED 1781
OFFICIAL RECORD

STANDARD PLAN NO. S-470-0	VAULT INDEX NUMBER B-4428	SHEET 2 OF 2 SHEETS

B-4428


CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
FRANCES T. BANERJEE, GENERAL MANAGER
MASON AVENUE
CORISCO ST. TO PLUMMER ST.
CITY OF LOS ANGELES
VITALY B. TROYAN P.E.
CITY ENGINEER
INSTALLATION DATES
PROJECT NO. 90291
DRAWING NO. A-2054
INDEX NUMBER
SHEET 2
Thomas Guide 500/D7
District W.V.
SCALE: 1"=40'
SCALES
Mason
Avenue
Plummer
St.
INDUSTRIAL
RESIDENTIAL (R)
(Alley)
BUS ZONE
R/C
REMOVE
CONT'D FROM SHEET 1
MATCH LINE
176' TAPER @ 88:1
176' TAPER @ 117:1
176' TAPER @ 352:1
JOIN

WINNETKA AVENUE BIKE LANES

INSTALLATION DATES	
MARKOUT BEGAN:	
MARKOUT COMPLETED:	
STRIPING COMPLETED:	
References:	
A-3791, A-4980, A-498	
Thomas Guide	District
530, E1	WV

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
JAIME DE LA VEGA, GENERAL MANAGER

WINNETKA AVE
NORDHOFF ST. TO DEVONSHIRE ST.

PROJECT NO.	DRAWING NO.	
MSR11016	A-5709	4 / 4

SCALE: 1"=40'

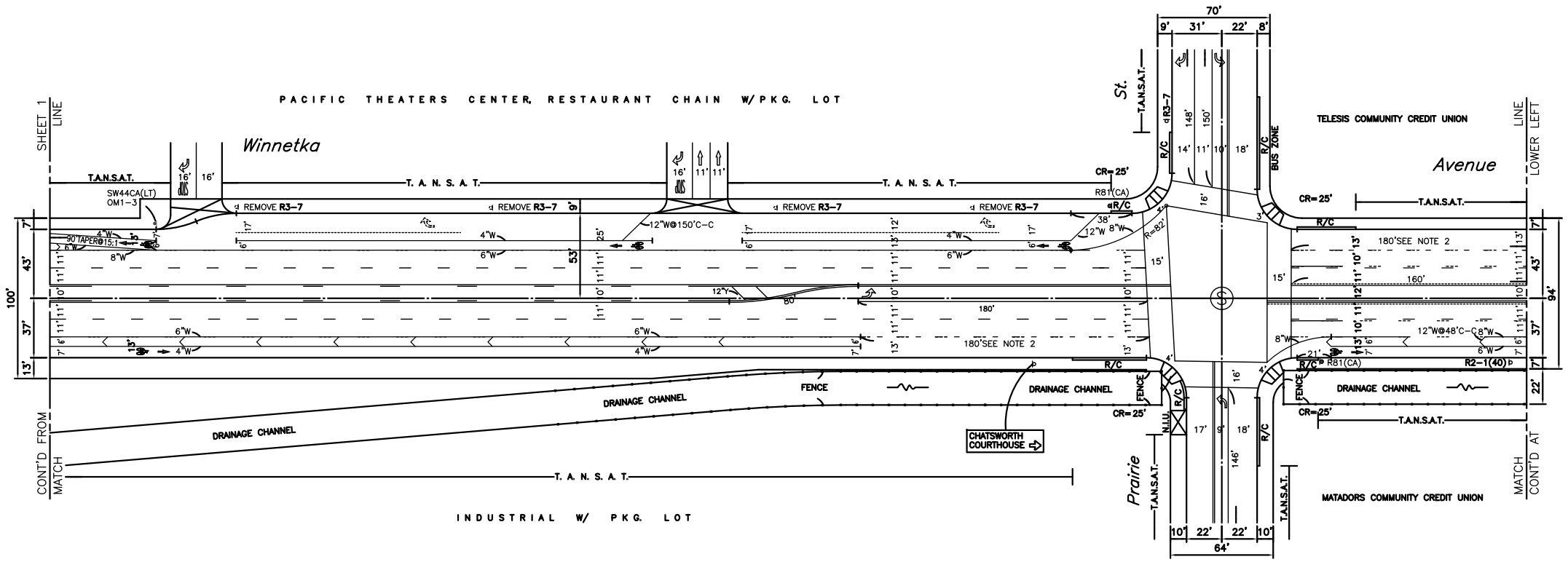
NO.	REVISION DESCRIPTION	BY	DATE
	T.E./SR. T.E.	T.C.	03-14-2012

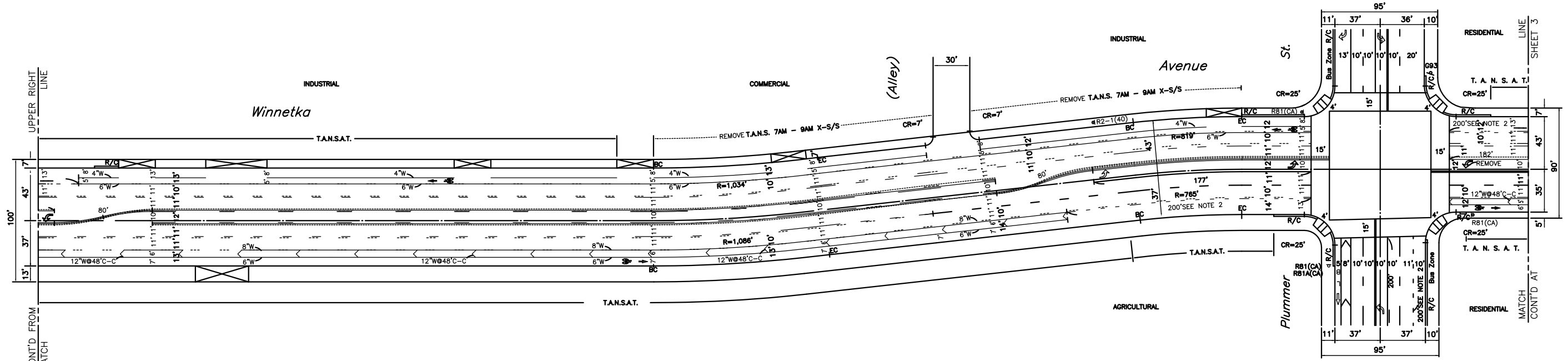
	NAME	DATE
BASE		
CHECK		
DESIGN	S.M.	03-14-2012

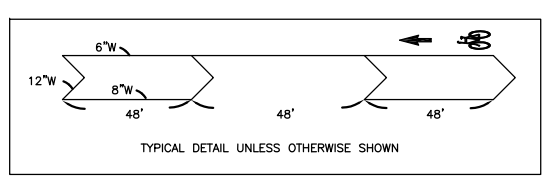
SUPERVISOR
DISTRICT
SIGNALS

SCALES	SHEET	INDEX NUMBER
HORIZ. 1"=		
VERT. 1"=		

1"=20' ORIGINAL MAP SCALE 20 10 0 20 40 60 80 100 FEET







TYPICAL DETAIL UNLESS OTHERWISE SHOWN

WINNETKA AVENUE BIKE LANES

SCALE: 1"=40'

INSTALLATION DATES
MARKOUT BEGAN:
MARKOUT COMPLETED:
STRIPING COMPLETED:
References: A-3791, A-4980, A-498

Thomas Guide	District
530, E1	WV

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
JAIME DE LA VEGA, GENERAL MANAGER

WINNETKA AVE
NORDHOFF ST. TO DEVONSHIRE ST.

PROJECT NO. MSR11016 | DRAWING NO. A-5709 | 2 / 4

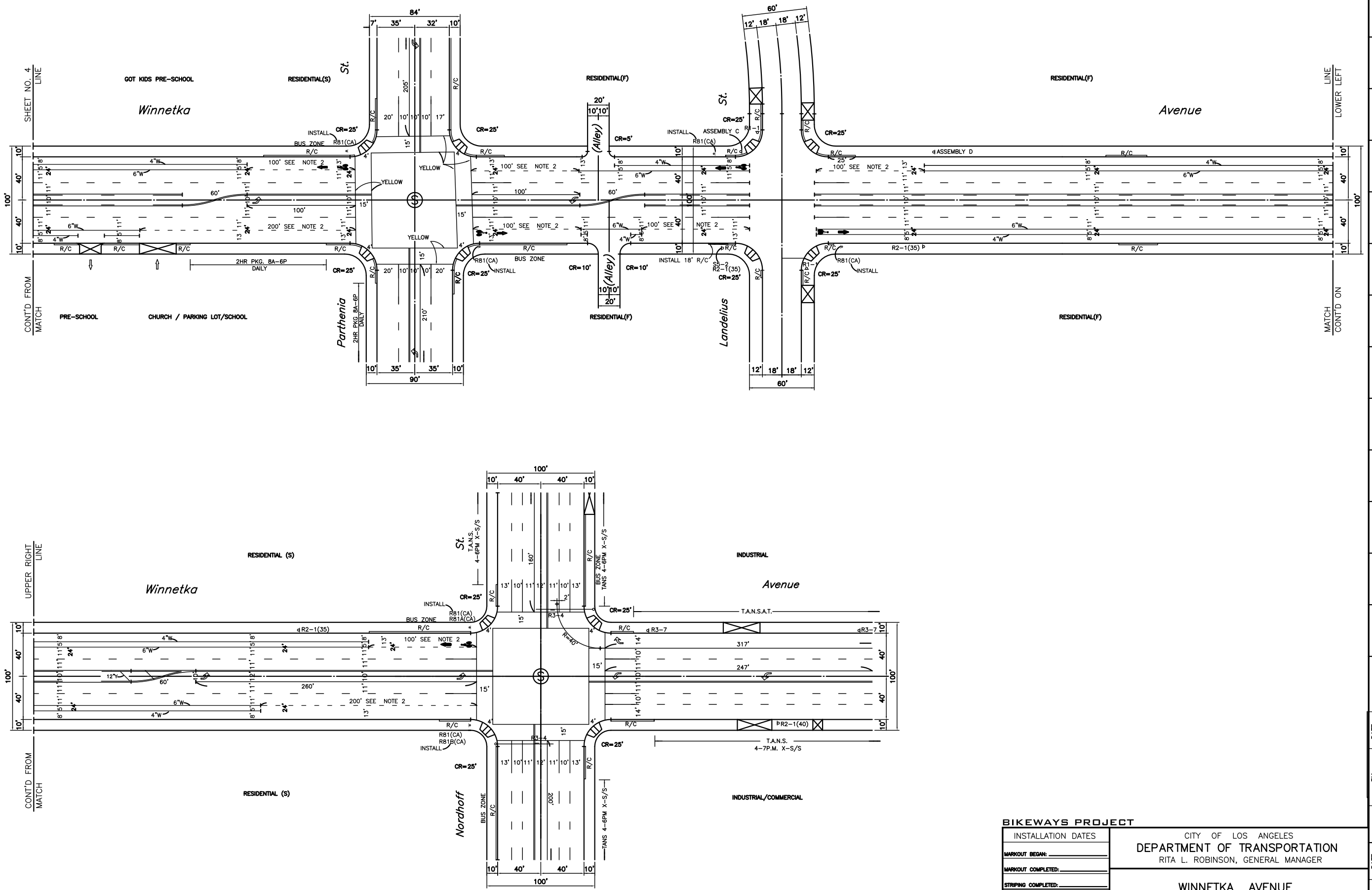
BY	DATE	REVISION DESCRIPTION	NO.
NAME	DATE		
NAME	DATE		
S.M.	03-14-2012		

BY	DATE
T.C.	03-14-2012
NAME	
SUPERVISOR	
DISTRICT	
SIGNALS	
NAME	

PRINCIPAL
T.E./SR. T.E.

1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES | HORIZ. 1"= | VERT. 1"=
SHEET
INDEX NUMBER



R1-1 | R2-1
R81(CA) | R81A(CA)
R81B(CA) | R3-7
S5-2 | ASSEMBLY "D" (CA)
R3-4

BIKEWAYS PROJECT

INSTALLATION DATES
MARKOUT BEGAN:
MARKOUT COMPLETED:
STRIPING COMPLETED:
References:

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
RITA L. ROBINSON, GENERAL MANAGER

WINNETKA AVENUE
GAULT ST. TO NORDOFF ST.

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
560-J1	W.V.	LTF10006	A-5497	5/5

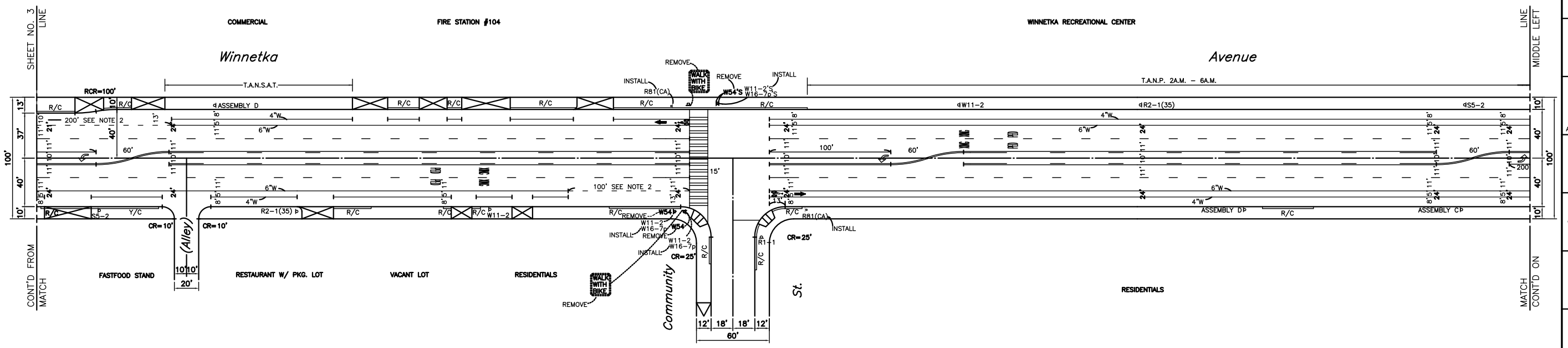
SCALE: 1"=40'

1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES | HORIZ. 1"=40' | VERT. | SHEET | INDEX NUMBER

NO.	REVISION DESCRIPTION	DATE	BY
	T.E./SR. T.E.		
	PRINCIPAL T.E.		

	BY	DATE
SUPERVISOR	P.M.	
DISTRICT	K.F.	
SIGNALS		
BASE	E.Y.CHAVEZ	
CHECK	E.Y.CHAVEZ	
DESIGN	T.F.	



SCALE: 1"=40'

1"=20' ORIGINAL MAP SCALE 1"=40'

20 10 0 20 40 80 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES	HORIZ. 1"=40' VERT.	SHEET	INDEX NUMBER

R1-1 | R2-1 | R81(CA) | ASSEMBLY "D" (CA) | ASSEMBLY C | W11-2 | W16-7p | S5-2 | W54

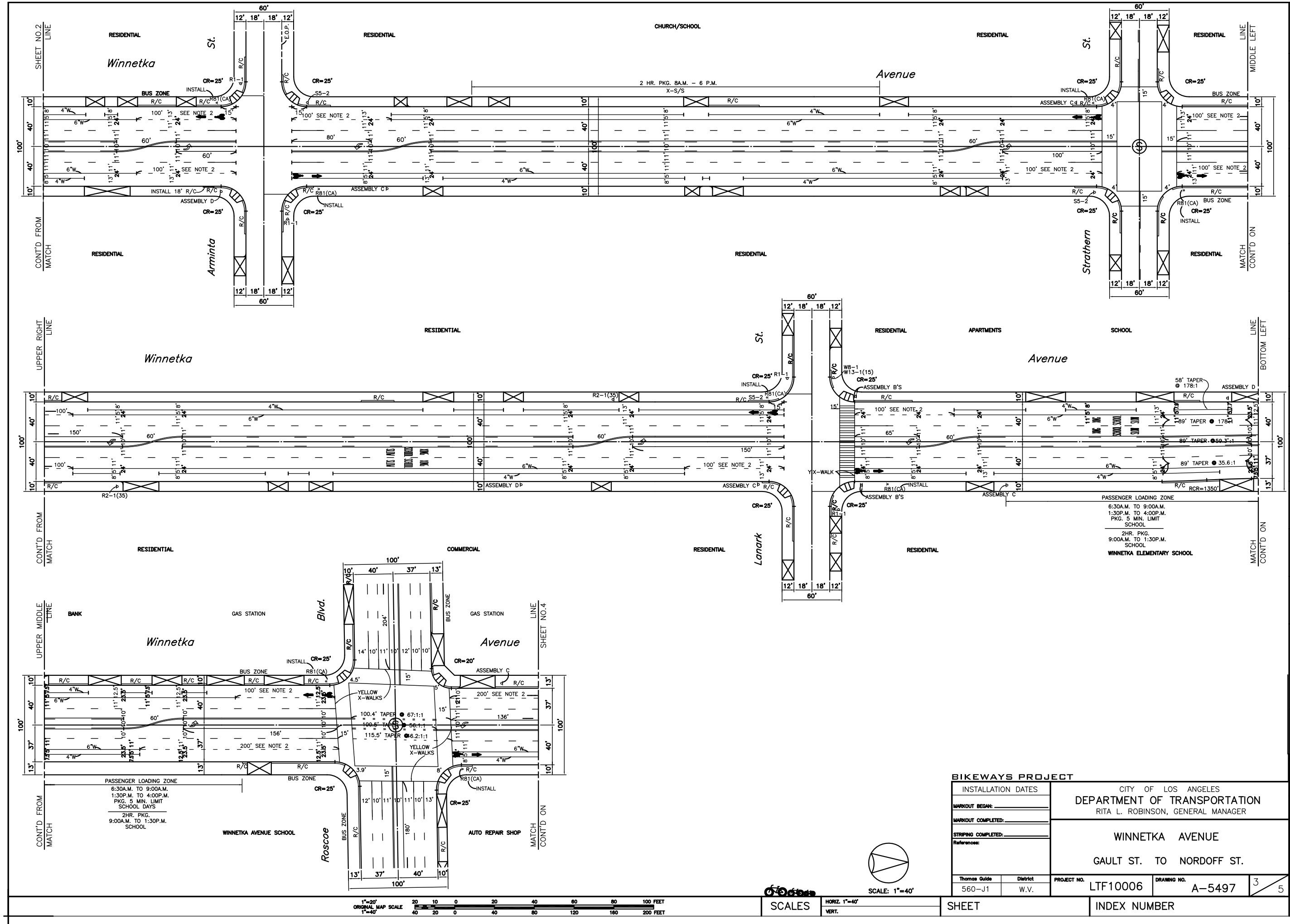
BIKEWAYS PROJECT

INSTALLATION DATES	CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION RITA L. ROBINSON, GENERAL MANAGER	
MARKOUT BEGAN:	WINNETKA AVENUE	
MARKOUT COMPLETED:	GAULT ST. TO NORDOFF ST.	
STRIPING COMPLETED:		
References:		
Thomas Guide: 560-J1	District: W.V.	PROJECT NO. LTF10006 / DRAWING NO. A-5497 / 4 5

NO.	REVISION DESCRIPTION	BY	DATE

PRINCIPAL T.E. | T.E./SR. T.E. | P.M. | K.F. | SUPERVISOR | DISTRICT | SIGNALS

BASE | E.Y.CHAVEZ | CHECK | E.Y.CHAVEZ | DESIGN | T.F.



R1-1 STOP

R2-1 SPEED LIMIT 35

R81(CA) BIKE LANE

S1-2

ASSEMBLY C SCHOOL SPEED LIMIT 25 WHEN FLASHING

S5-2 END SCHOOL ZONE

ASSEMBLY "B" (CA)

ASSEMBLY "D" (CA) AHEAD

W13-1 15 M.P.H.

SCALE: 1"=40'

BIKEWAYS PROJECT

INSTALLATION DATES

MARKOUT BEGAN: _____

MARKOUT COMPLETED: _____

STRIPING COMPLETED: _____

References:

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
RITA L. ROBINSON, GENERAL MANAGER

WINNETKA AVENUE

GAULT ST. TO NORDOFF ST.

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
560-J1	W.V.	LTF10006	A-5497	3 / 5

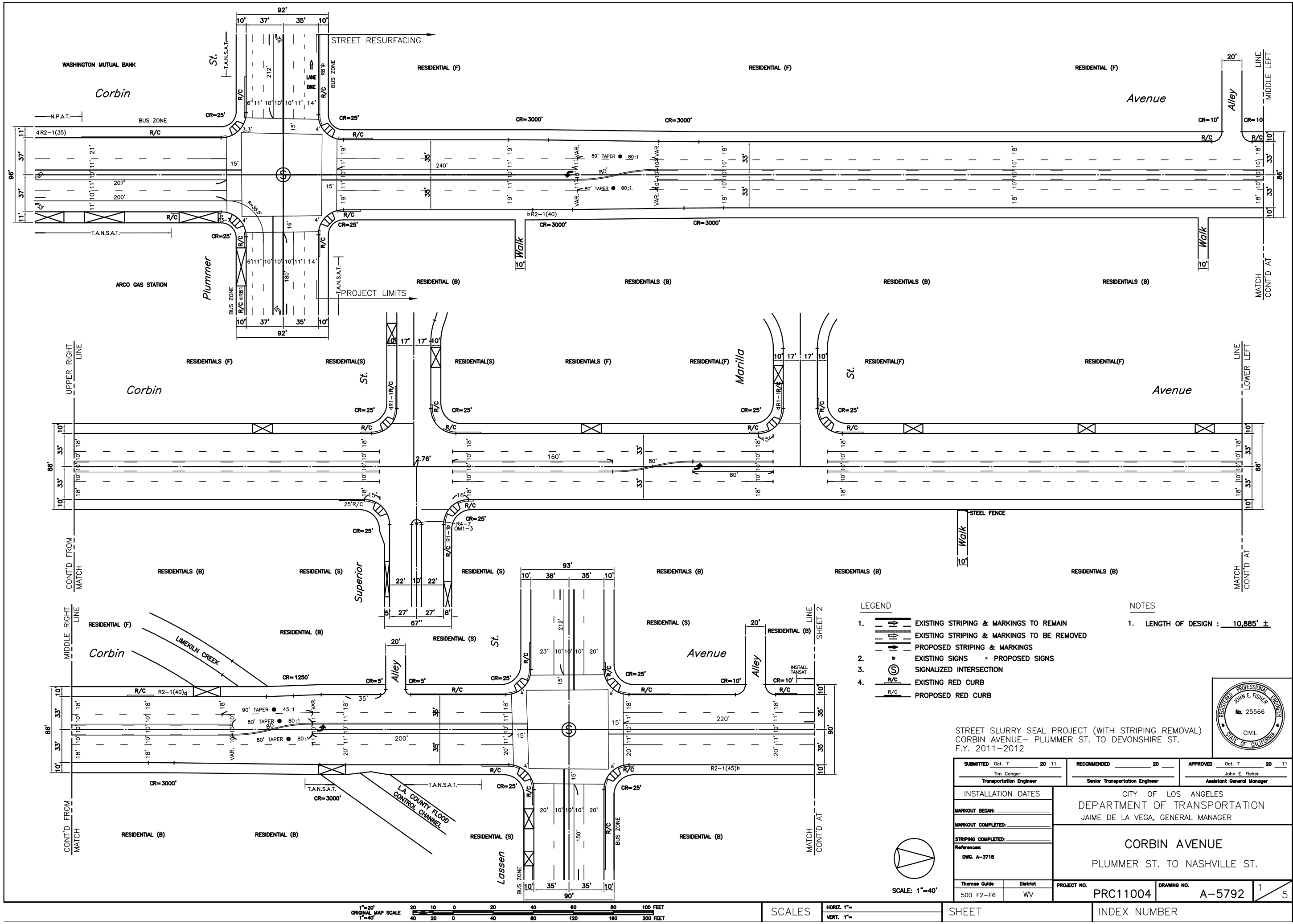
SCALES	HORIZ. 1"=40'	SHEET	INDEX NUMBER
	VERT.		

BY	DATE	REVISION DESCRIPTION	NO.
E.GIMENEZ		T.E./SR. T.E.	
E.GIMENEZ		PRINCIPAL T.E.	
T.F.			

BY	DATE
P.M.	
K.F.	

SUPERVISOR
DISTRICT
SIGNALS

BASE
CHECK
DESIGN



LEGEND

1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. EXISTING SIGNS ▸ PROPOSED SIGNS
3. SIGNALIZED INTERSECTION
4. R/C EXISTING RED CURB
   R/C PROPOSED RED CURB

NOTES

1. LENGTH OF DESIGN : 10,885' ±

SCALE: 1"=40'

STREET SLURRY SEAL PROJECT (WITH STRIPING REMOVAL)
CORBIN AVENUE– PLUMMER ST. TO DEVONSHIRE ST.
F.Y. 2011–2012

REGISTERED PROFESSIONAL ENGINEER — JOHN E. FISHER — No. 25566 — CIVIL — STATE OF CALIFORNIA

SUBMITTED	RECOMMENDED	APPROVED
Oct. 7 20 11	20	Oct. 7 20 11
Tim Conger		John E. Fisher
Transportation Engineer	Senior Transportation Engineer	Assistant General Manager

INSTALLATION DATES

MARKOUT BEGAN:

MARKOUT COMPLETED:

STRIPING COMPLETED:

References:
DWG. A-3718

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
JAIME DE LA VEGA, GENERAL MANAGER

CORBIN AVENUE
PLUMMER ST. TO NASHVILLE ST.

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
500 F2-F6	WV	PRC11004	A-5792	1/5

NO.	REVISION DESCRIPTION	DATE	BY
	T.E./SR. T.E.	9-9-11	KF
	PRINCIPAL T.E.		

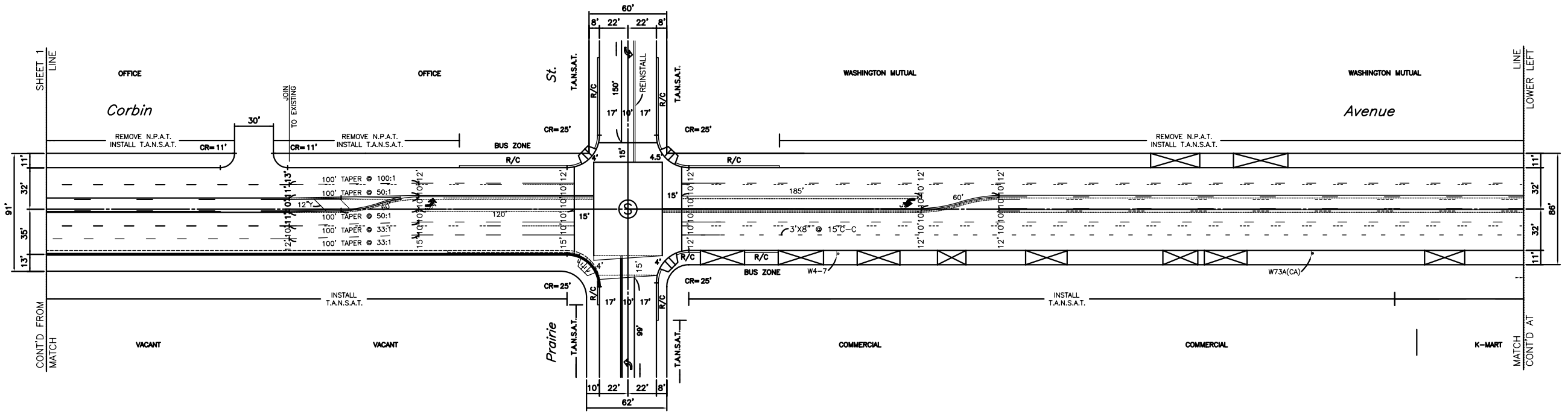
BASE CHECK DESIGN — SUPERVISOR DISTRICT BIKEWAYS

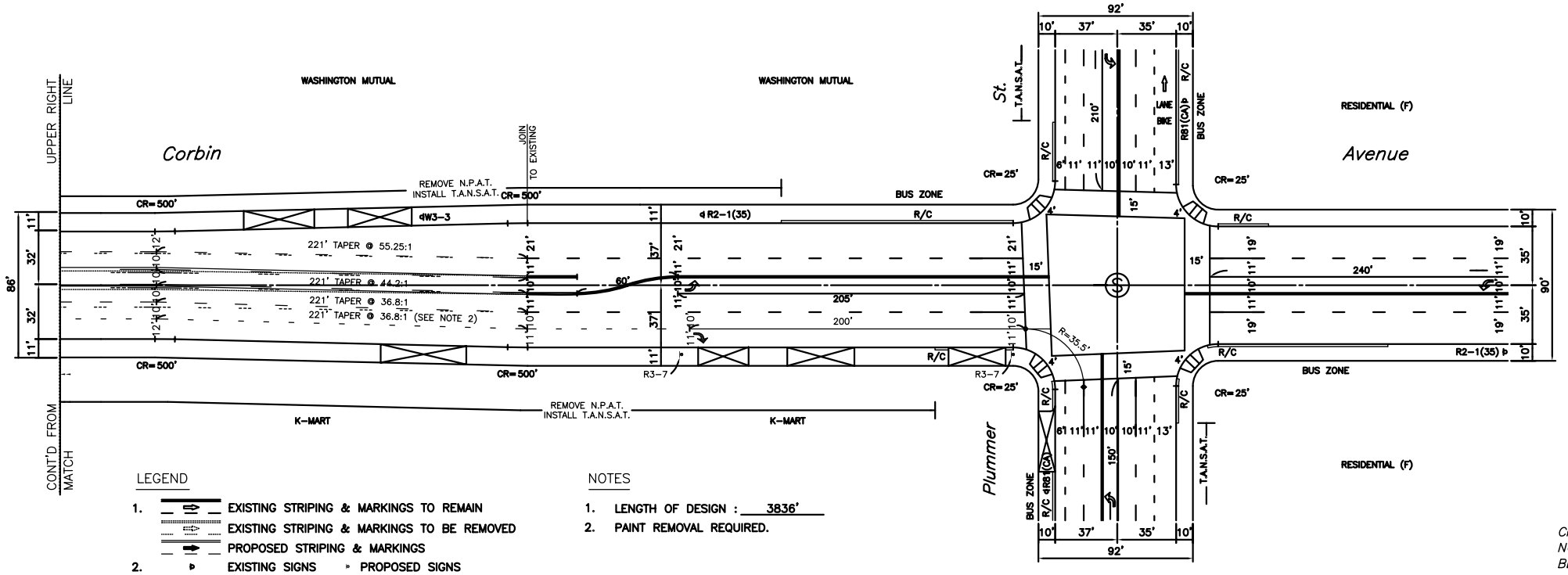
1"=20' ORIGINAL MAP SCALE 1"=40' — 20 10 0 20 40 60 80 100 FEET — 40 20 0 40 80 120 160 200 FEET

SCALES — HORIZ. 1"= VERT. 1"=

SHEET

INDEX NUMBER





LEGEND

1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. P EXISTING SIGNS ▫ PROPOSED SIGNS
3. (S) SIGNALIZED INTERSECTION
4. R/C EXISTING RED CURB
   R/C

NOTES

1. LENGTH OF DESIGN : 3836'
2. PAINT REMOVAL REQUIRED.

CONSTRUCTION NOTES (B-PERMITS):

1. THE B-PERMITTEE SHALL BE RESPONSIBLE FOR LABOR AND MATERIAL INVOLVED IN THE REMOVAL MARKOUT, AND INSTALLATION OF ALL STRIPING, PAVEMENT MARKINGS, CURB MARKINGS AND SIGNS SHOWN HEREON. REMOVAL OF MARKINGS SHALL BE PERFORMED BEFORE MARKOUT AND INSTALLATION OF NEW STRIPING, AND SHALL BE BY WET SANDBLASTING/GRINDING IN ACCORDANCE WITH LADOT SPECIFICATION NO. 76-016-10. MARKOUT SHALL BE BY HEAVY PAINT BRUSH MARKINGS OR SPRAY PAINT OVER A PULLED ROPE IN THE RESPECTIVE WHITE OR YELLOW COLORS OF THE PROPOSED STRIPING. STRIPING AND PAVEMENT MARKINGS SHALL BE IN HOT APPLIED ALKYD THERMOPLASTIC IN ACCORDANCE WITH LADOT SPECIFICATIONS NOS. 51-005-10 AND 76-012-15.
2. THE INSTALLATION OF THERMOPLASTIC STRIPING MAY PROCEED ONLY AFTER INSPECTION AND APPROVAL OF MARKOUT BY THE LADOT CITYWIDE INVESTIGATIONS UNIT. THE CONTRACTOR SHALL CORRECT ALL ERRORS IN MARKOUT REQUESTED BY LADOT. UPON APPROVAL OF MARKOUT, THE CONTRACTOR SHALL FULLY INSTALL THE THERMOPLASTIC STRIPING, PAVEMENT MARKINGS, (CURB MARKINGS, AND SIGNS-AS APPLICABLE) WITHIN THE FOLLOWING THREE (3) WORKING DAYS. THE CONTRACTOR SHALL CONTACT THE LADOT CITYWIDE INVESTIGATIONS UNIT AT (818) 374-5089 AT THE FOLLOWING POINTS IN TIME AND FOR THE FOLLOWING PURPOSES:
   A. TEN (10) WORKING DAYS IN ADVANCE OF MARKOUT.
   B. UPON COMPLETION OF MARKOUT (INCLUDING ANY MARKOUT CORRECTIONS) FOR INSPECTION AND APPROVAL.
   C. UPON COMPLETION OF THERMOPLASTIC STRIPING (INCLUDING ANY THERMOPLASTIC STRIPING CORRECTIONS) FOR INSPECTION AND FINAL STRIPING APPROVAL.
3. DURING ALL PHASES OF CONSTRUCTION, TEMPORARY RAISED OVERLAY PAVEMENT MARKERS SHALL BE MAINTAINED ADJACENT TO ANY TEMPORARY CENTERLINE, MARKOUT CENTERLINE OR SCAR OF A SANDBLASTED CENTERLINE, AS APPLICABLE, AS PER LADOT STANDARD PLAN NO. S-453.0.
4. THE FIELD CONDITIONS SHOWN AS EXISTING ON THIS PLAN MAY CHANGE BETWEEN THE PLAN APPROVAL DATE AND THE IMPLEMENTATION DATE. THE B-PERMITTEE MAY BE REQUIRED TO INSTALL OR REMOVE STRIPING, PAVEMENT MARKINGS, SIGNS OR OTHER TRAFFIC CONTROL DEVICES BEYOND THOSE INDICATED ON THIS PLAN, IN ORDER TO FACILITATE THESE CHANGES IN FIELD CONDITIONS AND/OR TO BE IN COMPLIANCE WITH LADOT STANDARDS AND SPECIFICATIONS. IF THIS PLAN HAS NOT BEEN INSTALLED WITHIN TWO (2) YEARS OF THE APPROVAL DATE, IT SHALL BE RESUBMITTED TO LADOT GEOMETRIC DESIGN SECTION FOR REAPPROVAL PRIOR TO PROCEEDING TO CONSTRUCTION.

CPC 21002-7295
NORDHOFF ST & CORBIN AVE NE CORNER
BD-204023 BC-204023

SUBMITTED	RECOMMENDED	APPROVED
6/26 20 06	6/27 20 06	6/27 20 06
TC	JW	SS
Transportation Engineer	Senior Transportation Engineer	Principal Transportation Engineer

INSTALLATION DATES
MARKOUT BEGAN:
MARKOUT COMPLETED:
STRIPING COMPLETED:
References:
REF. FILE A-4128.DWG

Thomas Guide	District
500 F6	W.V.

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
GLORIA J. JEFF,, General Manager

CORBIN AVENUE
NORDHOFF ST./NORDHOFF PL. TO PLUMMER ST.

PROJECT NO. 25592 | DRAWING NO. A-4587 | 2/2

LINSCOIT LAW & GREENSPAN engineers
TRANSPORTATION PLANNING – TRAFFIC ENGINEERING – PARKING
■ 234 EAST COLORADO BOULEVARD, SUITE 400, PASADENA, CA 91101 (626) 796-2322
□ 1580 CORPORATE DRIVE, SUITE 122, COSTA MESA, CA 92626 (714) 641-1587
□ 4542 RUFFNER STREET, SUITE 100, SAN DIEGO, CA 92111 (858) 300-8800

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PLAN PREPARED BY :
REGISTERED TRAFFIC ENGINEER
DATE :

PLAN RECOMMENDED BY :
REGISTERED CIVIL ENGINEER
DATE :

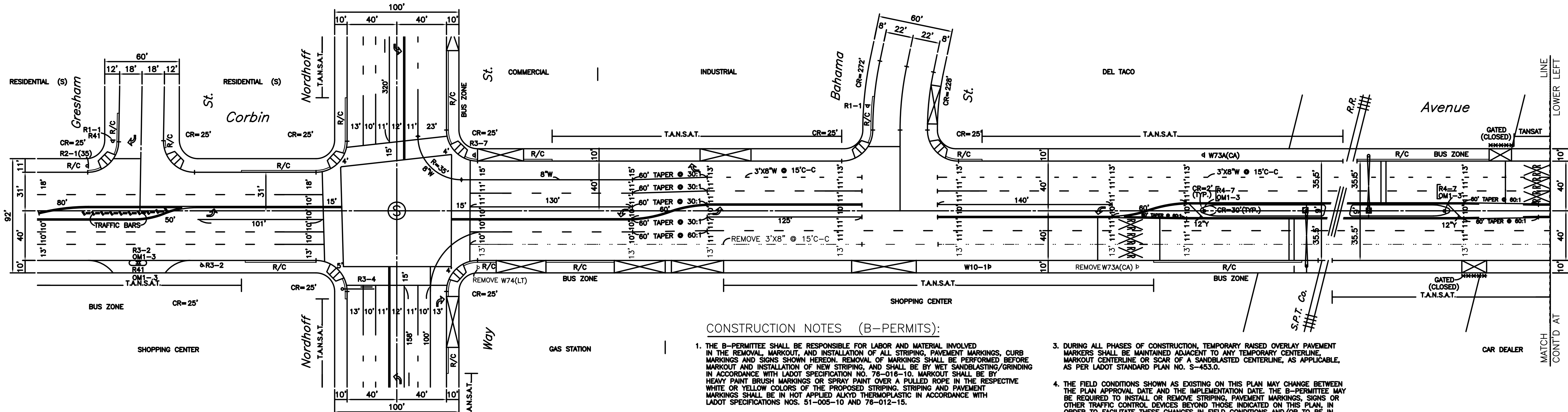
SCALE: 1"=40'

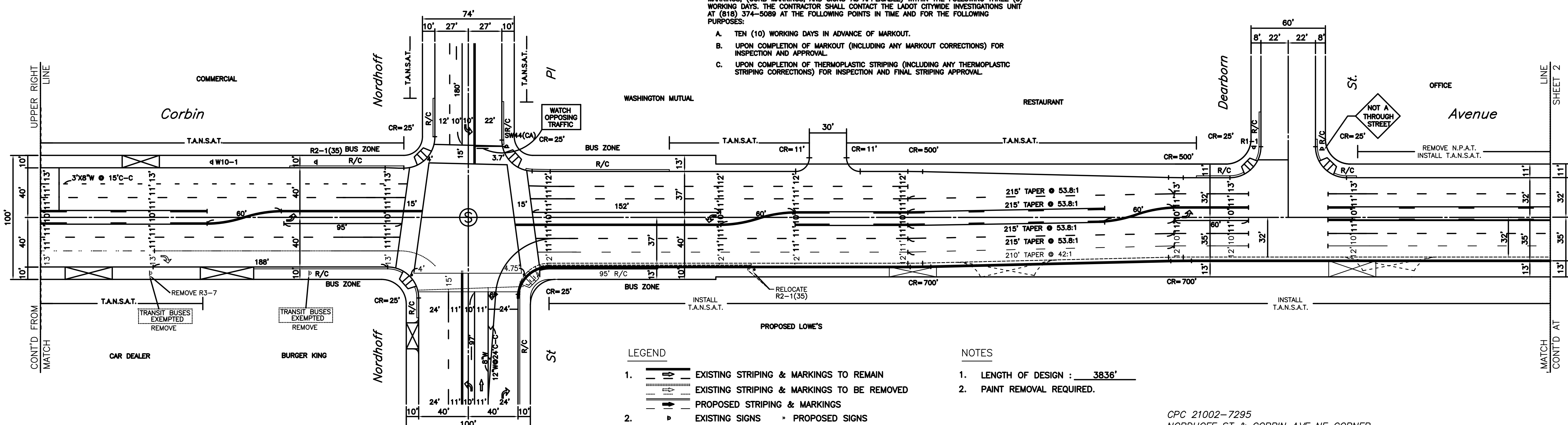
1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES | HORIZ. 1"= | VERT. 1"= | SHEET | INDEX NUMBER

NO.	REVISION DESCRIPTION	DATE	BY

DESIGN | CHECK | BASE | DATE | SUPERVISOR | DISTRICT | SIGNALS | DATE | T.E./SR. T.E.





CONSTRUCTION NOTES (B-PERMITS):

1. THE B-PERMITTEE SHALL BE RESPONSIBLE FOR LABOR AND MATERIAL INVOLVED IN THE REMOVAL, MARKOUT, AND INSTALLATION OF ALL STRIPING, PAVEMENT MARKINGS, CURB MARKINGS AND SIGNS SHOWN HEREON. REMOVAL OF MARKINGS SHALL BE PERFORMED BEFORE MARKOUT AND INSTALLATION OF NEW STRIPING, AND SHALL BE BY WET SANDBLASTING/GRINDING IN ACCORDANCE WITH LADOT SPECIFICATION NO. 76-016-10. MARKOUT SHALL BE BY HEAVY PAINT BRUSH MARKINGS OR SPRAY PAINT OVER A PULLED ROPE IN THE RESPECTIVE WHITE OR YELLOW COLORS OF THE PROPOSED STRIPING. STRIPING AND PAVEMENT MARKINGS SHALL BE IN HOT APPLIED ALKYD THERMOPLASTIC IN ACCORDANCE WITH LADOT SPECIFICATIONS NOS. 51-005-10 AND 76-012-15.
2. THE INSTALLATION OF THERMOPLASTIC STRIPING MAY PROCEED ONLY AFTER INSPECTION AND APPROVAL OF MARKOUT BY THE LADOT CITYWIDE INVESTIGATIONS UNIT. THE CONTRACTOR SHALL CORRECT ALL ERRORS IN MARKOUT REQUESTED BY LADOT. UPON APPROVAL OF MARKOUT, THE CONTRACTOR SHALL FULLY INSTALL THE THERMOPLASTIC STRIPING, PAVEMENT MARKINGS, (CURB MARKINGS, AND SIGNS-AS APPLICABLE) WITHIN THE FOLLOWING THREE (3) WORKING DAYS. THE CONTRACTOR SHALL CONTACT THE LADOT CITYWIDE INVESTIGATIONS UNIT AT (818) 374-5089 AT THE FOLLOWING POINTS IN TIME AND FOR THE FOLLOWING PURPOSES:
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   B. UPON COMPLETION OF MARKOUT (INCLUDING ANY MARKOUT CORRECTIONS) FOR INSPECTION AND APPROVAL.
   C. UPON COMPLETION OF THERMOPLASTIC STRIPING (INCLUDING ANY THERMOPLASTIC STRIPING CORRECTIONS) FOR INSPECTION AND FINAL STRIPING APPROVAL.
3. DURING ALL PHASES OF CONSTRUCTION, TEMPORARY RAISED OVERLAY PAVEMENT MARKERS SHALL BE MAINTAINED ADJACENT TO ANY TEMPORARY CENTERLINE, MARKOUT CENTERLINE OR SCAR OF A SANDBLASTED CENTERLINE, AS APPLICABLE, AS PER LADOT STANDARD PLAN NO. S-453.0.
4. THE FIELD CONDITIONS SHOWN AS EXISTING ON THIS PLAN MAY CHANGE BETWEEN THE PLAN APPROVAL DATE AND THE IMPLEMENTATION DATE. THE B-PERMITTEE MAY BE REQUIRED TO INSTALL OR REMOVE STRIPING, PAVEMENT MARKINGS, SIGNS OR OTHER TRAFFIC CONTROL DEVICES BEYOND THOSE INDICATED ON THIS PLAN, IN ORDER TO FACILITATE THESE CHANGES IN FIELD CONDITIONS AND/OR TO BE IN COMPLIANCE WITH LADOT STANDARDS AND SPECIFICATIONS. IF THIS PLAN HAS NOT BEEN INSTALLED WITHIN TWO (2) YEARS OF THE APPROVAL DATE, IT SHALL BE RESUBMITTED TO LADOT GEOMETRIC DESIGN SECTION FOR REAPPROVAL PRIOR TO PROCEEDING TO CONSTRUCTION.

LEGEND

1. EXISTING STRIPING & MARKINGS TO REMAIN
   EXISTING STRIPING & MARKINGS TO BE REMOVED
   PROPOSED STRIPING & MARKINGS
2. EXISTING SIGNS * PROPOSED SIGNS
3. SIGNALIZED INTERSECTION
4. EXISTING RED CURB
   PROPOSED RED CURB

NOTES

1. LENGTH OF DESIGN : 3836'
2. PAINT REMOVAL REQUIRED.

CPC 21002-7295
NORDHOFF ST & CORBIN AVE NE CORNER
BD-204023 BC-204023

SUBMITTED ____ 20 __ Transportation Engineer	RECOMMENDED ____ 20 __ Senior Transportation Engineer	APPROVED ____ 20 __ Principal Transportation Engineer

INSTALLATION DATES
MARKOUT BEGAN:
MARKOUT COMPLETED:
STRIPING COMPLETED:
References:
REF. FILE A-4128.DWG

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
GLORIA J. JEFF, General Manager

CORBIN AVENUE

NORDHOFF ST./NORDHOFF PL. TO PLUMMER ST.

Thomas Guide	District	PROJECT NO.	DRAWING NO.	
500 F6	W.V.	25592	A-4587	1/2

SHEET | INDEX NUMBER

SCALE: 1"=40'

PLAN PREPARED BY :
REGISTERED TRAFFIC ENGINEER
DATE :

PLAN RECOMMENDED BY :
REGISTERED CIVIL ENGINEER
DATE :

SCALES — HORIZ. 1"= — VERT. 1"=

1"=20' ORIGINAL MAP SCALE 1"=40' — 0 20 40 60 80 100 FEET / 0 40 80 120 160 200 FEET

NO.	REVISION DESCRIPTION	T.E./SR. T.E.	DATE

	BY	DATE		DATE
DESIGN	-	-	SUPERVISOR	-
CHECK	-	-	DISTRICT	-
BASE	-	-	SIGNALS	-

LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION PLANNING – TRAFFIC ENGINEERING – PARKING

■ 234 EAST COLORADO BOULEVARD, SUITE 400, PASADENA, CA 91101 (626) 796-2322
□ 1580 CORPORATE DRIVE, SUITE 122, COSTA MESA, CA 92626 (714) 641-1587
□ 4542 RUFFNER STREET, SUITE 100, SAN DIEGO, CA 92111 (858) 300-8800

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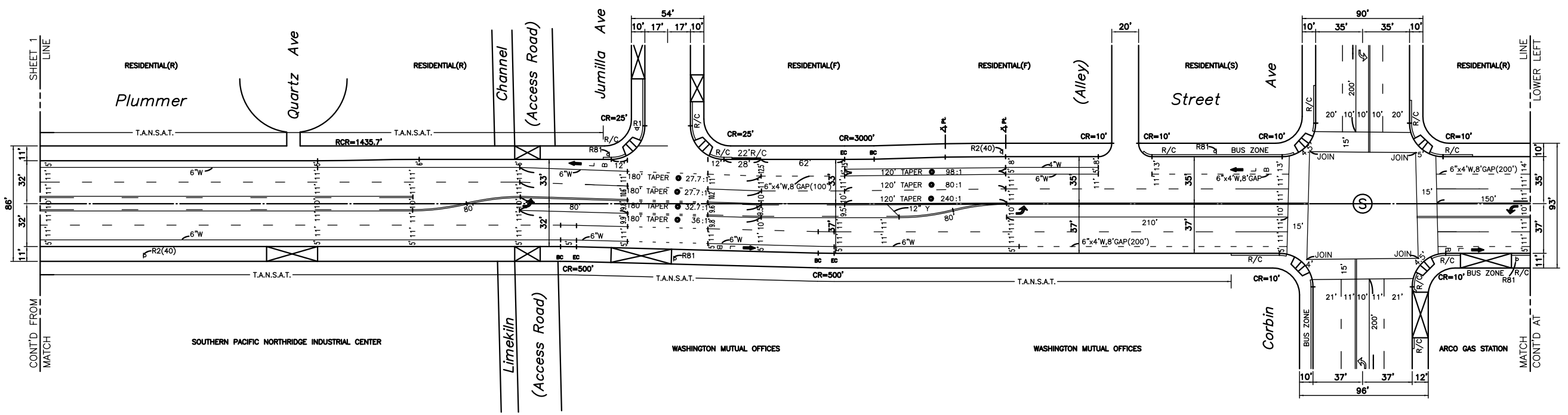
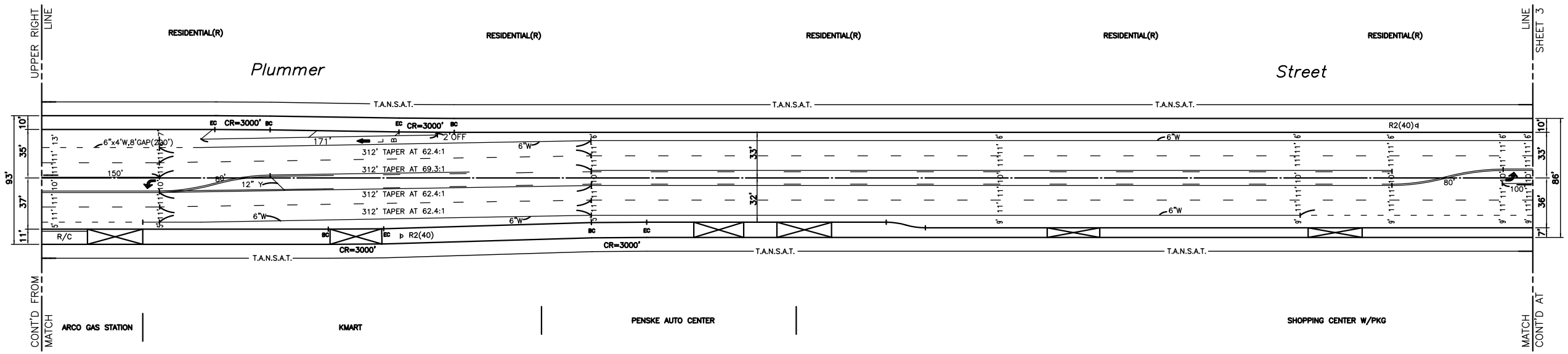




SCALE: 1"=40'

INSTALLATION DATES
MARKOUT BEGAN:
MARKOUT COMPLETED:
STRIPING COMPLETED:
References:

Thomas Guide	District
500,E6	WV

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION
WAYNE K. TANDA, GENERAL MANAGER

PLUMMER STREET

WINNETKA AVE. TO TAMPA AVE.

PROJECT NO.	DRAWING NO.	
72314	A-3266	2 / 3

1"=20' ORIGINAL MAP SCALE 1"=40'
20 10 0 20 40 60 80 100 FEET
40 20 0 40 80 120 160 200 FEET

SCALES | HORIZ. 1"= | VERT. 1"= | SHEET | INDEX NUMBER

NO.	REVISION DESCRIPTION (NON CADD PLANS ONLY)	T.E.	SR. T.E.	PR. TRAN. ENGR.	DATE

	BY	DATE
BASE	ROF	11-15-01
FIELD	ROF	11-15-01
DRAFTING		
CHECK	LGJ	11-25-01
DESIGN	DSS	

	BY	DATE
SUPERVISOR	MK	
S.T.A.R.		
DISTRICT		
SIGNALS		
BIKEWAYS		

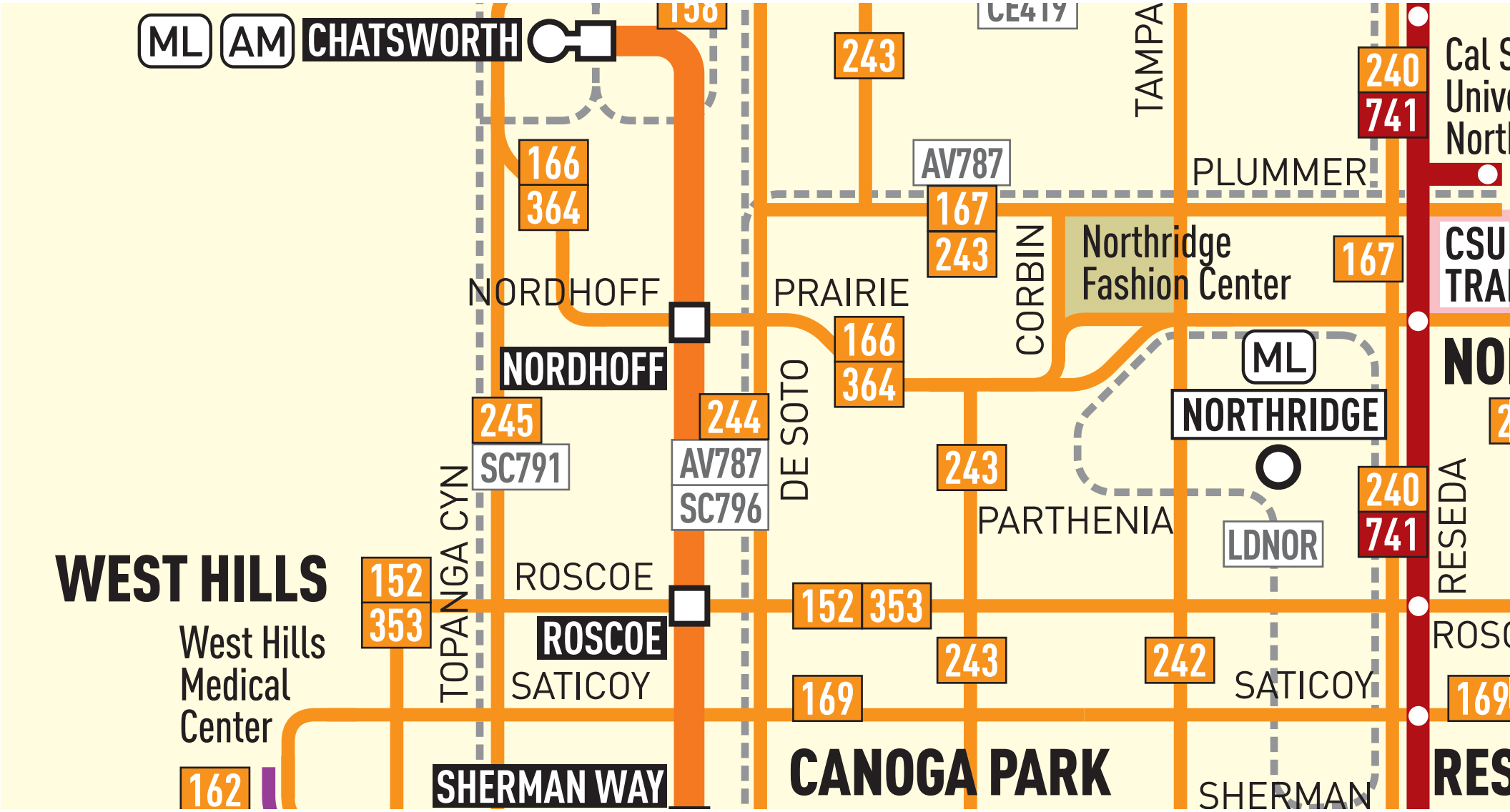
CITY OF LOS ANGELES
CITY ENGINEER
VITALY B. TROYAN, P.E.

DATE _____ 20__

DIV./DIST. ENGR. R.E. NO.

APPENDIX C

TRANSIT ROUTES


ML AM CHATSWORTH
166
364
NORDHOFF
NORDHOFF
245
SC791
TOPANGA CYN
152
353
WEST HILLS
West Hills
Medical
Center
162
ROSCOE
ROSCOE
SATICOY
SHERMAN WAY
244
AV787
SC796
DE SOTO
243
TAMPA
PRAIRIE
166
364
AV787
167
243
CORBIN
PLUMMER
Northridge
Fashion Center
ML
NORTHRIDGE
243
PARTHENIA
LDNOR
152 353
243
169
CANOGA PARK
242
SATICOY
240
741
167
240
741
RESEDA
SHERMAN

Monday through Friday Schedule

Effective Jun 23 2013

243

Northbound on Winnetka (Approximate Times)

Ventura & Winnetka	Winnetka & Vanowen	Corbin & Nordhoff	Mason & Devonshire	Rinaldi & Town Center
5:30A	5:36A	5:47A	5:56A	6:03A
7:07	7:13	7:25	7:35	7:42
8:23	8:29	8:40	8:49	8:56
10:07	10:13	10:24	10:33	10:40
12:07P	12:14P	12:26P	12:36P	12:43P
2:05	2:12	2:24	2:34	2:41
C3:21	3:32	3:45	3:55	4:02
3:58	4:06	4:19	4:29	4:36
5:58	6:05	6:17	6:26	6:33
7:58	8:05	8:16	8:23	8:30

Southbound on Winnetka (Approximate Times)

PORTER RANCH	CHATSWORTH	NORTHRIDGE	WINNETKA	WOODLAND HILLS
Rinaldi & Town Center	Mason & Devonshire	Nordhoff & Corbin	Winnetka & Vanowen	Ventura & Winnetka
5:24A	5:36A	5:44A	5:55A	6:00A
6:13	6:25	6:33	6:45	6:52
6:38	6:50	6:58	7:12	7:22
6:56	7:08	7:18	7:33	7:44
7:01	7:13	7:23	7:37	7:48
7:28	7:40	7:50	8:03	8:12
8:01	8:13	8:22	8:34	8:42
8:54	9:06	9:15	9:27	9:35
9:55	10:07	10:16	10:27	10:35
10:55	11:07	11:16	11:27	11:35
11:55	12:07P	12:16P	12:27P	12:35P
12:55P	1:07	1:16	1:27	1:35
1:50	2:02	2:14	2:26	2:35
2:51	3:03	3:15	3:27	3:35
3:42	3:54	4:06	4:18	4:26
4:24	4:36	4:48	5:00	5:08
5:07	5:19	5:31	5:42	5:50
6:09	6:21	6:31	6:41	6:48
7:14	7:26	7:34	7:44	7:51

Note: Southbound trips continue as Northbound 242 trips at Ventura and Winnetka

Monday through Friday Schedule

242

Northbound on Tampa (Approximate Times)

Ventura & Winnetka	Tampa & Sherman Way	Tampa & Nordhoff	Tampa & Devonshire	Rinaldi & Town Center
6:00A	6:09A	6:16A	6:20A	6:28A
7:22	7:32	7:40	7:44	7:54
8:12	8:23	8:31	8:35	8:44
9:35	9:46	9:54	9:58	10:07
11:35	11:46	11:54	11:58	12:07P
1:35	1:48	1:57	2:02	2:11
3:35	3:49	3:59	4:04	4:14
5:08	5:22	5:32	5:36	5:46
6:48	6:59	7:06	7:10	7:19

Southbound on Tampa (Approximate Times)

PORTER RANCH	NORTHRIDGE		RESEDA	WOODLAND HILLS
Rinaldi & Town Center	Tampa & Devonshire	Tampa & Nordhoff	Tampa & Sherman Way	Ventura & Winnetka
5:02A	5:09A	5:15A	5:22A	5:30A
6:00	6:07	6:13	6:20	6:29
6:35	6:42	6:48	6:57	7:07
7:09	7:16	7:22	7:31	7:45
7:48	7:55	8:01	8:10	8:23
8:34	8:41	8:47	8:56	9:07
9:36	9:43	9:49	9:57	10:07
10:37	10:44	10:49	10:57	11:07
11:33	11:40	11:47	11:56	12:07P
12:32P	12:39P	12:46P	12:55P	1:06
1:31	1:38	1:45	1:54	2:05
2:23	2:30	2:37	2:46	2:57
3:23	3:30	3:37	3:46	3:58
4:22	4:30	4:37	4:46	4:58
5:22	5:30	5:37	5:46	5:58
6:25	6:33	6:39	6:47	6:58
7:28	7:35	7:41	7:49	7:58

Note: Southbound trips continue as Northbound 243 trips at Ventura and Winnetka

Sunday & Holiday Schedule

No service operated on Sunday and the following holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Horarios en los días feriados

No habra servicio los domingos ni los siguientes dias festivos: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day y Christmas Day.

Special Notes

C Trip operates on school days only.

Avisos especiales

C *Viaje opera los dias de escuela solamente.*

Saturday Schedule

Effective Jun 23 2013

243

Northbound on Winnetka (Approximate Times)

Ventura & Winnetka	Winnetka & Vanowen	Corbin & Nordhoff	Mason & Devonshire	Rinaldi & Town Center
6:30A	6:35A	6:44A	6:51A	6:57A
8:30	8:36	8:46	8:54	9:00
10:30	10:36	10:46	10:54	11:00
12:30P	12:36P	12:47P	12:55P	1:01
2:30	2:36	2:47	2:55	3:01
4:30	4:35	4:45	4:52	4:58
6:30	6:35	6:45	6:52	6:58

Southbound on Winnetka (Approximate Times)

PORTER RANCH	CHATSWORTH	NORTHRIDGE	WINNETKA	WOODLAND HILLS
Rinaldi & Town Center	Mason & Devonshire	Nordhoff & Corbin	Winnetka & Vanowen	Ventura & Winnetka
6:25A	6:35A	6:44A	6:54A	7:00A
7:25	7:35	7:44	7:54	8:00
8:24	8:34	8:43	8:53	9:00
9:24	9:34	9:43	9:53	10:00
10:24	10:34	10:43	10:53	11:00
11:24	11:34	11:43	11:53	11:59
12:25P	12:35P	12:43P	12:53P	1:00P
1:25	1:35	1:43	1:53	2:00
2:24	2:35	2:43	2:53	3:00
3:24	3:35	3:43	3:53	4:00
4:24	4:35	4:43	4:53	5:00
5:24	5:35	5:43	5:53	6:00
6:27	6:36	6:44	6:54	7:00
7:28	7:37	7:45	7:54	8:00

Note: Southbound trips continue as Northbound 242 trips at Ventura and Winnetka

Saturday Schedule

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Northbound on Tampa (Approximate Times)

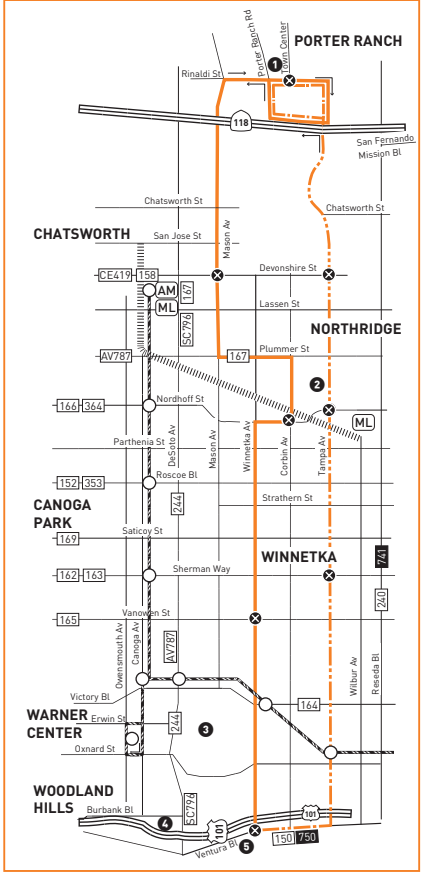
WOODLAND HILLS	RESEDA	NORTHRIDGE		PORTER RANCH
Ventura & Winnetka	Tampa & Sherman Way	Tampa & Nordhoff	Tampa & Devonshire	Rinaldi & Town Center
7:00A	7:11A	7:19A	7:23A	7:31A
8:00	8:11	8:19	8:23	8:31
9:00	9:11	9:19	9:23	9:32
10:00	10:11	10:19	10:24	10:33
11:00	11:11	11:20	11:25	11:34
11:59	12:12P	12:22P	12:27P	12:36P
1:00P	1:12	1:22	1:27	1:36
2:00	2:12	2:22	2:27	2:36
3:00	3:11	3:21	3:26	3:35
4:00	4:11	4:21	4:26	4:35
5:00	5:10	5:19	5:24	5:32
6:00	6:10	6:18	6:23	6:31
7:00	7:10	7:17	7:21	7:29
8:00	8:10	8:17	8:21	8:29

Southbound on Tampa (Approximate Times)

PORTER RANCH	NORTHRIDGE		RESEDA	WOODLAND HILLS
Rinaldi & Town Center	Tampa & Devonshire	Tampa & Nordhoff	Tampa & Sherman Way	Ventura & Winnetka
6:03A	6:09A	6:15A	6:22A	6:30A
7:01	7:08	7:14	7:21	7:30
8:00	8:07	8:13	8:20	8:30
9:01	9:07	9:13	9:20	9:30
9:59	10:05	10:12	10:19	10:30
10:58	11:04	11:11	11:19	11:30
11:58	12:04P	12:11P	12:19P	12:30P
12:58P	1:04	1:11	1:19	1:30
1:58	2:04	2:11	2:19	2:30
2:58	3:04	3:11	3:19	3:30
3:58	4:04	4:11	4:19	4:30
4:59	5:05	5:12	5:20	5:30
5:59	6:05	6:12	6:20	6:30
7:04	7:10	7:15	7:21	7:30

Note: Southbound trips continue as Northbound 243 trips at Ventura and Winnetka

ROUTE MAP



MAP NOTES

1. Porter Ranch Town Center
2. Northridge Fashion Center
3. Los Angeles Pierce College
4. Kaiser Permanente Hospital
5. Taft High School

LEGEND

- Route of Line 242
- Route of Line 243
- Route of Orange Line
- Metrolink
- Metro Orange Line Station
- AM Amtrak Station
- ML Metrolink Station
- Timepoint
- AV Antelope Valley Transit Authority
- CE LADOT Commuter Express
- SC Santa Clarita Transit

Monday through Friday

Effective Jun 23 2013

167

Eastbound – Southbound (Approximate Times)

CHATSWORTH		NORTHRIDGE		NORTH HILLS	PANORAMA CITY		NORTH HOLLYWOOD		STUDIO CITY
Chatsworth Station	Plummer & De Soto	Nordhoff & Reseda	Plummer & Balboa	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Van Nuys	Roscoe & Woodman	Coldwater Canyon & Vanowen	Valley College Orange Line Station	Ventura & Goodland (Coldwater Canyon)
4:34A	4:40A	4:51A	4:57A	5:05A	5:12A	5:25A	5:34A	5:39A	5:49A
5:35	5:41	5:52	5:58	6:06	6:13	6:27	6:38	6:45	6:57
6:30	6:38	6:54	7:02	7:11	7:19	7:36	7:49	7:59	8:17
7:12	7:21	7:38	7:46	7:55	8:03	8:20	8:33	8:43	9:01
8:07	8:16	8:33	8:41	8:50	8:58	9:15	9:28	9:38	9:52
8:55	9:04	9:21	9:29	9:39	9:47	10:05	10:17	10:27	10:41
9:54	10:03	10:20	10:28	10:38	10:46	11:05	11:17	11:27	11:41
10:41	10:50	11:07	11:16	11:26	11:34	11:53	12:05P	12:15P	12:29P
11:29	11:38	11:56	12:05P	12:15P	12:23P	12:42P	12:54	1:04	1:18
12:11P	12:21P	12:39P	12:48	12:58	1:06	1:25	1:37	1:47	2:01
1:01	1:11	1:29	1:38	1:48	1:56	2:15	2:27	2:37	2:51
1:51	2:01	2:20	2:30	2:40	2:49	3:08	3:20	3:30	3:44
2:29	2:40	2:59	3:09	3:19	3:28	3:47	3:59	4:09	4:23
3:08	3:19	3:38	3:48	3:58	4:07	4:26	4:38	4:48	5:02
3:50	4:01	4:22	4:32	4:42	4:51	5:10	5:22	5:32	5:46
4:32	4:43	5:04	5:14	5:24	5:33	5:52	6:04	6:14	6:28
5:14	5:25	5:45	5:55	6:04	6:12	6:30	6:40	6:49	7:01
6:00	6:10	6:28	6:37	6:46	6:54	7:11	7:21	7:30	7:41
6:44	6:53	7:10	7:19	7:28	7:36	7:53	8:03	8:10	8:20
7:35	7:43	8:00	8:08	8:17	8:25	8:40	8:50	8:56	9:07
8:38	8:46	9:01	9:08	9:15	9:22	9:35	9:44	9:50	10:00
9:40	9:47	10:00	10:07	10:14	A10:21	10:34	—	—	—
10:38	10:45	10:58	11:05	11:12	A11:19	11:32	—	—	—

Monday through Friday

167

Westbound – Northbound (Approximate Times)

STUDIO CITY	NORTH HOLLYWOOD		PANORAMA CITY		NORTH HILLS	NORTHRIDGE		CHATSWORTH	
Ventura & Goodland (Coldwater Canyon)	Valley College Orange Line Station	Coldwater Canyon & Vanowen	Roscoe & Woodman	Plummer & Van Nuys	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Balboa	Reseda & Nordhoff	De Soto & Plummer	Chatsworth Station
4:49A	4:58A	5:05A	5:15A	5:28A	5:37A	5:42A	5:48A	6:01A	6:06A
5:28	5:37	5:44	5:54	6:07	6:17	6:23	6:31	6:47	6:52
5:57	6:07	6:15	6:26	6:41	6:52	6:58	7:07	7:24	7:31
6:39	6:50	6:58	7:10	7:26	7:37	7:43	7:52	8:08	8:15
7:16	7:28	7:38	7:50	8:06	8:17	8:23	8:32	8:48	8:55
7:55	8:07	8:17	8:29	8:45	8:56	9:02	9:11	9:27	9:34
8:36	8:48	8:58	9:10	9:26	9:37	9:43	9:52	10:08	10:15
9:20	9:33	9:44	9:56	10:13	10:24	10:30	10:40	10:56	11:03
10:05	10:18	10:29	10:42	10:59	11:10	11:16	11:26	11:42	11:49
10:52	11:05	11:16	11:29	11:46	11:57	12:03P	12:13P	12:29P	12:36P
11:54	12:06P	12:17P	12:29P	12:46P	12:57P	1:03	1:13	1:29	1:36
12:47P	1:00	1:11	1:24	1:42	1:53	1:59	2:10	2:27	2:34
1:29	1:42	1:53	2:06	2:24	2:35	2:41	2:52	3:09	3:16
2:12	2:25	2:37	2:50	3:08	3:18	3:24	3:34	3:51	3:58
3:02	3:15	3:27	3:41	4:00	4:10	4:16	4:26	4:43	4:50
3:55	4:09	4:21	4:36	4:55	5:05	5:11	5:21	5:38	5:45
4:34	4:48	5:00	5:16	5:36	5:46	5:52	6:02	6:18	6:25
5:22	5:36	5:49	6:03	6:22	6:32	6:38	6:47	7:02	7:08
6:11	6:25	6:37	6:50	7:07	7:17	7:23	7:30	7:43	7:48
7:17	7:28	7:36	7:46	8:01	8:10	8:16	8:22	8:35	8:40
8:14	8:24	8:32	8:42	8:56	9:04	9:09	9:15	9:27	9:32
9:20	9:28	9:35	9:44	9:56	10:03	10:08	10:14	10:26	10:31
—	—	—	10:44	10:56	11:03	11:08	11:14	11:26	11:31

Saturday Schedule

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Eastbound – Southbound (Approximate Times)

CHATSWORTH		NORTHRIDGE		NORTH HILLS	PANORAMA CITY		NORTH HOLLYWOOD		STUDIO CITY
Chatsworth Station	Plummer & De Soto	Nordhoff & Reseda	Plummer & Balboa	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Van Nuys	Roscoe & Woodman	Coldwater Canyon & Vanowen	Valley College Orange Line Station	Ventura & Goodland (Coldwater Canyon)
4:34A	4:41A	4:52A	4:59A	5:07A	5:14A	5:28A	5:37A	5:44A	5:54A
5:34	5:41	5:52	5:59	6:07	6:14	6:28	6:37	6:44	6:54
6:27	6:34	6:45	6:52	7:00	7:07	7:22	7:31	7:38	7:49
7:16	7:23	7:34	7:41	7:50	7:57	8:13	8:23	8:31	8:42
8:03	8:11	8:23	8:31	8:40	8:47	9:04	9:14	9:22	9:33
8:52	9:00	9:13	9:21	9:30	9:37	9:54	10:04	10:12	10:23
9:42	9:50	10:03	10:11	10:20	10:27	10:46	10:56	11:04	11:15
10:32	10:40	10:53	11:01	11:10	11:17	11:36	11:46	11:54	12:05P
11:22	11:30	11:43	11:51	11:59	12:07P	12:26P	12:36P	12:44P	12:55
12:12P	12:20P	12:33P	12:41P	12:50P	12:57	1:16	1:26	1:34	1:45
1:03	1:11	1:24	1:32	1:40	1:47	2:06	2:16	2:24	2:35
1:53	2:01	2:14	2:22	2:30	2:37	2:55	3:05	3:13	3:24
2:43	2:51	3:04	3:12	3:20	3:27	3:45	3:55	4:03	4:14
3:33	3:41	3:54	4:02	4:10	4:17	4:35	4:45	4:53	5:04
4:26	4:34	4:47	4:55	5:03	5:10	5:29	5:39	5:47	5:58
5:24	5:32	5:45	5:53	6:01	6:08	6:27	6:37	6:45	6:56
6:25	6:33	6:46	6:54	7:02	7:09	7:25	7:34	7:41	7:52
7:28	7:36	7:49	7:57	8:04	8:11	8:26	8:35	8:41	8:51
8:31	8:38	8:50	8:57	9:04	A9:11	9:25	—	—	—
9:40	9:47	9:58	10:05	10:12	A10:19	10:33	—	—	—
10:38	10:45	10:56	11:03	11:10	A11:17	11:31	—	—	—

Saturday Schedule

167

Westbound – Northbound (Approximate Times)

STUDIO CITY	NORTH HOLLYWOOD		PANORAMA CITY		NORTH HILLS	NORTHRIDGE		CHATSWORTH	
Ventura & Goodland (Coldwater Canyon)	Valley College Orange Line Station	Coldwater Canyon & Vanowen	Roscoe & Woodman	Plummer & Van Nuys	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Balboa	Reseda & Nordhoff	De Soto & Plummer	Chatsworth Station
5:42A	5:49A	5:55A	6:04A	6:15A	6:23A	6:28A	6:35A	6:45A	6:51A
6:36	6:43	6:49	6:58	7:10	7:18	7:23	7:30	7:41	7:47
7:23	7:30	7:36	7:47	8:00	8:09	8:14	8:21	8:32	8:38
8:10	8:18	8:25	8:36	8:50	8:59	9:04	9:12	9:23	9:30
8:57	9:06	9:14	9:25	9:40	9:49	9:54	10:02	10:13	10:20
9:44	9:53	10:01	10:13	10:30	10:39	10:44	10:53	11:04	11:11
10:32	10:42	10:50	11:03	11:20	11:29	11:34	11:43	11:55	12:02P
11:24	11:34	11:42	11:54	12:10P	12:19P	12:24P	12:32P	12:44P	12:51
12:14P	12:24P	12:32P	12:44P	1:00	1:08	1:13	1:21	1:33	1:40
1:04	1:14	1:22	1:34	1:50	1:58	2:03	2:11	2:22	2:29
1:55	2:05	2:13	2:24	2:40	2:48	2:53	3:01	3:12	3:19
2:44	2:54	3:03	3:15	3:31	3:39	3:44	3:52	4:03	4:10
3:35	3:45	3:54	4:06	4:21	4:29	4:34	4:43	4:54	5:01
4:25	4:35	4:44	4:56	5:11	5:20	5:25	5:34	5:45	5:52
5:15	5:25	5:34	5:46	6:01	6:10	6:15	6:23	6:34	6:41
6:07	6:17	6:26	6:38	6:53	7:02	7:07	7:15	7:25	7:33
7:05	7:14	7:22	7:33	7:47	7:55	8:00	8:07	8:17	8:23
8:09	8:18	8:25	8:34	8:48	8:55	9:00	9:06	9:15	9:20
—	—	—	9:37	9:49	9:55	9:59	10:05	10:14	10:19
—	—	—	10:44	10:56	11:02	11:06	11:12	11:21	11:26

Sunday and Holiday Schedules

Sunday and Holiday Schedule in effect on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Horarios de domingo y días feriados

Horarios de domingo y días feriados en vigor para New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day y Christmas Day

Special Notes

A Passengers traveling to Ventura Bl must transfer at Plummer and Van Nuys to Line 233.

Avisos especiales

A *Los pasajeros que viajan hacia Ventura Bl deben transferirse a la Línea 233 en Plummer y Van Nuys.*

Sunday and Holiday Schedule

Effective Jun 23 2013

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Eastbound – Southbound (Approximate Times)

CHATSWORTH		NORTHRIDGE		NORTH HILLS	PANORAMA CITY		NORTH HOLLYWOOD		STUDIO CITY
Chatsworth Station	Plummer & De Soto	Nordhoff & Reseda	Plummer & Balboa	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Van Nuys	Roscoe & Woodman	Coldwater Canyon & Vanowen	Valley College Orange Line Station	Ventura & Goodland (Coldwater Canyon)
4:34A	4:41A	4:52A	4:59A	5:07A	5:14A	5:27A	5:36A	5:42A	5:52A
5:34	5:41	5:52	5:59	6:07	6:14	6:27	6:36	6:42	6:52
6:29	6:36	6:47	6:54	7:02	7:09	7:23	7:32	7:39	7:51
7:19	7:26	7:37	7:44	7:52	7:59	8:14	8:24	8:31	8:43
8:05	8:13	8:25	8:33	8:41	8:49	9:05	9:15	9:22	9:34
8:54	9:02	9:15	9:23	9:31	9:39	9:56	10:06	10:14	10:25
9:44	9:52	10:05	10:13	10:21	10:29	10:45	10:55	11:03	11:14
10:34	10:42	10:55	11:03	11:11	11:19	11:35	11:45	11:53	12:04P
11:24	11:32	11:45	11:53	12:01P	12:09P	12:25P	12:35P	12:43P	12:54
12:13P	12:21P	12:34P	12:42P	12:50	12:58	1:16	1:26	1:34	1:45
1:03	1:11	1:24	1:32	1:40	1:48	2:06	2:16	2:24	2:35
1:52	2:00	2:13	2:21	2:29	2:36	2:54	3:04	3:12	3:23
2:42	2:50	3:03	3:11	3:19	3:26	3:44	3:54	4:02	4:13
3:32	3:40	3:53	4:01	4:09	4:16	4:33	4:43	4:51	5:02
4:26	4:34	4:47	4:55	5:03	5:10	5:28	5:38	5:46	5:57
5:24	5:32	5:45	5:53	6:01	6:08	6:26	6:36	6:44	6:55
6:24	6:32	6:45	6:53	7:01	7:08	7:23	7:33	7:40	7:51
7:25	7:33	7:46	7:54	8:02	8:09	8:23	8:33	8:39	8:49
8:28	8:36	8:48	8:55	9:02	A9:09	9:22	—	—	—
9:40	9:47	9:58	10:05	10:12	A10:19	10:32	—	—	—
10:38	10:45	10:56	11:03	11:10	A11:17	11:30	—	—	—

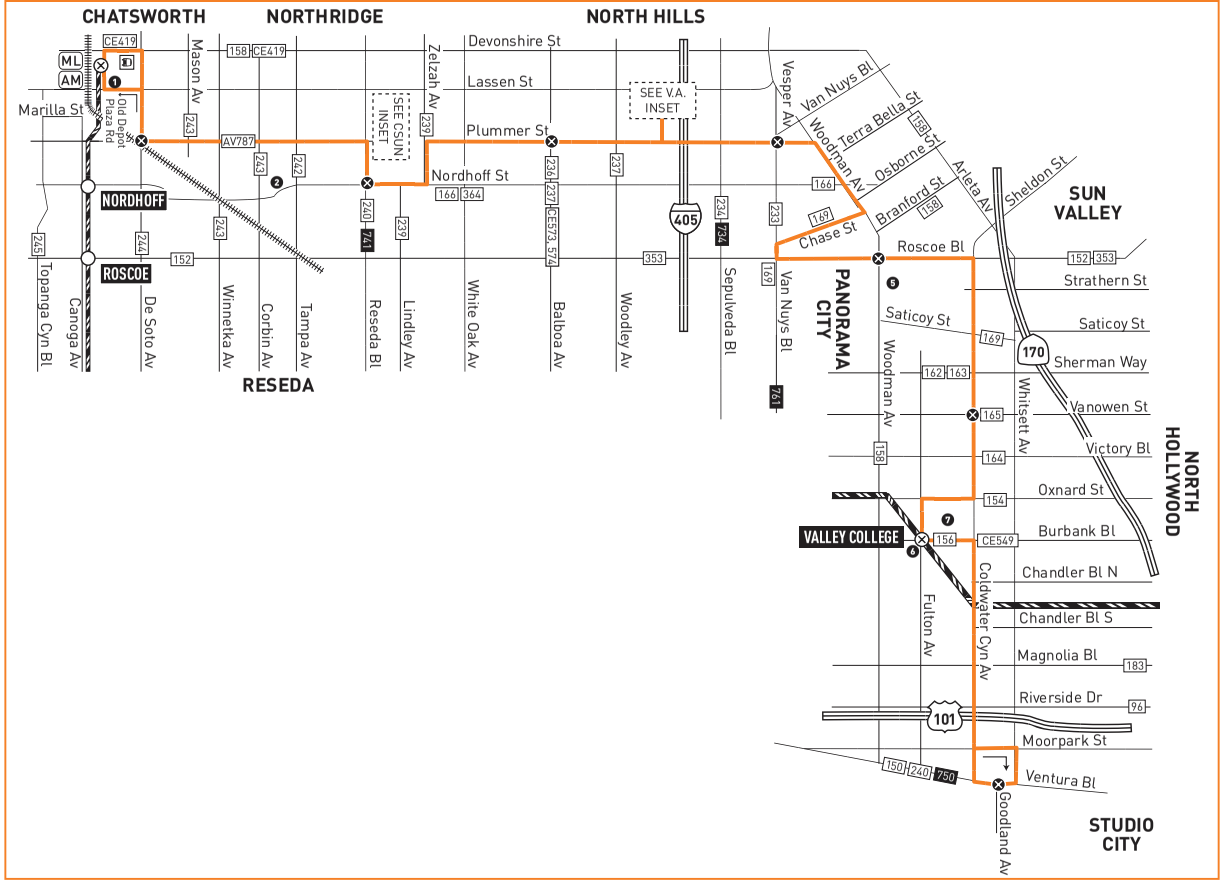
Sunday and Holiday Schedule

167

Westbound – Northbound (Approximate Times)

STUDIO CITY	NORTH HOLLYWOOD		PANORAMA CITY		NORTH HILLS	NORTHRIDGE		CHATSWORTH	
Ventura & Goodland (Coldwater Canyon)	Valley College Orange Line Station	Coldwater Canyon & Vanowen	Roscoe & Woodman	Plummer & Van Nuys	Sepulveda Veterans Hospital Outpatient Clinic	Plummer & Balboa	Reseda & Nordhoff	De Soto & Plummer	Chatsworth Station
5:42A	5:49A	5:55A	6:04A	6:15A	6:22A	6:26A	6:32A	6:41A	6:48A
6:37	6:44	6:50	6:59	7:10	7:18	7:22	7:29	7:39	7:45
7:23	7:30	7:36	7:47	8:00	8:09	8:14	8:22	8:33	8:39
8:12	8:20	8:26	8:37	8:50	8:59	9:04	9:12	9:23	9:30
8:59	9:08	9:15	9:26	9:40	9:49	9:54	10:02	10:13	10:20
9:49	9:58	10:05	10:16	10:30	10:39	10:44	10:52	11:03	11:10
10:35	10:45	10:53	11:04	11:20	11:29	11:34	11:42	11:53	11:59
11:25	11:35	11:43	11:54	12:10P	12:19P	12:24P	12:32P	12:43P	12:50P
12:15P	12:25P	12:33P	12:44P	1:00	1:09	1:14	1:22	1:33	1:40
1:05	1:15	1:23	1:34	1:50	1:59	2:04	2:12	2:23	2:30
1:55	2:05	2:13	2:24	2:40	2:49	2:54	3:02	3:13	3:20
2:45	2:55	3:03	3:14	3:30	3:39	3:44	3:52	4:03	4:10
3:35	3:45	3:53	4:04	4:20	4:29	4:34	4:42	4:53	5:00
4:24	4:34	4:42	4:54	5:10	5:19	5:24	5:32	5:43	5:50
5:16	5:26	5:34	5:45	6:00	6:09	6:14	6:22	6:33	6:40
6:09	6:19	6:26	6:37	6:52	7:00	7:05	7:13	7:24	7:31
7:04	7:13	7:20	7:30	7:45	7:53	7:57	8:05	8:14	8:20
8:07	8:16	8:23	8:32	8:46	8:53	8:57	9:03	9:12	9:17
—	—	—	9:35	9:47	9:53	9:57	10:03	10:12	10:17
—	—	—	10:42	10:54	11:00	11:04	11:10	11:19	11:24

ROUTE MAP



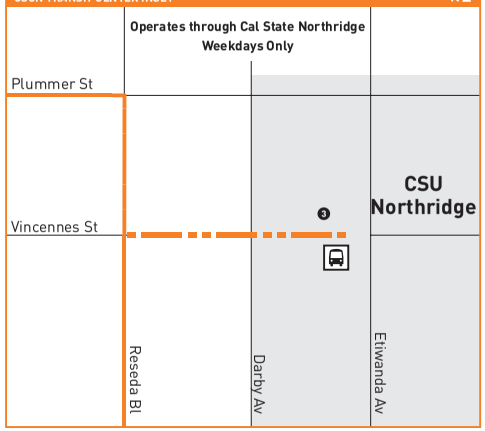
MAP NOTES

1. **Chatsworth Station**
   Metro 158, 166, 167, 244, 245, 364, Metro Orange Line; CE419: SC791; SV-C; Ventura County Metrolink Line: Amtrak
2. **Northridge Fashion Center**
3. **California State University, Northridge Transit Center**
   Metro 167, 741, AV787
4. **Sepulveda V.A. Ambulatory Care Center**
5. **Kaiser Hospital**
6. **Valley College Station**
   Metro 156, 167, 656, Orange Line; CE549; LDVAN
7. **L.A. Valley College**

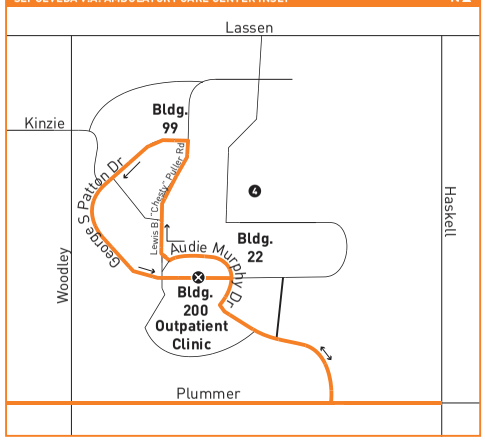
LEGEND

- Route of Line 167
- Extended Route of Line 167 (Weekdays Only)
- Timepoint
- Metro Orange Line
- Metrolink, Amtrak
- Orange Line Station
- Orange Line Station & Timepoint
- Transit Center
- AM Amtrak Station
- ML Metrolink Station
- AV Antelope Valley Transit
- CE LADOT Commuter Express
- LD LADOT Dash
- SC Santa Clarita Transit
- SV Simi Valley Transit

CSUN TRANSIT CENTER INSET



SEPULVEDA V.A. AMBULATORY CARE CENTER INSET



DASH

NORTHRIDGE

EFFECTIVE JULY 1, 2013
EFECTIVO 1 JULIO, 2013

DASH NORTHRIDGE

	Leaves/Sale Northridge Metrolink Station A	Nordhoff & Tampa B	Reseda & Nordhoff C	Reseda & Roscoe D	Sherman Way & Reseda E	Wilbur & Saticoy F	Arrives/Llega Northridge Metrolink Station A
MONDAY-FRIDAY/LUNES-VIERNES							
FIRST BUS/ EL PRIMERO AUTOBÚS	5:30AM	5:35	5:38	5:42	5:46	5:50	5:55
then every/ entonces cada 15 minutes until/ minutos hasta	:45 :00 :15 :30 6:45AM	:50 :05 :20 :35 6:50	:53 :08 :23 :38 6:53	:57 :12 :27 :42 6:57	:01 :16 :31 :46 7:01	:05 :20 :35 :50 7:05	:10 :25 :40 :55 7:10
then every/ entonces cada 20 minutes until/ minutos hasta	7:00AM :20 :40 :00	7:06 :26 :46 :06	7:11 :31 :51 :11	7:17 :37 :57 :17	7:22 :42 :02 :22	7:28 :48 :08 :28	7:35 :55 :15 :35
LAST BUS/ EL ÚLTIMO AUTOBÚS	7:00PM	7:06	7:11	7:17	7:22	7:28	7:35
SATURDAY/SÁBADO							
FIRST BUS/ EL PRIMERO AUTOBÚS	9:00AM	9:06	9:11	9:17	9:22	9:28	9:35
then every/ entonces cada 20 minutes until/ minutos hasta	:20 :40 :00	:26 :46 :06	:31 :51 :11	:37 :57 :17	:42 :02 :22	:48 :08 :28	:55 :15 :35
LAST BUS/ EL ÚLTIMO AUTOBÚS	5:00PM	5:06	5:11	5:17	5:22	5:28	5:35

Note: Schedules are subject to traffic, weather and other conditions. Please be patient as these conditions are out of the control of the driver and LADOT. Also remember to allow sufficient time to make transfers to other services./Nota: Los horarios están sujetos al tráfico, el clima y a otras condiciones. Favor de ser paciente porque dichas condiciones están fuera del control del conductor y de LADOT. Recuerde el darse suficiente tiempo para hacer transbordes a otros servicios.

LADOT
City of Los Angeles
Department of Transportation

(213, 310, 323 or/o 818) 808-2273
www.ladottransit.com

DASH

NORTHRIDGE

EFFECTIVE JULY 1, 2013
EFECTIVO 1 JULIO, 2013

LADOT

City of Los Angeles
Department of Transportation

(213, 310, 323 or/o 818) 808-2273
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Monday through Friday Schedule

Effective Jun 23 2013

Metro range ine

Eastbound (pproximate Times)

H TSW TH Chatsworth Station	W NE ENTE Warner Center Station	N Canoga Station A	W NNET Pierce College Station	N N YS Balboa Station	Van Nuys Station	N H TH YW North Hollywood Station
ADDITIONA PEAK HOUR TRIPS SHOWN IN CHATSWORTH TO WARNER CENTER SHUTT E SECTION OF THIS TI ETAB E						
—	3:41A	3:46A	3:50A	4:00A	4:09A	4:23A
3:53A	—	4:05	4:09	4:19	4:28	4:42
—	4:15	4:20	4:24	4:34	4:43	4:57
4:22	—	4:34	4:38	4:48	4:57	5:11
—	4:41	4:46	4:50	5:00	5:09	5:23
4:43	—	4:55	4:59	5:09	5:18	5:32
—	4:57	5:02	5:06	5:16	5:25	5:39
4:56	—	5:08	5:12	5:22	5:31	5:45
—	5:09	5:14	5:18	5:28	5:37	5:51
5:06	—	5:18	5:22	5:32	5:41	5:55
—	5:17	5:22	5:26	5:36	5:45	5:59
5:15	—	5:27	5:31	5:41	5:50	6:04
—	5:26	5:31	5:35	5:45	5:54	6:08
5:23	—	5:35	5:39	5:49	5:58	6:12
—	5:34	5:39	5:43	5:53	6:02	6:16
5:31	—	5:43	5:47	5:57	6:06	6:20
—	5:42	5:47	5:51	6:01	6:10	6:24
5:39	—	5:51	5:55	6:06	6:15	6:29
—	5:49	5:54	5:58	6:09	6:18	6:32
5:46	—	5:58	6:02	6:13	6:22	6:36
—	5:57	6:02	6:06	6:17	6:26	6:40
5:53	—	6:06	6:10	6:21	6:30	6:44
—	6:05	6:10	6:14	6:25	6:34	6:48
6:00	—	6:13	6:17	6:28	6:37	6:52
—	6:12	6:17	6:21	6:32	6:41	6:56
6:08	—	6:21	6:25	6:36	6:46	7:01
—	6:19	6:24	6:28	6:39	6:50	7:05
6:16	—	6:29	6:33	6:44	6:55	7:10
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6:31	—	6:44	6:48	7:00	7:11	7:26
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6:39	—	6:52	6:56	7:08	7:19	7:34
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6:47	—	7:00	7:04	7:16	7:27	7:42
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9:14	—	9:27	9:31	9:43	9:55	10:11
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9:31	—	9:44	9:48	10:00	10:12	10:28
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10:02	—	10:16	10:20	10:32	10:44	11:00
—	10:19	10:24	10:28	10:40	10:52	11:08
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10:50	—	11:04	11:08	11:20	11:32	11:48
—	11:07	11:12	11:16	11:28	11:40	11:56
11:06	—	11:20	11:24	11:36	11:48	12:04P
—	11:23	11:28	11:32	11:44	11:56	12:12
11:22	—	11:36	11:40	11:52	12:04P	12:20
—	11:39	11:44	11:48	11:59	12:12	12:28
11:38	—	11:52	11:56	12:08P	12:20	12:36
—	11:55	11:59	12:04P	12:16	12:28	12:44
11:54	—	12:08P	12:12	12:24	12:36	12:52
—	12:11P	12:16	12:20	12:32	12:44	1:00
12:10P	—	12:24	12:28	12:40	12:52	1:08
—	12:27	12:32	12:36	12:48	1:00	1:16
12:26	—	12:40	12:44	12:56	1:08	1:24
—	12:43	12:48	12:52	1:04	1:16	1:32
12:42	—	12:56	1:00	1:12	1:24	1:40
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2:42	—	2:56	3:00	3:12	3:24	3:40
—	2:56	3:01	3:05	3:17	3:29	3:45
2:51	—	3:05	3:09	3:21	3:33	3:49
—	3:04	3:09	3:13	3:25	3:37	3:53
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3:48	—	4:02	4:06	4:18	4:30	4:46
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5:44	—	5:58	6:02	6:14	6:26	6:42
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—	6:07	6:12	6:16	6:28	6:40	6:56
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6:18	—	6:32	6:36	6:48	7:00	7:16
—	6:36	6:41	6:45	6:57	7:08	7:24
6:37	—	6:51	6:55	7:06	7:17	7:33
—	6:55	7:00	7:04	7:15	7:26	7:42
6:55	—	7:09	7:13	7:24	7:35	7:51
—	7:14	7:19	7:23	7:34	7:45	8:01
7:11	7:28	7:32	7:36	7:47	7:58	8:14
7:26	7:43	7:47	7:51	8:02	8:13	8:29
7:41	7:58	8:02	8:06	8:17	8:28	8:44
7:56	8:13	8:17	8:21	8:32	8:43	8:59
8:11	8:28	8:32	8:36	8:47	8:58	9:14
8:26	8:43	8:47	8:51	9:02	9:13	9:29
8:41	8:58	9:02	9:06	9:17	9:28	9:44
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9:26	9:43	9:47	9:51	10:02	10:13	10:29
9:42	9:59	10:03	10:07	10:18	10:29	10:45
10:00	10:17	10:21	10:25	10:36	10:47	11:03
10:21	10:38	10:42	10:46	10:57	11:08	11:24
10:42	10:59	11:03	11:07	11:18	11:28	11:43
11:06	11:23	11:27	11:31	11:42	11:52	12:07A
11:27	11:44	11:48	11:52	12:03A	12:13A	12:27
11:46	12:03A	12:07A	12:11A	12:21	12:31	12:45

Service continues on Friday nights only. See ate Night Section below.

Westbound (pproximate Times)

N H TH YW North Hollywood Station	EY EN Valley College Station	N N YS Sepulveda Station	T Z N Reseda Station	N Canoga Station B	W NE ENTE Warner Center Station	H TSW TH Chatsworth Station
ADDITIONA PEAK HOUR TRIPS SHOWN IN CHATSWORTH TO WARNER CENTER SHUTT E SECTION OF THIS TI ETAB E						
4:32A	4:41A	4:50A	5:00A	5:11A	—	5:23A
4:50	4:59	5:08	5:18	5:30	5:35A	—
5:05	5:14	5:23	5:33	5:44	—	5:56
5:20	5:29	5:38	5:48	6:00	6:05	—
5:32	5:41	5:50	6:00	6:12	—	6:25
5:44	5:53	6:02	6:13	6:25	6:30	—
5:52	6:01	6:11	6:22	6:34	—	6:47
6:00	6:09	6:19	6:30	6:42	6:47	—
6:05	6:14	6:24	6:35	6:47	—	7:00
6:10	6:19	6:29	6:40	6:52	6:57	—
6:15	6:24	6:34	6:45	6:57	—	7:10
6:19	6:28	6:38	6:49	7:01	7:06	—
6:23	6:32	6:42	6:53	7:05	—	7:18
6:27	6:36	6:46	6:57	7:09	7:14	—
6:31	6:40	6:50	7:01	7:13	—	7:26
6:35	6:44	6:54	7:05	7:17	7:22	—
6:39	6:48	6:58	7:09	7:21	—	7:34
6:43	6:52	7:02	7:13	7:25	7:30	—
6:47	6:56	7:06	7:17	7:29	—	7:42
6:51	7:00	7:10	7:21	7:33	7:38	—
6:55	7:04	7:14	7:25	7:37	—	7:50
6:59	7:08	7:18	7:29	7:41	7:46	—
7:03	7:12	7:22	7:33	7:45	—	7:58
7:07	7:16	7:26	7:37	7:49	7:54	—
7:11	7:20	7:30	7:41	7:53	—	8:06
7:15	7:24	7:34	7:45	7:57	8:02	—
7:19	7:28	7:38	7:49	8:01	—	8:14
7:23	7:32	7:42	7:53	8:05	8:10	—
7:27	7:36	7:46	7:57	8:09	—	8:22
7:31	7:40	7:50	8:01	8:13	8:18	—
7:35	7:44	7:54	8:05	8:17	—	8:30
7:39	7:48	7:58	8:09	8:21	8:26	—
7:43	7:52	8:02	8:13	8:25	—	8:38
7:47	7:56	8:06	8:17	8:29	8:34	—
7:51	8:00	8:10	8:21	8:33	—	8:46
7:55	8:04	8:14	8:25	8:37	8:42	—
7:59	8:08	8:18	8:29	8:41	—	8:54
8:03	8:12	8:22	8:33	8:45	8:50	—
8:07	8:16	8:26	8:37	8:49	—	9:02
8:11	8:20	8:30	8:41	8:53	8:58	—
8:15	8:24	8:34	8:45	8:57	—	9:10
8:19	8:28	8:38	8:49	9:01	9:06	—
8:23	8:32	8:42	8:53	9:05	—	9:18
8:27	8:36	8:46	8:57	9:09	9:14	—
8:31	8:40	8:50	9:01	9:13	—	9:26
8:36	8:45	8:55	9:06	9:18	9:23	—
8:40	8:49	8:59	9:10	9:22	—	9:35
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8:48	8:57	9:07	9:18	9:30	—	9:43
8:52	9:01	9:11	9:22	9:34	9:39	—
8:56	9:05	9:15	9:26	9:38	—	9:51
9:00	9:09	9:19	9:30	9:42	9:47	—
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9:08	9:17	9:27	9:38	9:50	9:55	—
9:12	9:21	9:31	9:42	9:54	—	10:07
9:17	9:26	9:36	9:47	9:59	10:04	—
9:22	9:32	9:42	9:53	10:05	—	10:18
9:27	9:37	9:47	9:58	10:10	10:15	—
9:32	9:42	9:52	10:03	10:15	—	10:28
9:38	9:48	9:58	10:09	10:21	10:26	—
9:44	9:54	10:04	10:15	10:27	—	10:40
9:50	10:00	10:10	10:21	10:33	10:38	—
9:58	10:08	10:18	10:29	10:41	—	10:54
10:06	10:16	10:26	10:37	10:49	10:54	—
10:14	10:24	10:34	10:45	10:57	—	11:10
10:22	10:32	10:42	10:53	11:05	11:10	—
10:30	10:40	10:50	11:01	11:13	—	11:26
10:38	10:48	10:58	11:09	11:21	11:26	—
10:46	10:56	11:06	11:17	11:29	—	11:42
10:54	11:04	11:14	11:25	11:37	11:42	—
11:02	11:12	11:22	11:33	11:45	—	11:58
11:10	11:20	11:30	11:41	11:53	11:58	—
11:18	11:28	11:38	11:49	12:01P	—	12:14P
11:26	11:36	11:46	11:57	12:09	12:14P	—
11:34	11:44	11:54	12:05P	12:17	—	12:30
11:42	11:52	12:02P	12:13	12:25	12:30	—
11:50	11:59	12:10	12:21	12:33	—	12:46
11:58	12:08P	12:18	12:29	12:41	12:46	—
12:06P	12:16	12:26	12:37	12:49	—	1:02
12:14	12:24	12:34	12:45	12:57	1:02	—
12:22	12:32	12:42	12:53	1:05	—	1:18
12:30	12:40	12:50	1:01	1:13	1:18	—
12:38	12:48	12:58	1:09	1:21	—	1:34
12:46	12:56	1:06	1:17	1:29	1:34	—
12:54	1:04	1:14	1:25	1:37	—	1:50
1:02	1:12	1:22	1:33	1:45	1:50	—
1:10	1:20	1:30	1:41	1:53	—	2:06
1:18	1:28	1:38	1:49	2:01	2:06	—
1:26	1:36	1:46	1:57	2:09	—	2:22
1:34	1:44	1:54	2:05	2:17	2:22	—
1:42	1:52	2:02	2:13	2:25	—	2:38
1:50	2:00	2:10	2:21	2:33	2:38	—
1:58	2:08	2:18	2:29	2:41	—	2:54
2:06	2:16	2:26	2:37	2:49	2:54	—
2:14	2:24	2:34	2:45	2:57	—	3:10
2:22	2:32	2:42	2:53	3:05	3:10	—
2:30	2:40	2:50	3:01	3:13	—	3:26
2:38	2:48	2:58	3:09	3:21	3:26	—
2:45	2:55	3:05	3:16	3:28	—	3:41
2:52	3:02	3:12	3:23	3:35	3:40	—
2:59	3:09	3:19	3:30	3:42	—	3:55
3:06	3:16	3:26	3:37	3:49	3:54	—
3:13	3:23	3:33	3:44	3:56	—	4:09
3:20	3:30	3:40	3:51	4:03	4:08	—
3:27	3:37	3:47	3:58	4:10	—	4:23
3:33	3:43	3:53	4:04	4:16	4:21	—
3:38	3:48	3:58	4:09	4:21	—	4:34
3:43	3:53	4:03	4:14	4:26	4:31	—
3:47	3:57	4:07	4:18	4:30	—	4:43
3:52	4:02	4:12	4:23	4:35	4:40	—
3:57	4:07	4:17	4:28	4:40	—	4:53
4:01	4:11	4:21	4:32	4:44	4:49	—
4:06	4:16	4:26	4:37	4:49	—	5:02
4:10	4:20	4:30	4:41	4:53	4:58	—
4:14	4:24	4:34	4:45	4:57	—	5:10
4:18	4:28	4:38	4:49	5:01	5:06	—
4:22	4:32	4:42	4:53	5:05	—	5:18
4:26	4:36	4:46	4:57	5:09	5:14	—
4:30	4:40	4:50	5:01	5:13	—	5:26
4:34	4:44	4:54	5:05	5:17	5:22	—
4:38	4:48	4:58	5:09	5:21	—	5:34
4:42	4:52	5:02	5:13	5:25	5:30	—
4:47	4:57	5:07	5:18	5:30	—	5:43
4:51	5:01	5:11	5:22	5:34	5:39	—
4:55	5:05	5:15	5:26	5:38	—	5:51
4:59	5:09	5:19	5:30	5:42	5:47	—
5:03	5:13	5:23	5:34	5:46	—	5:59
5:07	5:17	5:27	5:38	5:50	5:55	—
5:11	5:21	5:31	5:42	5:54	—	6:07
5:15	5:25	5:35	5:46	5:58	6:03	—
5:19	5:29	5:39	5:50	6:02	—	6:15
5:23	5:33	5:43	5:54	6:06	6:11	—
5:27	5:37	5:47	5:58	6:10	—	6:23
5:31	5:41	5:51	6:02	6:14	6:19	—
5:35	5:45	5:55	6:06	6:18	—	6:31
5:39	5:49	5:59	6:10	6:22	6:27	—
5:43	5:53	6:03	6:14	6:26	—	6:39
5:47	5:57	6:07	6:18	6:30	6:35	—
5:52	6:02	6:12	6:23	6:35	—	6:48
5:56	6:06	6:16	6:27	6:39	6:44	—
6:01	6:11	6:21	6:32	6:44	—	6:57
6:05	6:15	6:25	6:36	6:48	6:53	—
6:10	6:20	6:30	6:41	6:53	—	7:06
6:14	6:24	6:34	6:45	6:57	7:02	—
6:18	6:28	6:38	6:49	7:01	—	7:14
6:22	6:32	6:42	6:53	7:05	7:10	—
6:26	6:36	6:46	6:57	7:09	—	7:22
6:30	6:40	6:50	7:01	7:13	7:18	—
6:34	6:44	6:54	7:05	7:17	—	7:30
6:38	6:48	6:58	7:09	7:21	7:26	—
6:43	6:53	7:03	7:14	7:26	—	7:39
6:48	6:58	7:08	7:19	7:31	7:36	—
6:53	7:03	7:13	7:24	7:36	—	7:49
6:58	7:07	7:17	7:28	7:40	7:45	—
7:02	7:11	7:21	7:32	7:44	—	7:57
7:07	7:16	7:26	7:37	7:49	7:54	—
7:12	7:21	7:31	7:42	7:54	—	8:07
7:17	7:26	7:36	7:47	7:59	8:04	—
7:23	7:32	7:42	7:53	8:05	—	8:18
7:29	7:38	7:48	7:59	8:11	8:16	—
7:36	7:45	7:55	8:06	8:17	8:22	8:39
7:45	7:54	8:04	8:15	8:26	8:31	8:48
7:54	8:03	8:13	8:24	8:35	8:40	8:57
8:03	8:12	8:22	8:33	8:44	8:49	9:06
8:13	8:22	8:32	8:43	8:54	8:59	9:16
8:24	8:33	8:43	8:54	9:05	9:10	9:27
8:39	8:48	8:58	9:09	9:20	9:25	9:42
8:54	9:03	9:13	9:24	9:35	9:40	9:57
9:09	9:18	9:28	9:39	9:50	9:55	10:12
9:24	9:33	9:43	9:54	10:05	10:10	10:27
9:39	9:48	9:58	10:08	10:19	10:24	10:41
9:54	10:03	10:13	10:23	10:34	10:39	10:56
10:09	10:18	10:28	10:38	10:49	10:54	11:11
10:24	10:33	10:43	10:53	11:04	11:09	11:26
10:39	10:48	10:58	11:08	11:19	11:24	11:41
10:55	11:04	11:14	11:24	11:35	11:40	11:57
11:15	11:24	11:34	11:44	11:55	11:59	12:17A
11:35	11:44	11:54	12:04A	12:15A	12:20A	12:37
11:55	12:04A	12:14A	12:24	12:35	12:40	12:57
12:16A	12:25	12:35	12:45	12:56	1:01	1:18
12:35	12:44	12:54	1:04	1:15	1:20	1:37
12:55	1:04	1:14	1:24	1:35	1:40	1:57

Service continues on Friday nights only. See ate Night Section below.

Friday ate Night and Saturday ate Night nly

Metro range ine

Eastbound (pproximate Times)

H TSW TH Chatsworth Station	W NE ENTE Warner Center Station	N Canoga Station A	W NNET Pierce College Station	N N YS Balboa Station	Van Nuys Station	N TH H YW North Hollywood Station
12:06A	12:18A	12:23A	12:31A	12:41A	12:51A	1:05A
12:26	12:38	12:43	12:51	1:01	1:11	1:25
12:46	12:58	1:03	1:11	1:21	1:31	1:45
1:06	1:18	1:23	1:31	1:41	1:51	2:05
1:26	1:38	1:43	1:51	2:01	2:11	2:25
1:46	1:58	2:03	2:11	2:21	2:31	2:45

Westbound (pproximate Times)

N TH H YW North Hollywood Station	EY EN Valley College Station	N N YS Sepulveda Station	T Z N Reseda Station	N Canoga Station B	W NE ENTE Warner Center Station	H TSW TH Chatsworth Station
1:15A	1:24A	1:34A	1:44A	1:55A	2:00A	2:17A
1:35	1:44	1:54	2:04	2:15	2:20	2:37
1:55	2:04	2:14	2:24	2:35	2:40	2:57
2:15	2:24	2:34	2:44	2:55	3:00	3:17
2:35	2:44	2:54	3:04	3:15	3:20	3:37
2:55	3:04	3:14	3:24	3:35	3:40	3:57

Chatsworth - Warner Center Shuttle
Weekday Peak Hours Only

Metro Orange Line

Eastbound (Approximate Times)

CHATSWORTH	CANOGA PARK	WARNER CENTER
Chatsworth Station	Canoga Station	Warner Center Station
5:35A	5:48A	5:53A
6:05	6:18	6:23
6:29	6:42	6:47
6:54	7:07	7:12
7:12	7:25	7:30
7:44	7:57	8:02
7:56	8:09	8:14
8:39	8:52	8:57
8:55	9:08	9:13
	SHUTTLE TRIPS DO NOT OPERATE MIDDAY	
2:00P	2:14P	2:19P
2:52	3:06	3:11
3:19	3:33	3:38
3:42	3:56	4:01
4:23	4:37	4:42
4:40	4:54	4:59
5:11	5:25	5:30
5:33	5:47	5:52
6:00	6:14	6:19

During midday when shuttle is not in operation, passengers traveling between Warner Center and Chatsworth Station may board regular Orange Line trips and transfer at Canoga Station

Chatsworth - Warner Center Shuttle
Weekday Peak Hours Only

Metro Orange Line

Westbound (Approximate Times)

WARNER CENTER	CANOGA PARK	CHATSWORTH
Warner Center Station	Canoga Station	Chatsworth Station
6:00A	6:05A	6:18A
6:30	6:35	6:48
6:48	6:53	7:06
7:13	7:18	7:31
7:31	7:36	7:49
8:03	8:08	8:21
8:16	8:21	8:34
9:02	9:07	9:20
9:15	9:20	9:33
	SHUTTLE TRIPS DO NOT OPERATE MIDDAY	
2:25P	2:30P	2:43P
3:14	3:19	3:32
3:54	3:59	4:12
4:06	4:11	4:24
4:43	4:48	5:01
5:03	5:08	5:21
5:31	5:36	5:49
6:08	6:13	6:26
6:23	6:28	6:41

Durante el mediodía cuando el servicio de enlance no opera, usuarios viajando entre las estaciones Warner Ctr y Chatsworth pueden abordar Metro Orange Line con servicio regular y transbordar en la estación Canoga.

Saturday, Sunday and Holiday Schedules

Saturday, Sunday and Holiday Schedule in effect on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Horarios de sábado, domingo y días feriados

Horarios de sábado, domingo, y días feriados en vigor para New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day y Christmas Day.

Special Notes

- **A** Trips departing Warner Ctr will stop at Platform 4 at Canoga. Trips departing from Chatsworth will stop at Platform 2 at Canoga. See Inset Map
- **B** Trips terminating at Warner Ctr will stop at Platform 3 at Canoga. Trips terminating at Chatsworth will stop at Platform 1 at Canoga. See Inset Map.

Shaded trips operate between Chatsworth Station and North Hollywood Station via Warner Ctr. Trips will serve both stops at Canoga Station.

Avisos especiales

- **A** *Viajes saliendo de Warner Ctr pararán en la plataforma 4 en Canoga. Viajes saliendo de Chatsworth pararán en la plataforma 2 en Canoga. Vea el mapa.*
- **B** *Viajes terminando en Warner Ctr pararán en la plataforma 3 en Canoga. Viajes terminando en Chatsworth pararán en la plataforma 1 en Canoga. Vea el mapa.*

Viajes bajo columnas sombreadas operarán entre las estaciones Chatsworth y North Hollywood a lo largo de Warner Ctr. Viajes servirán ambas paradas en la estación Canoga.

Saturday, Sunday and Holiday Schedule — Metro Orange Line

Effective Jun 23 2013

Eastbound (Approximate Times)

CHATSWORTH	WARNER CENTER	CANOGA PARK	WINNETKA	VAN NUYS		NORTH HOLLYWOOD
Chatsworth Station	Warner Center Station	Canoga Station A	Pierce College Station	Balboa Station	Van Nuys Station	North Hollywood Station
—	3:41A	3:46A	3:50A	4:00A	4:09A	4:23A
3:50A	—	4:02	4:06	4:16	4:25	4:39
—	4:13	4:18	4:22	4:32	4:41	4:55
4:22	—	4:34	4:38	4:48	4:57	5:11
—	4:40	4:45	4:49	4:59	5:08	5:22
4:47	—	4:59	5:03	5:13	5:22	5:36
—	5:08	5:13	5:17	5:27	5:36	5:50
5:16	—	5:28	5:32	5:42	5:51	6:05
—	5:37	5:42	5:46	5:56	6:05	6:19
5:43	—	5:55	5:59	6:10	6:19	6:33
—	6:02	6:07	6:11	6:22	6:31	6:45
6:05	—	6:18	6:22	6:33	6:43	6:58
—	6:23	6:28	6:32	6:43	6:54	7:09
6:25	—	6:38	6:42	6:54	7:05	7:20
—	6:44	6:49	6:53	7:05	7:16	7:31
6:47	—	7:00	7:04	7:16	7:27	7:42
—	7:06	7:11	7:15	7:27	7:38	7:53
7:09	—	7:22	7:26	7:38	7:49	8:04
—	7:28	7:33	7:37	7:49	8:00	8:15
7:31	—	7:44	7:48	8:00	8:11	8:26
—	7:50	7:55	7:59	8:11	8:22	8:37
7:53	—	8:06	8:10	8:22	8:33	8:48
—	8:12	8:17	8:21	8:33	8:44	8:59
8:15	—	8:28	8:32	8:44	8:55	9:11
—	8:33	8:38	8:42	8:54	9:05	9:21
8:34	—	8:47	8:51	9:03	9:15	9:31
—	8:52	8:57	9:01	9:13	9:25	9:41
8:54	—	9:07	9:11	9:23	9:35	9:51
—	9:12	9:17	9:21	9:33	9:45	10:01
9:14	—	9:27	9:31	9:43	9:55	10:11
—	9:32	9:37	9:41	9:53	10:05	10:21
9:34	—	9:47	9:51	10:03	10:15	10:31
—	9:52	9:57	10:01	10:13	10:25	10:41
9:54	—	10:07	10:11	10:23	10:35	10:51
—	10:12	10:17	10:21	10:33	10:45	11:01
10:13	—	10:27	10:31	10:43	10:55	11:11
—	10:32	10:37	10:41	10:53	11:05	11:21
10:33	—	10:47	10:51	11:03	11:15	11:31
—	10:52	10:57	11:01	11:13	11:25	11:41
10:53	—	11:07	11:11	11:23	11:35	11:51
—	11:12	11:17	11:21	11:33	11:45	12:01P
11:13	—	11:27	11:31	11:43	11:55	12:11
—	11:32	11:37	11:41	11:53	12:05P	12:21
11:33	—	11:47	11:51	12:03P	12:15	12:31
—	11:52	11:57	12:01P	12:13	12:25	12:41
11:53	—	12:07P	12:11	12:23	12:35	12:51
—	12:12P	12:17	12:21	12:33	12:45	1:01
12:13P	—	12:27	12:31	12:43	12:55	1:11
—	12:32	12:37	12:41	12:53	1:05	1:21
12:33	—	12:47	12:51	1:03	1:15	1:31
—	12:52	12:57	1:01	1:13	1:25	1:41
12:53	—	1:07	1:11	1:23	1:35	1:51
—	1:12	1:17	1:21	1:33	1:45	2:01
1:13	—	1:27	1:31	1:43	1:55	2:11
—	1:32	1:37	1:41	1:53	2:05	2:21
1:33	—	1:47	1:51	2:03	2:15	2:31
—	1:52	1:57	2:01	2:13	2:25	2:41
1:53	—	2:07	2:11	2:23	2:35	2:51
—	2:12	2:17	2:21	2:33	2:45	3:01
2:13	—	2:27	2:31	2:43	2:55	3:11
—	2:32	2:37	2:41	2:53	3:05	3:21
2:33	—	2:47	2:51	3:03	3:15	3:31
—	2:52	2:57	3:01	3:13	3:25	3:41
2:53	—	3:07	3:11	3:23	3:35	3:51
—	3:12	3:17	3:21	3:33	3:45	4:01
3:13	—	3:27	3:31	3:43	3:55	4:11
—	3:32	3:37	3:41	3:53	4:05	4:21
3:33	—	3:47	3:51	4:03	4:15	4:31
—	3:52	3:57	4:01	4:13	4:25	4:41
3:53	—	4:07	4:11	4:23	4:35	4:51
—	4:12	4:17	4:21	4:33	4:45	5:01
4:13	—	4:27	4:31	4:43	4:55	5:11
—	4:32	4:37	4:41	4:53	5:05	5:21
4:33	—	4:47	4:51	5:03	5:15	5:31
—	4:52	4:57	5:01	5:13	5:25	5:41
4:53	—	5:07	5:11	5:23	5:35	5:51
—	5:12	5:17	5:21	5:33	5:45	6:01
5:13	—	5:27	5:31	5:43	5:55	6:11
—	5:33	5:38	5:42	5:54	6:06	6:22
5:35	—	5:49	5:53	6:05	6:17	6:33
—	5:55	6:00	6:04	6:16	6:28	6:44
5:58	—	6:12	6:16	6:28	6:40	6:56
—	6:19	6:24	6:28	6:40	6:52	7:08
6:23	—	6:37	6:41	6:53	7:05	7:21
—	6:47	6:52	6:56	7:07	7:18	7:34
6:51	—	7:05	7:09	7:20	7:31	7:47
—	7:14	7:19	7:23	7:34	7:45	8:01
7:20	—	7:33	7:37	7:48	7:59	8:15
—	7:42	7:47	7:51	8:02	8:13	8:29
7:41	7:58	8:02	8:06	8:17	8:28	8:44
7:56	8:13	8:17	8:21	8:32	8:43	8:59
8:11	8:28	8:32	8:36	8:47	8:58	9:14
8:26	8:43	8:47	8:51	9:02	9:13	9:29
8:41	8:58	9:02	9:06	9:17	9:28	9:44
8:56	9:13	9:17	9:21	9:32	9:43	9:59
9:11	9:28	9:32	9:36	9:47	9:58	10:14
9:26	9:43	9:47	9:51	10:02	10:13	10:29
9:42	9:59	10:03	10:07	10:18	10:29	10:45
10:00	10:17	10:21	10:25	10:36	10:47	11:03
10:21	10:38	10:42	10:46	10:57	11:08	11:24
10:42	10:59	11:03	11:07	11:18	11:28	11:43
11:06	11:23	11:27	11:31	11:42	11:52	12:07A
11:27	11:44	11:48	11:52	12:03A	12:13A	12:27
11:46	12:03A	12:07A	12:11A	12:21	12:31	12:45

Service continues on Saturday nights only. See Late Night Section

Saturday, Sunday and Holiday Schedule — Metro Orange Line

Westbound (Approximate Times)

NORTH HOLLYWOOD	VALLEY GLEN	VAN NUYS	TARZANA	CANOGA PARK	WARNER CENTER	CHATSWORTH
North Hollywood Station	Valley College Station	Sepulveda Station	Reseda Stattion	Canoga Station B	Warner Center Station	Chatsworth Station
4:32A	4:41A	4:50A	5:00A	5:11A	—	5:23A
4:48	4:57	5:06	5:16	5:27	—	5:39
5:04	5:13	5:22	5:32	5:44	5:49A	—
5:20	5:29	5:38	5:48	5:59	—	6:12
5:35	5:44	5:53	6:03	6:15	6:20	—
5:49	5:58	6:08	6:19	6:31	—	6:44
6:03	6:12	6:22	6:33	6:45	6:50	—
6:18	6:27	6:37	6:48	7:00	—	7:13
6:31	6:40	6:50	7:01	7:13	7:18	—
6:44	6:53	7:03	7:14	7:26	—	7:39
6:57	7:06	7:16	7:27	7:39	7:44	—
7:10	7:19	7:29	7:40	7:52	—	8:05
7:19	7:28	7:38	7:49	8:01	8:06	—
7:31	7:40	7:50	8:01	8:13	—	8:26
7:43	7:52	8:02	8:13	8:25	8:30	—
7:55	8:04	8:14	8:25	8:37	—	8:50
8:07	8:16	8:26	8:37	8:49	8:54	—
8:19	8:28	8:38	8:49	9:01	—	9:14
8:30	8:39	8:49	9:00	9:12	9:17	—
8:42	8:51	9:01	9:12	9:24	—	9:37
8:53	9:02	9:12	9:23	9:35	9:40	—
9:03	9:12	9:22	9:33	9:45	—	9:58
9:13	9:22	9:32	9:43	9:55	10:00	—
9:22	9:32	9:42	9:53	10:05	—	10:18
9:32	9:42	9:52	10:03	10:15	10:20	—
9:42	9:52	10:02	10:13	10:25	—	10:38
9:52	10:02	10:12	10:23	10:35	10:40	—
10:02	10:12	10:22	10:33	10:45	—	10:58
10:12	10:22	10:32	10:43	10:55	11:00	—
10:22	10:32	10:42	10:53	11:05	—	11:18
10:32	10:42	10:52	11:03	11:15	11:20	—
10:42	10:52	11:02	11:13	11:25	—	11:38
10:52	11:02	11:12	11:23	11:35	11:40	—
11:02	11:12	11:22	11:33	11:45	—	11:58
11:12	11:22	11:32	11:43	11:55	11:59	—
11:22	11:32	11:42	11:53	12:05P	—	12:18P
11:32	11:42	11:52	12:03P	12:15	12:20P	—
11:42	11:52	12:02P	12:13	12:25	—	12:38
11:52	12:02P	12:12	12:23	12:35	12:40	—
12:02P	12:12	12:22	12:33	12:45	—	12:58
12:12	12:22	12:32	12:43	12:55	1:00	—
12:22	12:32	12:42	12:53	1:05	—	1:18
12:32	12:42	12:52	1:03	1:15	1:20	—
12:42	12:52	1:02	1:13	1:25	—	1:38
12:52	1:02	1:12	1:23	1:35	1:40	—
1:02	1:12	1:22	1:33	1:45	—	1:58
1:12	1:22	1:32	1:43	1:55	2:00	—
1:22	1:32	1:42	1:53	2:05	—	2:18
1:32	1:42	1:52	2:03	2:15	2:20	—
1:42	1:52	2:02	2:13	2:25	—	2:38
1:52	2:02	2:12	2:23	2:35	2:40	—
2:02	2:12	2:22	2:33	2:45	—	2:58
2:12	2:22	2:32	2:43	2:55	3:00	—
2:22	2:32	2:42	2:53	3:05	—	3:18
2:32	2:42	2:52	3:03	3:15	3:20	—
2:42	2:52	3:02	3:13	3:25	—	3:38
2:52	3:02	3:12	3:23	3:35	3:40	—
3:02	3:12	3:22	3:33	3:45	—	3:58
3:12	3:22	3:32	3:43	3:55	4:00	—
3:22	3:32	3:42	3:53	4:05	—	4:18
3:32	3:42	3:52	4:03	4:15	4:20	—
3:42	3:52	4:02	4:13	4:25	—	4:38
3:52	4:02	4:12	4:23	4:35	4:40	—
4:02	4:12	4:22	4:33	4:45	—	4:58
4:12	4:22	4:32	4:43	4:55	5:00	—
4:22	4:32	4:42	4:53	5:05	—	5:18
4:32	4:42	4:52	5:03	5:15	5:20	—
4:42	4:52	5:02	5:13	5:25	—	5:38
4:52	5:02	5:12	5:23	5:35	5:40	—
5:02	5:12	5:22	5:33	5:45	—	5:58
5:12	5:22	5:32	5:43	5:55	6:00	—
5:22	5:32	5:42	5:53	6:05	—	6:18
5:32	5:42	5:52	6:03	6:15	6:20	—
5:42	5:52	6:02	6:13	6:25	—	6:38
5:52	6:02	6:12	6:23	6:35	6:40	—
6:02	6:12	6:22	6:33	6:45	—	6:58
6:12	6:22	6:32	6:43	6:55	7:00	—
6:22	6:32	6:42	6:53	7:05	—	7:18
6:33	6:43	6:53	7:04	7:16	7:21	—
6:45	6:55	7:05	7:16	7:28	—	7:41
6:57	7:07	7:17	7:28	7:39	7:44	8:01
7:09	7:18	7:28	7:39	7:50	7:55	8:12
7:21	7:30	7:40	7:51	8:02	8:07	8:24
7:32	7:41	7:51	8:02	8:13	8:18	8:35
7:45	7:54	8:04	8:15	8:26	8:31	8:48
7:58	8:07	8:17	8:28	8:39	8:44	9:01
8:11	8:20	8:30	8:41	8:52	8:57	9:14
8:24	8:33	8:43	8:54	9:05	9:10	9:27
8:39	8:48	8:58	9:09	9:20	9:25	9:42
8:54	9:03	9:13	9:24	9:35	9:40	9:57
9:09	9:18	9:28	9:39	9:50	9:55	10:12
9:24	9:33	9:43	9:54	10:05	10:10	10:27
9:39	9:48	9:58	10:08	10:19	10:24	10:41
9:54	10:03	10:13	10:23	10:34	10:39	10:56
10:09	10:18	10:28	10:38	10:49	10:54	11:11
10:24	10:33	10:43	10:53	11:04	11:09	11:26
10:39	10:48	10:58	11:08	11:19	11:24	11:41
10:55	11:04	11:14	11:24	11:35	11:40	11:57
11:15	11:24	11:34	11:44	11:55	11:59	12:17A
11:35	11:44	11:54	12:04A	12:15A	12:20A	12:37
11:55	12:04A	12:14A	12:24	12:35	12:40	12:57
12:16A	12:25	12:35	12:45	12:56	1:01	1:18
12:35	12:44	12:54	1:04	1:15	1:20	1:37
12:55	1:04	1:14	1:24	1:35	1:40	1:57

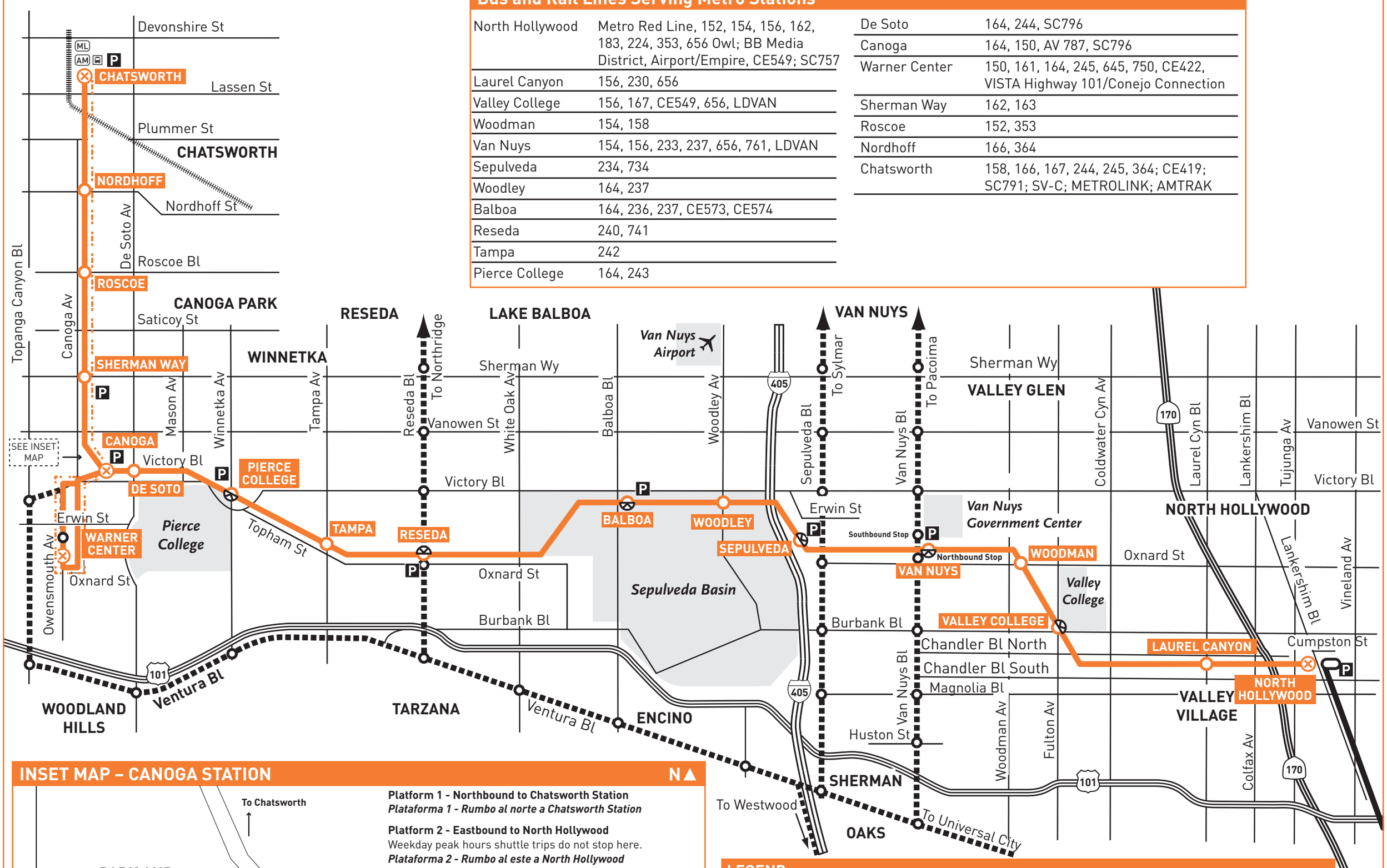
Service continues on Saturday nights only. See Late Night Section

ROUTE MAP

N

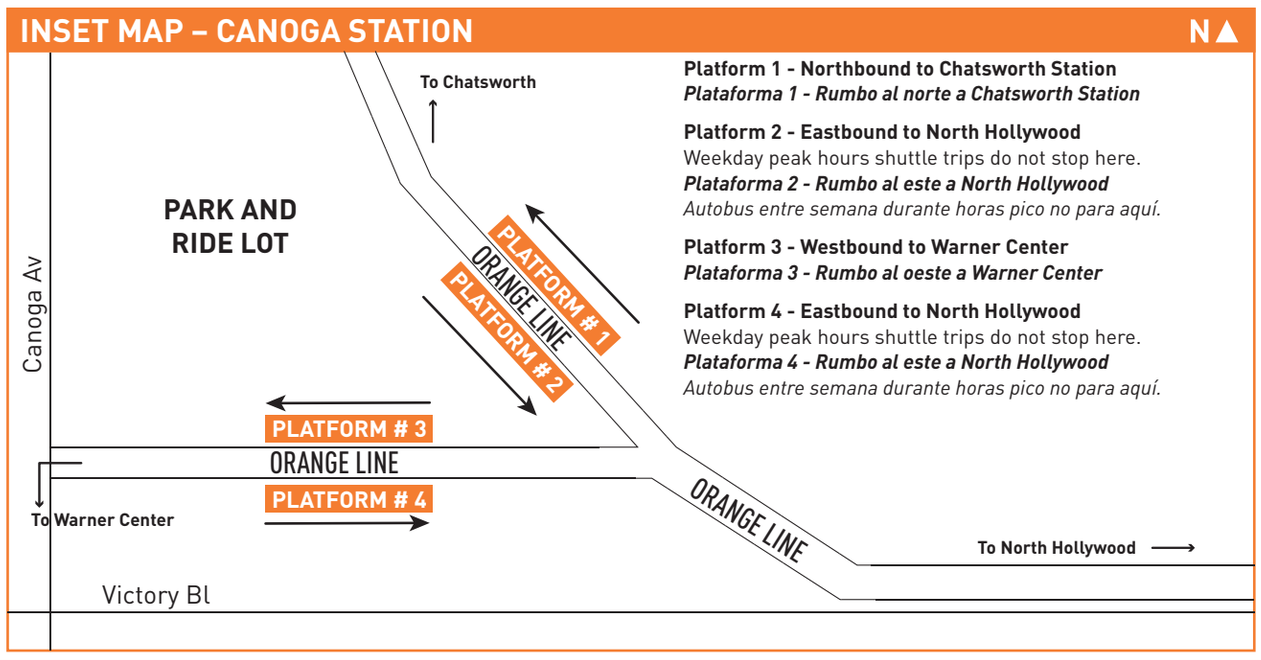
Bus and Rail Lines Serving Metro Stations

North Hollywood	Metro Red Line, 152, 154, 156, 162, 183, 224, 353, 656 Owl; BB Media District, Airport/Empire, CE549; SC757
Laurel Canyon	156, 230, 656
Valley College	156, 167, CE549, 656, LDVAN
Woodman	154, 158
Van Nuys	154, 156, 233, 237, 656, 761, LDVAN
Sepulveda	234, 734
Woodley	164, 237
Balboa	164, 236, 237, CE573, CE574
Reseda	240, 741
Tampa	242
Pierce College	164, 243
De Soto	164, 244, SC796
Canoga	164, 150, AV 787, SC796
Warner Center	150, 161, 164, 245, 645, 750, CE422, VISTA Highway 101/Conejo Connection
Sherman Way	162, 163
Roscoe	152, 353
Nordhoff	166, 364
Chatsworth	158, 166, 167, 244, 245, 364; CE419; SC791; SV-C; METROLINK; AMTRAK



INSET MAP – CANOGA STATION

N



Platform 1 - Northbound to Chatsworth Station
Plataforma 1 - Rumbo al norte a Chatsworth Station

Platform 2 - Eastbound to North Hollywood
Weekday peak hours shuttle trips do not stop here.
Plataforma 2 - Rumbo al este a North Hollywood
Autobus entre semana durante horas pico no para aquí.

Platform 3 - Westbound to Warner Center
Plataforma 3 - Rumbo al oeste a Warner Center

Platform 4 - Eastbound to North Hollywood
Weekday peak hours shuttle trips do not stop here.
Plataforma 4 - Rumbo al este a North Hollywood
Autobus entre semana durante horas pico no para aquí.

LEGEND

- Metro Orange Line
- Metro Red Line (To Union Station)
- Metro Rapid Lines
- Chatsworth-Warner Ctr Shuttle
- Metrolink/Amtrak
- Metro Rapid Stops
- Metro Orange Line Station
- Westbound only Timepoint
- Eastbound only Timepoint
- Timetable Timepoint
- Parking

- AM — Amtrak Station
- ML — Metrolink Station
- Transit Center
- AV — Antelope Valley Transit Authority
- BB — Burbank Bus
- CE — LADOT Commuter Express
- LD — LADOT Dash
- SC — Santa Clarita Transit
- SV — Simi Valley Transit
- VISTA — Ventura Intercity Service Transit Authority

178524

APPENDIX D

TRAFFIC VOLUME DATA

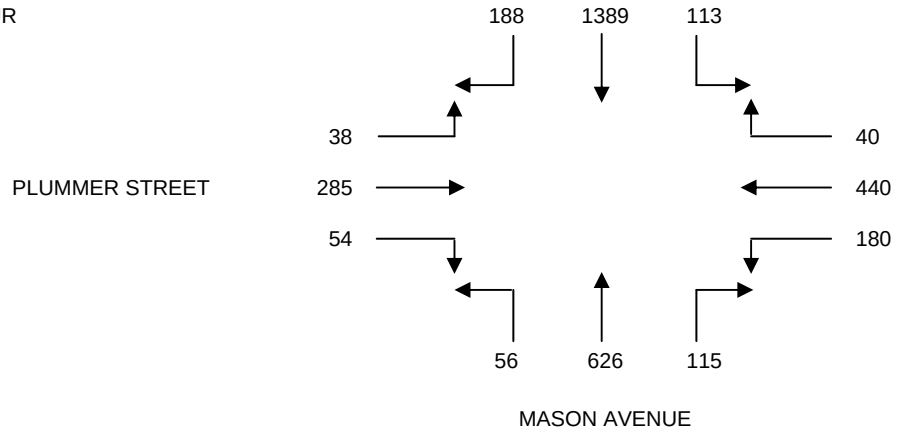
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S MASON AVENUE
E/W PLUMMER STREET
FILE NUMBER: 1-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	39	247	22	12	61	20	19	137	9	9	29	5
0715-0730	43	327	20	8	106	33	25	177	10	13	45	9
0730-0745	43	371	29	10	102	47	29	167	14	15	74	9
0745-0800	54	371	36	15	123	53	39	160	18	16	94	11
0800-0815	48	320	28	7	109	47	22	122	14	10	72	9
0815-0830	28	273	24	14	70	25	21	102	15	8	58	7
0830-0845	42	281	24	11	64	23	12	86	6	7	39	3
0845-0900	29	243	21	8	48	20	16	88	13	9	45	4

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	179	1316	107	45	392	153	112	641	51	53	242	34	3325
0715-0815	188	1389	113	40	440	180	115	626	56	54	285	38	3524
0730-0830	173	1335	117	46	404	172	111	551	61	49	298	36	3353
0745-0845	172	1245	112	47	366	148	94	470	53	41	263	30	3041
0800-0900	147	1117	97	40	291	115	71	398	48	34	214	23	2595

A.M. PEAK HOUR
0715-0815



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

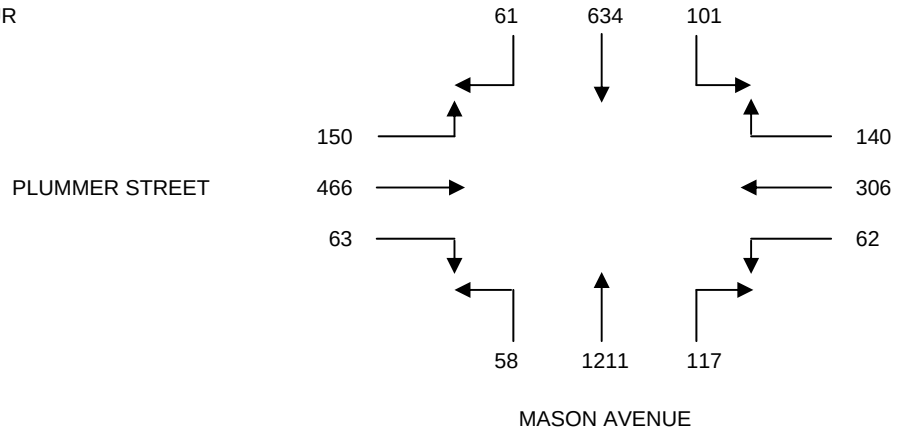
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S MASON AVENUE
E/W PLUMMER STREET
FILE NUMBER: 1-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0400-0415	15	150	28	27	53	13	32	206	9	13	83	34
0415-0430	14	123	29	33	88	12	25	268	14	14	87	25
0430-0445	12	160	20	33	77	19	29	310	19	19	142	32
0445-0500	19	151	29	23	63	14	33	281	18	14	104	43
0500-0515	18	147	25	44	77	12	27	302	13	19	120	37
0515-0530	12	176	27	40	89	17	28	318	8	11	100	38
0530-0545	12	198	27	27	66	11	39	251	6	12	92	21
0545-0600	9	134	21	24	61	17	27	191	7	7	76	25

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0400-0500	60	584	106	116	281	58	119	1065	60	60	416	134	3059
0415-0515	63	581	103	133	305	57	114	1161	64	66	453	137	3237
0430-0530	61	634	101	140	306	62	117	1211	58	63	466	150	3369
0445-0545	61	672	108	134	295	54	127	1152	45	56	416	139	3259
0500-0600	51	655	100	135	293	57	121	1062	34	49	388	121	3066

P.M. PEAK HOUR
0430-0530



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

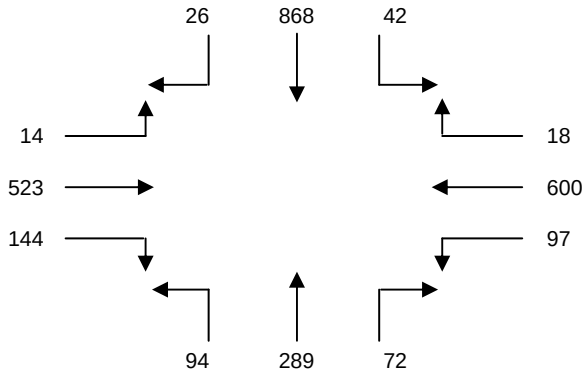
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S WINNETKA AVENUE
E/W LASSEN STREET
FILE NUMBER: 2-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	3	126	2	2	132	24	6	50	20	22	71	1
0715-0730	8	178	6	4	189	25	12	65	27	31	126	2
0730-0745	4	221	12	8	152	26	22	87	29	47	167	4
0745-0800	9	238	14	4	119	20	24	67	21	39	125	5
0800-0815	5	231	10	2	140	26	14	70	17	27	105	3
0815-0830	4	192	6	2	180	48	19	68	12	20	93	4
0830-0845	2	154	3	2	101	34	13	62	13	20	94	3
0845-0900	2	115	2	4	96	23	10	76	12	25	97	3
0900-0915	3	105	2	4	81	19	9	75	7	19	86	2
0915-0930	2	84	3	2	78	11	10	55	11	10	75	2
0930-0945	2	81	4	3	86	9	11	51	9	9	75	2
0945-1000	0	79	4	1	75	7	6	64	7	8	81	3

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	24	763	34	18	592	95	64	269	97	139	489	12	2596
0715-0815	26	868	42	18	600	97	72	289	94	144	523	14	2787
0730-0830	22	882	42	16	591	120	79	292	79	133	490	16	2762
0745-0845	20	815	33	10	540	128	70	267	63	106	417	15	2484
0800-0900	13	692	21	10	517	131	56	276	54	92	389	13	2264
0815-0915	11	566	13	12	458	124	51	281	44	84	370	12	2026
0830-0930	9	458	10	12	356	87	42	268	43	74	352	10	1721
0845-0945	9	385	11	13	341	62	40	257	39	63	333	9	1562
0900-1000	7	349	13	10	320	46	36	245	34	46	317	9	1432

A.M. PEAK HOUR
0715-0815



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

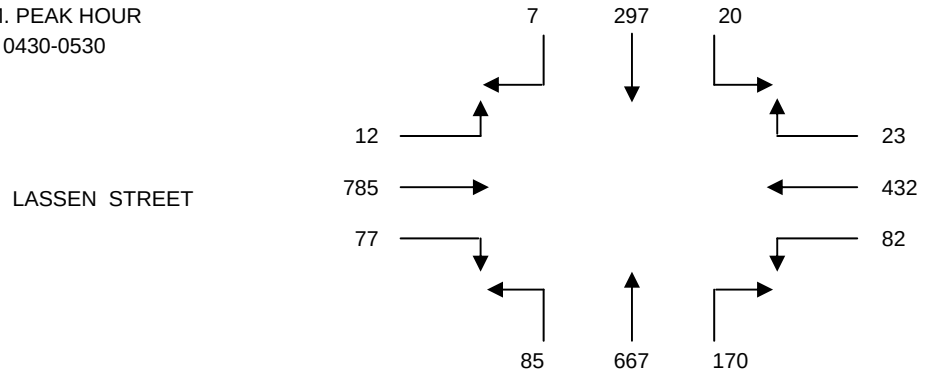
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S WINNETKA AVENUE
E/W LASSEN STREET
FILE NUMBER: 2-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	2	73	1	2	51	6	16	90	11	8	80	2
0315-0330	4	89	2	1	81	13	20	106	12	15	107	5
0330-0345	5	85	2	2	98	14	33	137	19	19	199	5
0345-0400	5	74	2	5	88	8	28	112	18	16	158	2
0400-0415	5	63	5	2	101	15	25	136	21	19	173	3
0415-0430	2	67	7	5	100	15	39	166	18	16	156	4
0430-0445	3	73	4	6	101	19	36	183	19	14	211	4
0445-0500	1	79	4	5	111	18	40	157	26	21	201	3
0500-0515	1	69	5	8	102	18	42	160	23	24	206	3
0515-0530	2	76	7	4	118	27	52	167	17	18	167	2
0530-0545	2	78	4	3	119	21	49	154	25	18	184	5
0545-0600	3	86	3	5	105	13	29	104	22	16	145	3

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0300-0400	16	321	7	10	318	41	97	445	60	58	544	14	1931
0315-0415	19	311	11	10	368	50	106	491	70	69	637	15	2157
0330-0430	17	289	16	14	387	52	125	551	76	70	686	14	2297
0345-0445	15	277	18	18	390	57	128	597	76	65	698	13	2352
0400-0500	11	282	20	18	413	67	140	642	84	70	741	14	2502
0415-0515	7	288	20	24	414	70	157	666	86	75	774	14	2595
0430-0530	7	297	20	23	432	82	170	667	85	77	785	12	2657
0445-0545	6	302	20	20	450	84	183	638	91	81	758	13	2646
0500-0600	8	309	19	20	444	79	172	585	87	76	702	13	2514

P.M. PEAK HOUR
0430-0530



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

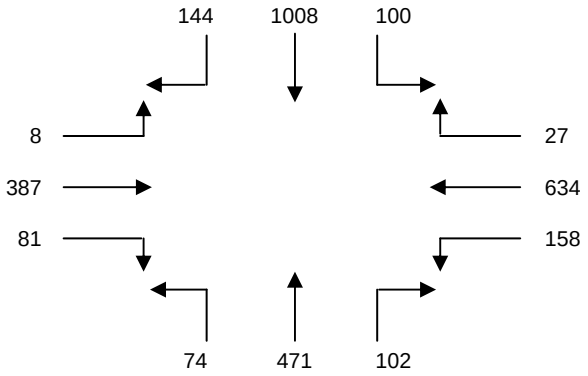
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S WINNETKA AVENUE
E/W PLUMMER STREET
FILE NUMBER: 3-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	18	154	10	4	101	24	11	82	14	11	47	1
0715-0730	29	205	17	8	131	39	20	106	18	19	64	2
0730-0745	36	251	29	13	144	40	33	137	17	19	92	3
0745-0800	34	270	27	6	157	42	22	111	17	26	124	2
0800-0815	36	254	24	4	169	40	24	115	21	19	94	1
0815-0830	38	233	20	4	164	36	23	108	19	17	77	2
0830-0845	25	195	15	2	118	30	18	90	17	18	79	3
0845-0900	18	167	16	1	96	24	13	88	16	11	66	2
0900-0915	14	130	14	1	90	31	16	87	15	14	72	2
0915-0930	10	114	11	1	88	24	16	90	14	11	68	1
0930-0945	9	108	11	1	74	26	13	86	15	14	71	3
0945-1000	9	95	7	2	69	24	11	72	17	9	59	1

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	117	880	83	31	533	145	86	436	66	75	327	8	2787
0715-0815	135	980	97	31	601	161	99	469	73	83	374	8	3111
0730-0830	144	1008	100	27	634	158	102	471	74	81	387	8	3194
0745-0845	133	952	86	16	608	148	87	424	74	80	374	8	2990
0800-0900	117	849	75	11	547	130	78	401	73	65	316	8	2670
0815-0915	95	725	65	8	468	121	70	373	67	60	294	9	2355
0830-0930	67	606	56	5	392	109	63	355	62	54	285	8	2062
0845-0945	51	519	52	4	348	105	58	351	60	50	277	8	1883
0900-1000	42	447	43	5	321	105	56	335	61	48	270	7	1740

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

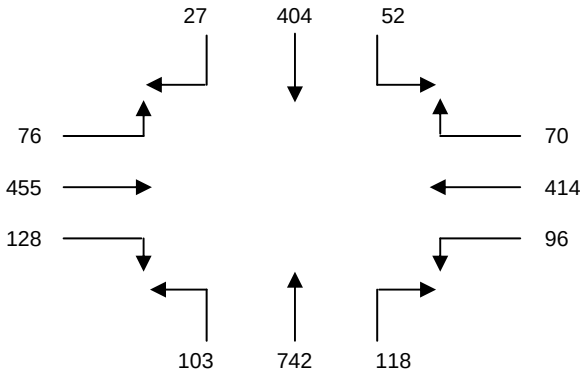
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S WINNETKA AVENUE
E/W PLUMMER STREET
FILE NUMBER: 3-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0300-0315	7	90	7	12	79	14	15	115	18	11	96	10
0315-0330	8	116	9	14	86	14	18	139	20	14	99	16
0330-0345	5	99	9	12	88	19	23	148	18	20	106	18
0345-0400	6	92	11	12	86	16	16	147	20	21	138	24
0400-0415	3	94	10	12	83	15	24	148	25	26	104	19
0415-0430	4	90	14	11	84	19	24	156	19	26	99	15
0430-0445	5	98	9	13	88	20	29	167	20	31	102	19
0445-0500	6	92	11	15	89	16	26	177	24	25	96	17
0500-0515	6	100	11	19	94	24	24	164	26	26	111	14
0515-0530	7	94	15	16	102	22	31	181	26	34	108	18
0530-0545	6	103	12	16	107	24	27	193	24	36	115	22
0545-0600	8	107	14	19	111	26	36	204	27	32	121	22

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0300-0400	26	397	36	50	339	63	72	549	76	66	439	68	2181
0315-0415	22	401	39	50	343	64	81	582	83	81	447	77	2270
0330-0430	18	375	44	47	341	69	87	599	82	93	447	76	2278
0345-0445	18	374	44	48	341	70	93	618	84	104	443	77	2314
0400-0500	18	374	44	51	344	70	103	648	88	108	401	70	2319
0415-0515	21	380	45	58	355	79	103	664	89	108	408	65	2375
0430-0530	24	384	46	63	373	82	110	689	96	116	417	68	2468
0445-0545	25	389	49	66	392	86	108	715	100	121	430	71	2552
0500-0600	27	404	52	70	414	96	118	742	103	128	455	76	2685

P.M. PEAK HOUR
0500-0600



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

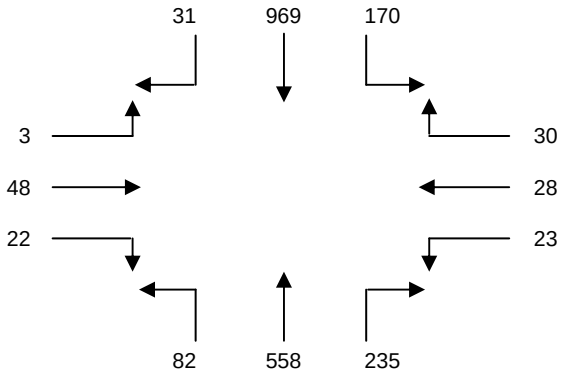
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S WINNETKA AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 4-AM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	8	114	6	1	2	2	20	81	6	5	2	3
0715-0730	5	186	16	3	4	6	31	141	11	4	5	2
0730-0745	9	268	23	7	3	4	37	164	15	5	12	0
0745-0800	9	268	46	6	5	7	60	156	29	7	19	1
0800-0815	5	233	53	9	9	5	79	112	20	8	11	0
0815-0830	8	200	48	8	11	7	59	126	18	2	6	2
0830-0845	7	183	30	12	5	15	36	115	17	1	9	1
0845-0900	6	136	33	14	5	15	45	100	15	3	5	1
0900-0915	7	121	20	12	6	15	29	110	10	2	5	0
0915-0930	5	106	23	19	9	24	23	75	10	7	7	4
0930-0945	6	115	23	11	7	24	32	70	9	4	8	2
0945-1000	11	79	15	18	4	11	39	85	9	2	7	2

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0700-0800	31	836	91	17	14	19	148	542	61	21	38	6	1824
0715-0815	28	955	138	25	21	22	207	573	75	24	47	3	2118
0730-0830	31	969	170	30	28	23	235	558	82	22	48	3	2199
0745-0845	29	884	177	35	30	34	234	509	84	18	45	4	2083
0800-0900	26	752	164	43	30	42	219	453	70	14	31	4	1848
0815-0915	28	640	131	46	27	52	169	451	60	8	25	4	1641
0830-0930	25	546	106	57	25	69	133	400	52	13	26	6	1458
0845-0945	24	478	99	56	27	78	129	355	44	16	25	7	1338
0900-1000	29	421	81	60	26	74	123	340	38	15	27	8	1242

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

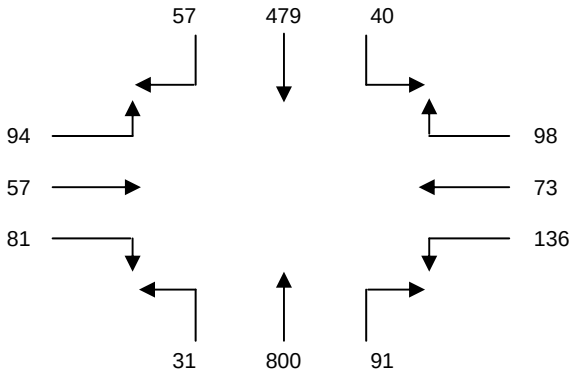
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S WINNETKA AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 4-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0300-0315	11	95	12	19	17	23	14	127	6	8	14	12
0315-0330	15	100	13	17	16	20	19	143	8	13	11	16
0330-0345	10	101	10	11	18	31	25	134	7	19	21	18
0345-0400	8	103	10	16	11	22	22	126	6	15	17	15
0400-0415	12	104	13	16	13	32	21	147	6	16	22	21
0415-0430	8	115	9	17	18	25	23	169	8	14	16	25
0430-0445	13	120	6	21	17	28	25	197	6	19	19	23
0445-0500	18	111	10	24	15	20	31	189	6	21	11	18
0500-0515	11	119	8	27	24	39	20	213	9	25	13	22
0515-0530	11	127	12	27	18	45	17	209	9	18	19	26
0530-0545	17	122	10	20	16	32	23	189	7	17	14	28
0545-0600	12	134	9	14	16	30	16	150	5	16	13	20

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0300-0400	44	399	45	63	62	96	80	530	27	55	63	61	1525
0315-0415	45	408	46	60	58	105	87	550	27	63	71	70	1590
0330-0430	38	423	42	60	60	110	91	576	27	64	76	79	1646
0345-0445	41	442	38	70	59	107	91	639	26	64	74	84	1735
0400-0500	51	450	38	78	63	105	100	702	26	70	68	87	1838
0415-0515	50	465	33	89	74	112	99	768	29	79	59	88	1945
0430-0530	53	477	36	99	74	132	93	808	30	83	62	89	2036
0445-0545	57	479	40	98	73	136	91	800	31	81	57	94	2037
0500-0600	51	502	39	88	74	146	76	761	30	76	59	96	1998

P.M. PEAK HOUR
0445-0545



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

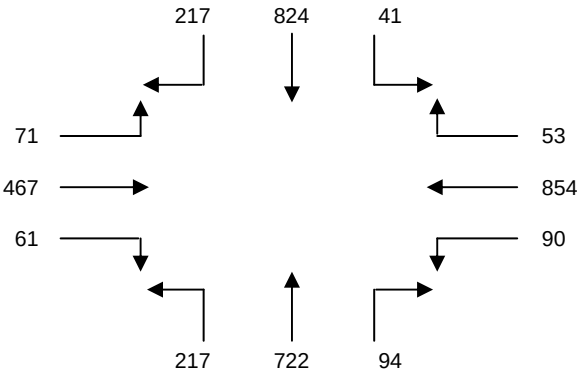
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S WINNETKA AVENUE
E/W NORDHOFF STREET
FILE NUMBER: 5-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	29	129	2	8	118	13	10	130	44	6	56	9
0715-0730	39	157	7	8	187	21	18	198	53	14	94	19
0730-0745	57	215	8	15	230	25	29	173	48	15	130	14
0745-0800	56	217	12	11	207	22	23	209	68	19	128	21
0800-0815	53	193	13	10	213	23	17	150	47	13	109	23
0815-0830	51	199	8	17	204	20	25	190	54	14	100	13
0830-0845	48	161	11	5	174	21	23	130	30	12	113	19
0845-0900	32	141	7	7	143	10	20	120	36	11	114	14
0900-0915	26	123	12	6	122	13	26	155	33	9	93	8
0915-0930	27	100	8	4	101	15	20	100	21	11	106	10
0930-0945	22	94	11	6	110	17	19	82	22	19	97	14
0945-1000	17	70	6	5	88	10	17	95	26	15	91	19

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	181	718	29	42	742	81	80	710	213	54	408	63	3321
0715-0815	205	782	40	44	837	91	87	730	216	61	461	77	3631
0730-0830	217	824	41	53	854	90	94	722	217	61	467	71	3711
0745-0845	208	770	44	43	798	86	88	679	199	58	450	76	3499
0800-0900	184	694	39	39	734	74	85	590	167	50	436	69	3161
0815-0915	157	624	38	35	643	64	94	595	153	46	420	54	2923
0830-0930	133	525	38	22	540	59	89	505	120	43	426	51	2551
0845-0945	107	458	38	23	476	55	85	457	112	50	410	46	2317
0900-1000	92	387	37	21	421	55	82	432	102	54	387	51	2121

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

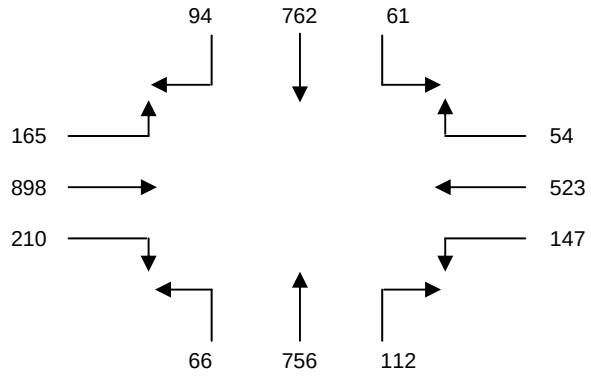
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S WINNETKA AVENUE
E/W NORDHOFF STREET
FILE NUMBER: 5-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	27	137	13	15	108	42	26	150	27	32	152	28
0315-0330	24	159	12	12	117	46	22	175	24	28	141	24
0330-0345	30	173	15	14	145	43	26	168	34	56	162	42
0345-0400	21	165	10	15	120	44	26	190	32	44	155	20
0400-0415	28	185	13	16	119	36	26	198	22	60	213	24
0415-0430	27	170	11	11	122	33	24	178	21	44	200	37
0430-0445	15	199	11	12	109	38	24	165	20	64	244	51
0445-0500	23	192	15	16	119	39	32	192	15	43	206	34
0500-0515	25	187	16	17	152	40	29	192	22	67	229	46
0515-0530	22	193	15	12	121	36	25	177	18	50	220	54
0530-0545	24	190	15	9	131	32	26	195	11	50	243	31
0545-0600	18	177	16	12	101	42	35	188	15	48	220	33

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0300-0400	102	634	50	56	490	175	100	683	117	160	610	114	3291
0315-0415	103	682	50	57	501	169	100	731	112	188	671	110	3474
0330-0430	106	693	49	56	506	156	102	734	109	204	730	123	3568
0345-0445	91	719	45	54	470	151	100	731	95	212	812	132	3612
0400-0500	93	746	50	55	469	146	106	733	78	211	863	146	3696
0415-0515	90	748	53	56	502	150	109	727	78	218	879	168	3778
0430-0530	85	771	57	57	501	153	110	726	75	224	899	185	3843
0445-0545	94	762	61	54	523	147	112	756	66	210	898	165	3848
0500-0600	89	747	62	50	505	150	115	752	66	215	912	164	3827

P.M. PEAK HOUR
0445-0545



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5160_004 **Day:** TUESDAY

City: City of Northridge **Date:** 4/2/2013

AM

NS/EW Streets:	Winnetka Ave			Winnetka Ave			Parthenia St			Parthenia St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	0	
7:00 AM	7	159	8	18	136	10	6	159	6	15	128	21	673
7:15 AM	18	220	17	19	179	15	28	157	12	17	196	43	921
7:30 AM	27	223	31	39	224	20	18	206	18	28	226	30	1090
7:45 AM	37	272	38	34	199	21	26	209	18	35	272	46	1207
8:00 AM	26	223	43	25	235	19	27	193	12	32	218	37	1090
8:15 AM	19	170	17	15	172	13	44	171	14	30	222	24	911
8:30 AM	12	194	29	20	172	12	20	138	5	21	125	20	768
8:45 AM	12	164	13	9	145	17	18	129	12	22	162	16	719
9:00 AM	15	153	22	12	155	10	10	131	12	23	142	13	698
9:15 AM	9	125	19	11	132	11	15	121	11	22	116	18	610
9:30 AM	7	117	30	8	114	12	13	100	9	24	119	20	573
9:45 AM	6	149	19	12	146	10	8	107	13	15	113	9	607
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	195	2169	286	222	2009	170	233	1821	142	284	2039	297	9867
APPROACH %'s :	7.36%	81.85%	10.79%	9.25%	83.67%	7.08%	10.61%	82.92%	6.47%	10.84%	77.82%	11.34%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	108	938	129	117	837	75	99	765	60	112	912	156	4308
PEAK HR FACTOR :		0.847			0.909			0.913			0.836		0.892

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA13_5160_004 **Day:** TUESDAY

City: City of Northridge **Date:** 4/2/2013

PM

NS/EW Streets:	Winnetka Ave			Winnetka Ave			Parthenia St			Parthenia St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	2	0	1	2	0	
3:00 PM	16	176	32	25	149	11	15	162	12	33	140	17	788
3:15 PM	12	175	24	19	215	19	17	135	13	34	164	26	853
3:30 PM	32	181	56	46	231	18	18	208	19	35	155	31	1030
3:45 PM	19	179	22	31	193	18	19	181	17	26	148	20	873
4:00 PM	9	217	28	34	246	16	18	210	15	34	161	26	1014
4:15 PM	11	176	25	27	189	14	18	193	13	26	146	19	857
4:30 PM	20	166	22	36	238	23	23	253	18	29	185	20	1033
4:45 PM	15	206	25	31	224	16	25	174	13	26	140	24	919
5:00 PM	13	204	36	32	322	41	21	224	18	25	200	18	1154
5:15 PM	13	198	34	33	264	22	31	206	24	36	178	18	1057
5:30 PM	21	215	30	33	251	19	23	223	22	29	174	15	1055
5:45 PM	8	211	33	22	204	20	24	204	17	31	178	19	971
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	189	2304	367	369	2726	237	252	2373	201	364	1969	253	11604
APPROACH %'s :	6.61%	80.56%	12.83%	11.07%	81.81%	7.11%	8.92%	83.97%	7.11%	14.08%	76.14%	9.78%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	55	828	133	120	1041	102	99	857	81	121	730	70	4237
PEAK HR FACTOR :		0.955			0.799			0.967			0.948		0.918

CONTROL : Signalized

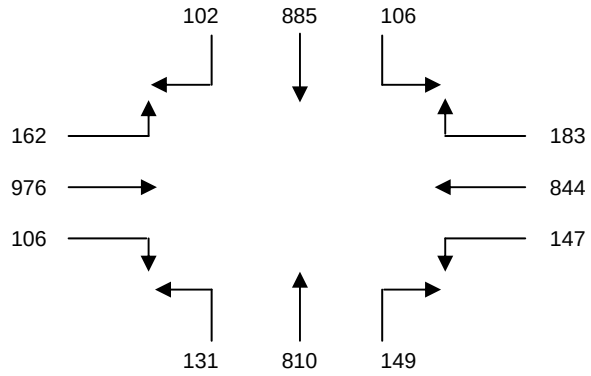
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S WINNETKA AVENUE
E/W ROSCOE BOULEVARD
FILE NUMBER: 6-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	12	159	18	25	159	30	36	121	15	12	142	18
0715-0730	19	190	20	38	206	34	34	134	21	20	189	20
0730-0745	25	236	29	54	222	37	30	168	24	24	260	37
0745-0800	33	245	31	63	242	35	38	200	32	39	274	42
0800-0815	24	211	24	40	201	44	48	241	44	23	231	44
0815-0830	20	193	22	26	179	31	33	201	31	20	211	39
0830-0845	20	181	21	22	162	32	32	186	26	24	191	20
0845-0900	14	159	14	16	141	34	34	170	28	24	167	24
0900-0915	16	155	9	17	144	17	27	166	18	18	151	18
0915-0930	14	144	11	20	151	24	19	157	21	16	146	15
0930-0945	11	129	13	16	136	18	12	139	21	12	139	17
0945-1000	12	141	11	14	133	15	11	136	16	13	141	12

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	89	830	98	180	829	136	138	623	92	95	865	117	4092
0715-0815	101	882	104	195	871	150	150	743	121	106	954	143	4520
0730-0830	102	885	106	183	844	147	149	810	131	106	976	162	4601
0745-0845	97	830	98	151	784	142	151	828	133	106	907	145	4372
0800-0900	78	744	81	104	683	141	147	798	129	91	800	127	3923
0815-0915	70	688	66	81	626	114	126	723	103	86	720	101	3504
0830-0930	64	639	55	75	598	107	112	679	93	82	655	77	3236
0845-0945	55	587	47	69	572	93	92	632	88	70	603	74	2982
0900-1000	53	569	44	67	564	74	69	598	76	59	577	62	2812

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

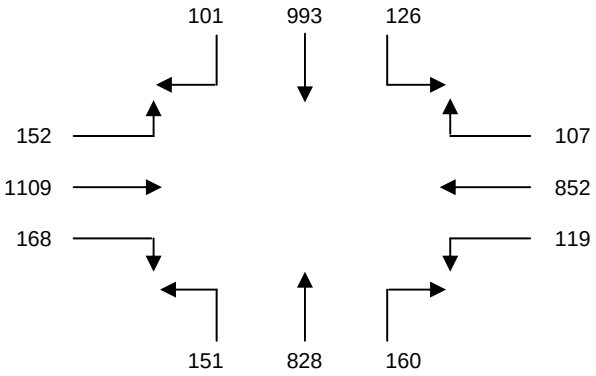
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S WINNETKA AVENUE
E/W ROSCOE BOULEVARD
FILE NUMBER: 6-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	22	169	44	37	186	28	36	164	34	27	221	46
0315-0330	23	183	34	31	202	33	36	169	38	35	239	39
0330-0345	26	201	32	39	207	34	34	181	38	32	255	47
0345-0400	30	221	36	40	206	36	39	190	36	34	266	43
0400-0415	20	235	31	34	203	41	36	186	30	36	251	36
0415-0430	23	247	36	25	199	37	40	180	32	39	256	38
0430-0445	22	268	42	30	186	36	38	188	28	36	257	33
0445-0500	20	220	30	29	206	24	44	189	31	44	266	38
0500-0515	25	258	25	36	210	30	40	199	33	40	273	33
0515-0530	28	249	36	22	204	22	42	210	36	44	264	41
0530-0545	22	256	31	25	221	36	36	215	44	36	288	36
0545-0600	26	230	34	24	217	31	42	204	38	48	284	42

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0300-0400	101	774	146	147	801	131	145	704	146	128	981	175	4379
0315-0415	99	840	133	144	818	144	145	726	142	137	1011	165	4504
0330-0430	99	904	135	138	815	148	149	737	136	141	1028	164	4594
0345-0445	95	971	145	129	794	150	153	744	126	145	1030	150	4632
0400-0500	85	970	139	118	794	138	158	743	121	155	1030	145	4596
0415-0515	90	993	133	120	801	127	162	756	124	159	1052	142	4659
0430-0530	95	995	133	117	806	112	164	786	128	164	1060	145	4705
0445-0545	95	983	122	112	841	112	162	813	144	164	1091	148	4787
0500-0600	101	993	126	107	852	119	160	828	151	168	1109	152	4866

P.M. PEAK HOUR
0500-0600



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

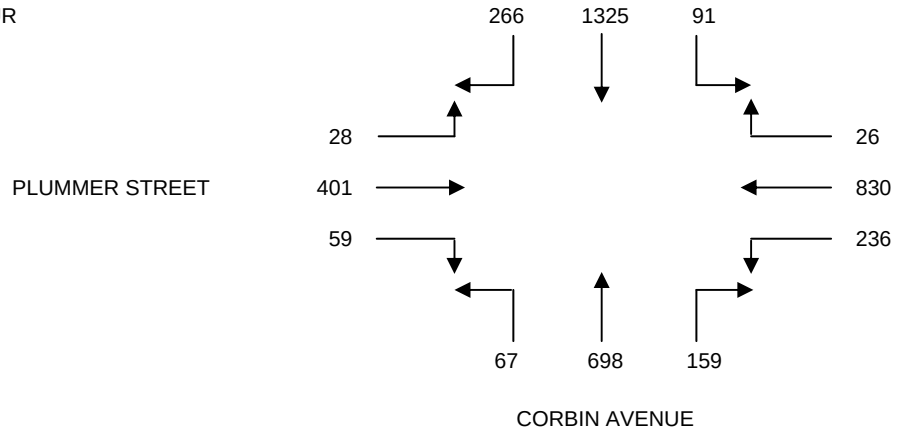
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S CORBIN AVENUE
E/W PLUMMER STREET
FILE NUMBER: 7-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	25	182	19	4	97	39	21	112	19	12	46	4
0715-0730	49	280	20	6	162	40	34	161	18	16	71	4
0730-0745	55	336	21	8	207	64	46	197	13	11	115	7
0745-0800	74	334	28	9	257	59	42	184	16	13	124	8
0800-0815	78	318	20	5	194	53	25	169	19	19	89	5
0815-0830	59	337	22	4	172	60	46	148	19	16	73	8
0830-0845	53	215	27	5	133	40	23	118	17	19	75	4
0845-0900	42	183	24	9	107	38	33	111	11	14	79	3

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	203	1132	88	27	723	202	143	654	66	52	356	23	3669
0715-0815	256	1268	89	28	820	216	147	711	66	59	399	24	4083
0730-0830	266	1325	91	26	830	236	159	698	67	59	401	28	4186
0745-0845	264	1204	97	23	756	212	136	619	71	67	361	25	3835
0800-0900	232	1053	93	23	606	191	127	546	66	68	316	20	3341

A.M. PEAK HOUR
0730-0830



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

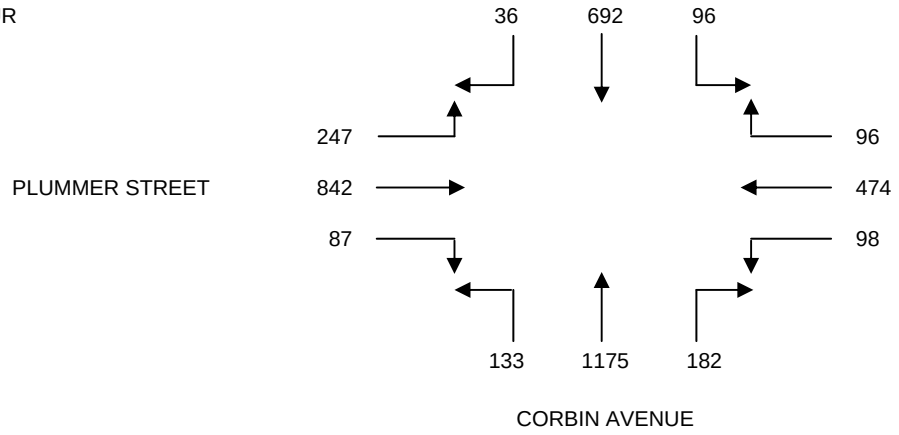
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S CORBIN AVENUE
E/W PLUMMER STREET
FILE NUMBER: 7-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0400-0415	12	174	22	15	82	34	45	262	24	20	140	43
0415-0430	10	153	28	17	91	22	45	224	21	18	168	46
0430-0445	9	164	26	17	97	30	41	269	29	22	202	69
0445-0500	9	181	22	22	115	26	42	265	33	22	205	46
0500-0515	8	161	21	29	120	21	48	362	36	21	241	74
0515-0530	10	186	27	28	142	21	51	279	35	22	194	58
0530-0545	10	171	31	20	100	26	50	282	28	23	183	38
0545-0600	10	175	32	35	109	32	44	240	32	14	126	48

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0400-0500	40	672	98	71	385	112	173	1020	107	82	715	204	3679
0415-0515	36	659	97	85	423	99	176	1120	119	83	816	235	3948
0430-0530	36	692	96	96	474	98	182	1175	133	87	842	247	4158
0445-0545	37	699	101	99	477	94	191	1188	132	88	823	216	4145
0500-0600	38	693	111	112	471	100	193	1163	131	80	744	218	4054

P.M. PEAK HOUR
0430-0530



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

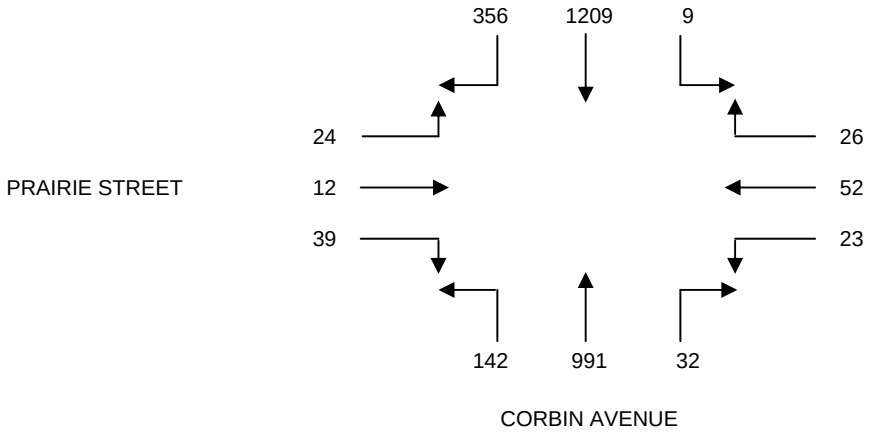
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S CORBIN AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 8-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	52	172	1	4	2	6	5	152	11	2	1	3
0715-0730	50	274	3	4	8	4	3	229	24	4	3	4
0730-0745	84	326	1	9	11	7	8	299	30	4	4	4
0745-0800	129	266	2	5	26	8	12	281	43	7	2	5
0800-0815	78	296	4	8	12	5	6	220	34	15	4	5
0815-0830	65	321	2	4	3	3	6	191	35	13	2	10
0830-0845	38	220	4	5	8	3	10	178	23	10	2	16
0845-0900	30	188	3	2	3	6	12	186	20	14	5	10

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	315	1038	7	22	47	25	28	961	108	17	10	16	2594
0715-0815	341	1162	10	26	57	24	29	1029	131	30	13	18	2870
0730-0830	356	1209	9	26	52	23	32	991	142	39	12	24	2915
0745-0845	310	1103	12	22	49	19	34	870	135	45	10	36	2645
0800-0900	211	1025	13	19	26	17	34	775	112	52	13	41	2338

A.M. PEAK HOUR
0730-0830



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

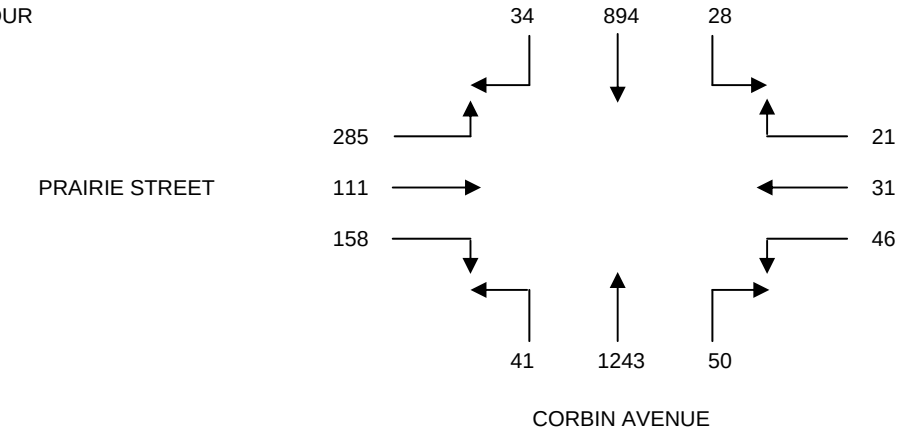
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: THURSDAY, MARCH 21, 2013
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S CORBIN AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 8-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0400-0415	11	202	12	3	4	8	17	297	15	29	15	60
0415-0430	9	192	8	8	7	8	16	305	17	29	18	44
0430-0445	10	218	4	8	6	13	11	281	11	40	22	65
0445-0500	11	223	7	5	4	9	11	310	12	30	23	61
0500-0515	5	219	11	5	10	9	11	311	11	58	38	95
0515-0530	8	234	6	3	11	15	17	341	7	30	28	64
0530-0545	11	220	8	6	6	7	19	305	10	23	20	51
0545-0600	6	175	10	6	3	13	11	259	7	18	10	30

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0400-0500	41	835	31	24	21	38	55	1193	55	128	78	230	2729
0415-0515	35	852	30	26	27	39	49	1207	51	157	101	265	2839
0430-0530	34	894	28	21	31	46	50	1243	41	158	111	285	2942
0445-0545	35	896	32	19	31	40	58	1267	40	141	109	271	2939
0500-0600	30	848	35	20	30	44	58	1216	35	129	96	240	2781

P.M. PEAK HOUR
0430-0530



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

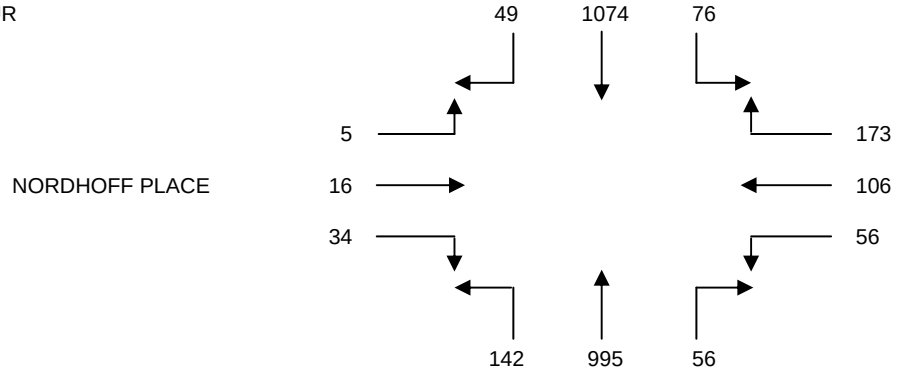
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: WEDNESDAY, AUGUST 28, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S CORBIN AVENUE
E/W NORDHOFF PLACE
FILE NUMBER: 1-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	4	152	10	49	17	7	5	155	29	1	2	0
0715-0730	5	198	12	34	15	12	6	170	24	2	2	1
0730-0745	9	256	17	40	20	12	11	235	22	4	2	1
0745-0800	12	297	12	44	21	12	13	291	30	8	2	0
0800-0815	13	277	17	38	31	14	14	275	39	10	4	2
0815-0830	10	255	23	45	26	13	12	234	36	10	7	0
0830-0845	14	245	24	46	28	17	17	195	37	6	3	3
0845-0900	14	207	26	36	27	21	19	155	20	10	9	5
0900-0915	9	184	20	26	18	20	27	167	14	7	8	4
0915-0930	9	173	22	36	17	27	22	148	12	15	7	5
0930-0945	5	140	21	39	11	37	17	121	12	14	9	3
0945-1000	6	151	23	37	17	33	18	148	15	13	10	6

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	30	903	51	167	73	43	35	851	105	15	8	2	2283
0715-0815	39	1028	58	156	87	50	44	971	115	24	10	4	2586
0730-0830	44	1085	69	167	98	51	50	1035	127	32	15	3	2776
0745-0845	49	1074	76	173	106	56	56	995	142	34	16	5	2782
0800-0900	51	984	90	165	112	65	62	859	132	36	23	10	2589
0815-0915	47	891	93	153	99	71	75	751	107	33	27	12	2359
0830-0930	46	809	92	144	90	85	85	665	83	38	27	17	2181
0845-0945	37	704	89	137	73	105	85	591	58	46	33	17	1975
0900-1000	29	648	86	138	63	117	84	584	53	49	34	18	1903

A.M. PEAK HOUR
0745-0845



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

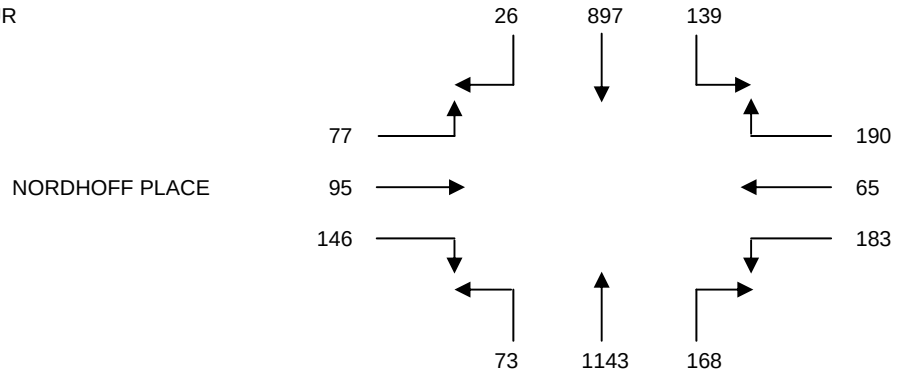
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: WEDNESDAY, AUGUST 28, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S CORBIN AVENUE
E/W NORDHOFF PLACE
FILE NUMBER: 1-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	8	216	20	25	10	32	21	235	9	19	13	6
0315-0330	10	206	24	31	8	29	31	249	10	25	18	10
0330-0345	9	243	20	37	9	34	27	217	15	16	10	11
0345-0400	12	193	27	30	12	47	22	246	13	15	9	6
0400-0415	9	182	26	40	12	42	27	286	21	20	13	11
0415-0430	7	187	28	49	17	46	24	267	22	30	29	13
0430-0445	6	179	30	49	16	37	28	252	12	24	45	10
0445-0500	5	201	29	46	18	42	38	244	16	29	30	18
0500-0515	8	200	36	45	16	41	48	262	19	24	21	12
0515-0530	5	260	35	51	17	52	38	302	21	53	39	34
0530-0545	8	221	31	51	18	42	43	308	16	36	20	17
0545-0600	5	216	37	43	14	48	39	271	17	33	15	14

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0300-0400	39	858	91	123	39	142	101	947	47	75	50	33	2545
0315-0415	40	824	97	138	41	152	107	998	59	76	50	38	2620
0330-0430	37	805	101	156	50	169	100	1016	71	81	61	41	2688
0345-0445	34	741	111	168	57	172	101	1051	68	89	96	40	2728
0400-0500	27	749	113	184	63	167	117	1049	71	103	117	52	2812
0415-0515	26	767	123	189	67	166	138	1025	69	107	125	53	2855
0430-0530	24	840	130	191	67	172	152	1060	68	130	135	74	3043
0445-0545	26	882	131	193	69	177	167	1116	72	142	110	81	3166
0500-0600	26	897	139	190	65	183	168	1143	73	146	95	77	3202

P.M. PEAK HOUR
0500-0600



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

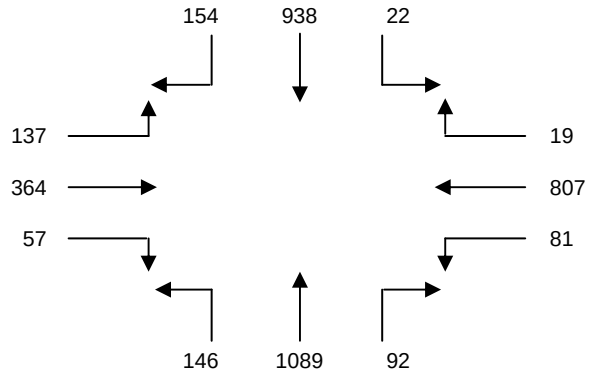
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 10:00 AM
INTERSECTION N/S CORBIN AVENUE
E/W NORDHOFF STREET / NORDHOFF WAY
FILE NUMBER: 9-AM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	20	127	4	4	158	10	12	191	30	14	52	13
0715-0730	22	181	4	3	141	14	16	254	25	13	69	20
0730-0745	29	222	3	2	172	15	20	280	32	12	85	28
0745-0800	37	251	5	4	213	20	26	299	35	17	94	39
0800-0815	43	246	8	9	235	20	26	278	43	17	107	40
0815-0830	45	219	6	4	187	26	20	232	36	11	78	30
0830-0845	46	177	11	6	149	19	26	200	23	13	70	35
0845-0900	32	160	7	4	130	16	24	163	27	9	72	25
0900-0915	21	137	7	5	115	15	20	165	25	13	106	27
0915-0930	29	130	10	4	81	19	19	161	19	7	84	20
0930-0945	30	135	12	7	93	11	16	124	10	10	89	23
0945-1000	21	116	11	4	61	10	21	128	12	11	70	27

1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0700-0800	108	781	16	13	684	59	74	1024	122	56	300	100	3337
0715-0815	131	900	20	18	761	69	88	1111	135	59	355	127	3774
0730-0830	154	938	22	19	807	81	92	1089	146	57	364	137	3906
0745-0845	171	893	30	23	784	85	98	1009	137	58	349	144	3781
0800-0900	166	802	32	23	701	81	96	873	129	50	327	130	3410
0815-0915	144	693	31	19	581	76	90	760	111	46	326	117	2994
0830-0930	128	604	35	19	475	69	89	689	94	42	332	107	2683
0845-0945	112	562	36	20	419	61	79	613	81	39	351	95	2468
0900-1000	101	518	40	20	350	55	76	578	66	41	349	97	2291

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

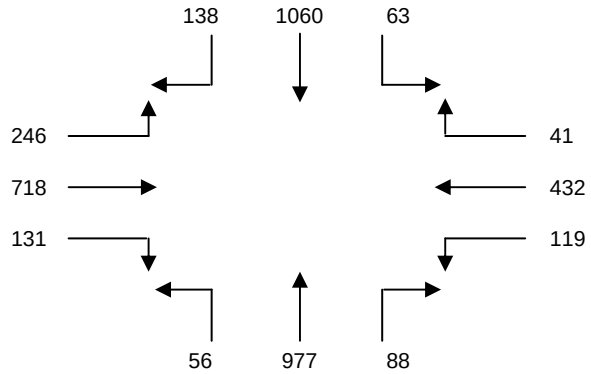
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 03:00 PM TO 06:00 PM
INTERSECTION N/S CORBIN AVENUE
E/W NORDHOFF STREET / NORDHOFF WAY
FILE NUMBER: 9-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0300-0315	20	173	8	7	118	19	18	188	11	10	110	33
0315-0330	23	188	10	10	117	23	24	191	9	11	122	30
0330-0345	27	227	16	8	134	31	15	231	14	24	151	55
0345-0400	36	186	12	9	129	28	22	229	17	16	139	42
0400-0415	23	242	19	7	113	20	22	241	10	25	137	48
0415-0430	29	181	11	10	122	27	20	207	11	24	144	54
0430-0445	35	230	18	7	108	24	21	242	19	29	187	56
0445-0500	30	233	11	11	102	24	24	228	11	30	188	56
0500-0515	45	297	18	14	116	30	18	223	10	40	171	68
0515-0530	37	262	17	10	113	34	24	243	16	33	180	71
0530-0545	26	268	17	6	101	31	22	283	19	28	179	51
0545-0600	39	219	16	10	108	44	17	229	15	27	163	56

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0300-0400	106	774	46	34	498	101	79	839	51	61	522	160	3271
0315-0415	109	843	57	34	493	102	83	892	50	76	549	175	3463
0330-0430	115	836	58	34	498	106	79	908	52	89	571	199	3545
0345-0445	123	839	60	33	472	99	85	919	57	94	607	200	3588
0400-0500	117	886	59	35	445	95	87	918	51	108	656	214	3671
0415-0515	139	941	58	42	448	105	83	900	51	123	690	234	3814
0430-0530	147	1022	64	42	439	112	87	936	56	132	726	251	4014
0445-0545	138	1060	63	41	432	119	88	977	56	131	718	246	4069
0500-0600	147	1046	68	40	438	139	81	978	60	128	693	246	4064

P.M. PEAK HOUR
0445-0545



THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
626.448.7978 PHONE
626.448.2877 FAX

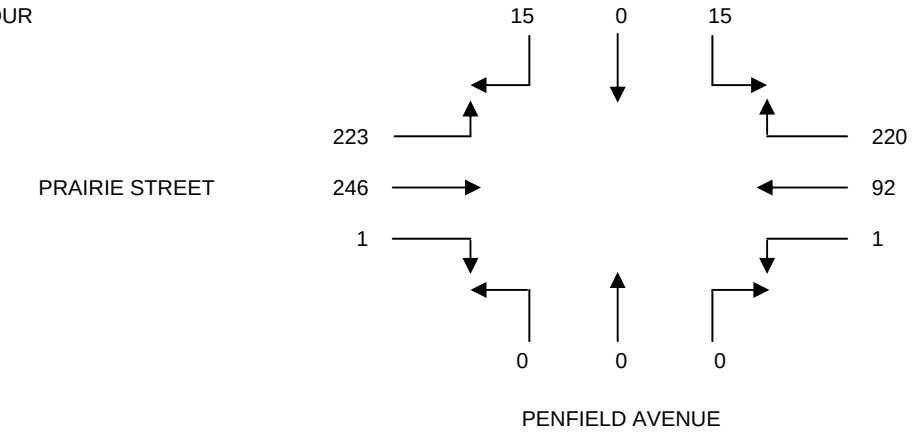
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S PENFIELD AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 10-AM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0700-0715	1	0	0	9	6	0	0	0	0	0	36	8
0715-0730	1	0	2	18	18	0	0	0	0	0	21	10
0730-0745	2	0	2	29	16	0	0	0	0	0	40	25
0745-0800	3	0	2	53	28	1	0	0	0	0	93	44
0800-0815	5	0	4	56	27	0	0	0	0	1	70	66
0815-0830	2	0	4	66	21	0	0	0	0	0	49	71
0830-0845	5	0	5	45	16	0	0	0	0	0	34	42
0845-0900	12	0	9	25	19	0	0	0	0	0	29	20

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0700-0800	7	0	6	109	68	1	0	0	0	0	190	87	468
0715-0815	11	0	10	156	89	1	0	0	0	1	224	145	637
0730-0830	12	0	12	204	92	1	0	0	0	1	252	206	780
0745-0845	15	0	15	220	92	1	0	0	0	1	246	223	813
0800-0900	24	0	22	192	83	0	0	0	0	1	182	199	703

A.M. PEAK HOUR
0745-0845



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

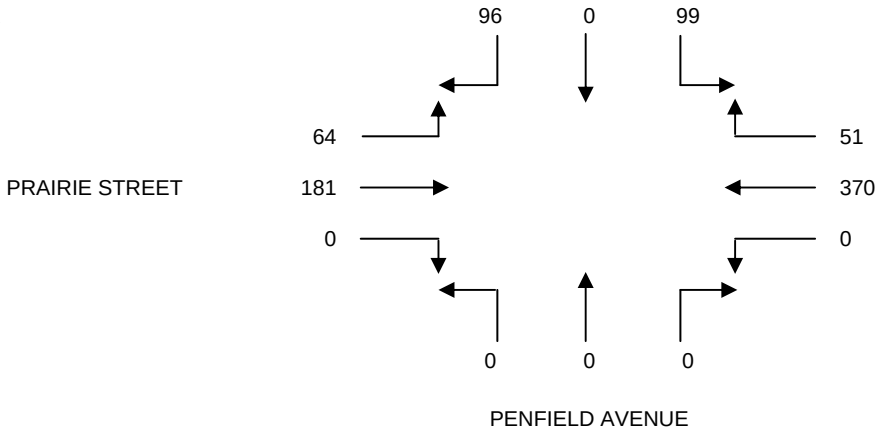
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: OVERLAND TRAFFIC CONSULTANTS, INC.
PROJECT: CHATSWORTH
DATE: TUESDAY, APRIL 02, 2013
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S PENFIELD AVENUE
E/W PRAIRIE STREET
FILE NUMBER: 10-PM

15 MINUTE TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT
0400-0415	34	0	18	14	63	0	0	0	0	0	34	31
0415-0430	21	0	21	20	44	0	0	0	0	0	43	24
0430-0445	34	0	39	22	85	0	0	0	0	0	51	20
0445-0500	20	0	21	10	73	0	0	0	0	0	50	19
0500-0515	24	0	25	12	132	0	0	0	0	0	35	15
0515-0530	18	0	14	7	80	0	0	0	0	0	45	10
0530-0545	13	0	10	4	67	0	0	0	0	0	33	4
0545-0600	11	0	5	1	45	0	0	0	0	0	25	3

1 HOUR TOTALS	1 SBRT	2 SBTH	3 SBLT	4 WBRT	5 WBTH	6 WBLT	7 NBRT	8 NBTH	9 NBLT	10 EBRT	11 EBTH	12 EBLT	TOTALS
0400-0500	109	0	99	66	265	0	0	0	0	0	178	94	811
0415-0515	99	0	106	64	334	0	0	0	0	0	179	78	860
0430-0530	96	0	99	51	370	0	0	0	0	0	181	64	861
0445-0545	75	0	70	33	352	0	0	0	0	0	163	48	741
0500-0600	66	0	54	24	324	0	0	0	0	0	138	32	638

P.M. PEAK HOUR
0430-0530



DATA PROVIDED BY:

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91005
PH: 626-446-7978
FAX: 626-446-2877
.

APPENDIX E

LEVEL OF SERVICE WORKSHEETS

Level of Service Workheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Conducted by:	JO	Date:	10/10/2013
6	East-West Street:	Parthenia Street	Peak Hour:	AM	Project:	Chatsworth MGA

No. of Phases					2					2					2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?					0					0					0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?					2					2					2
Override Capacity					0					0					0

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT				EXISTING W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	108	1	108	0	108	1	108	0	108	1	108
	Left-Through		0				0				0	
	Through	938	2	**469**	62	1000	2	**500**	-33	967	2	**484**
	Through-Right		0				0				0	
	Right	129	1	73	0	129	1	73	0	129	1	73
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
SOUTHBOUND	Left	117	1	**117**	10	127	1	**127**	-1	126	1	**126**
	Left-Through		0				0				0	
	Through	837	2	419	49	886	2	443	-32	854	2	427
	Through-Right		0				0				0	
	Right	75	1	26	10	85	1	29	-1	84	1	29
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
EASTBOUND	Left	99	1	**99**	13	112	1	**112**	-1	111	1	**111**
	Left-Through		0				0				0	
	Through	765	1	413	0	765	1	413	0	765	1	413
	Through-Right		1				1				1	
	Right	60	0	60	0	60	0	60	0	60	0	60
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
WESTBOUND	Left	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0				0				0	
	Through	912	1	**534**	0	912	1	**541**	0	912	1	**540**
	Through-Right		1				1				1	
	Right	156	0	156	13	169	0	169	-1	168	0	168
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
CRITICAL VOLUMES			*North-South:*	586			*North-South:*	627			*North-South:*	610
			East-West:	633			*East-West:*	653			*East-West:*	651
			SUM:	1219			*SUM:*	1280			*SUM:*	1261
VOLUME/CAPACITY *(V/C)* RATIO:				0.813				0.853				0.841
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.713**				**0.753**				**0.741**
LEVEL OF SERVICE (LOS):				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

ıange in *v/c* due to project:	**0.040**	Δ*v/c* after mitigation:	**0.028**
Significant impacted?	**YES**	Fully mitigated?	**YES**

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Conducted by:	JO	Date:	10/10/2013
6	East-West Street:	Parthenia Street	Peak Hour:	PM	Project:	Chatsworth MGA

No. of Phases			2				2				2		
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0				0				0		
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2	
Override Capacity				0				0				0	

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	55	1	**55**	0	55	1	**55**	0	55	1	**55**
	Left-Through		0				0				0	
	Through	828	2	414	52	880	2	440	-32	848	2	424
	Through-Right		0				0				0	
	Right	133	1	73	0	133	1	73	0	133	1	73
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
SOUTHBOUND	Left	120	1	120	15	135	1	135	-1	134	1	134
	Left-Through		0				0				0	
	Through	1041	2	**521**	68	1109	2	**555**	-34	1075	2	**538**
	Through-Right		0				0				0	
	Right	102	1	53	15	117	1	62	-1	116	1	62
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
EASTBOUND	Left	99	1	99	11	110	1	110	-1	109	1	109
	Left-Through		0				0				0	
	Through	857	1	**469**	0	857	1	**469**	0	857	1	**469**
	Through-Right		1				1				1	
	Right	81	0	81	0	81	0	81	0	81	0	81
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
WESTBOUND	Left	121	1	**121**	0	121	1	**121**	0	121	1	**121**
	Left-Through		0				0				0	
	Through	730	1	400	0	730	1	406	0	730	1	405
	Through-Right		1				1				1	
	Right	70	0	70	11	81	0	81	-1	80	0	80
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
CRITICAL VOLUMES		*North-South:*		576		*North-South:*		610		*North-South:*		593
		East-West:		590		*East-West:*		590		*East-West:*		590
		SUM:		1166		*SUM:*		1200		*SUM:*		1183
VOLUME/CAPACITY *(V/C)* RATIO:				0.777				0.800				0.789
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.677**				**0.700**				**0.689**
LEVEL OF SERVICE (LOS):				**B**				**C**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

ıange in *v/c* due to project:	0.023	Δ*v/c* after mitigation:	0.012
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Conducted by:	JO	Date:	10/10/2013
8	East-West Street:	Plummer Street	Peak Hour:	AM	Project:	Chatsworth MGA

No. of Phases				2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2	
Override Capacity				0				0				0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	67	1	**67**	0	67	1	**67**	0	67	1	**67**
	Left-Through		0				0				0	
	Through	698	2	349	35	733	2	367	-2	731	2	366
	Through-Right		0				0				0	
	Right	159	1	41	0	159	1	30	0	159	1	31
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
SOUTHBOUND	Left	91	1	91	0	91	1	91	0	91	1	91
	Left-Through		0				0				0	
	Through	1325	1	**796**	44	1369	1	**818**	-2	1367	2	**684**
	Through-Right		1				1				0	
	Right	266	0	266	0	266	0	266	0	266	1	252
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
EASTBOUND	Left	28	1	28	0	28	1	28	0	28	1	28
	Left-Through		0				0				0	
	Through	401	1	**230**	17	418	1	**239**	-1	417	1	**238**
	Through-Right		1				1				1	
	Right	59	0	59	0	59	0	59	0	59	0	59
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
WESTBOUND	Left	236	1	**236**	22	258	1	**258**	-1	257	1	**257**
	Left-Through		0				0				0	
	Through	830	2	415	0	839	2	420	0	839	2	420
	Through-Right		0				0				0	
	Right	26	1	0	0	26	1	0	0	26	1	0
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
CRITICAL VOLUMES			*North-South:*	863			*North-South:*	885			*North-South:*	751
			East-West:	466			*East-West:*	497			*East-West:*	495
			SUM:	1329			*SUM:*	1382			*SUM:*	1246
VOLUME/CAPACITY *(V/C)* RATIO:				0.886				0.921				0.831
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.786**				**0.821**				**0.731**
LEVEL OF SERVICE (LOS):				**C**				**D**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

ıange in *v/c* due to project:	0.035	Δ*v/c* after mitigation:	-0.055
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Conducted by:	JO	Date:	10/10/2013
8	East-West Street:	Plummer Street	Peak Hour:	PM	Project:	Chatsworth MGA

No. of Phases				2				2				2	
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0				0	
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB--	0	NB--	0	SB--	0	NB--	0	SB--	0	
	EB--	0	WB--	0	EB--	0	WB--	0	EB--	0	WB--	0	
ATSAC-1 or ATSAC+ATCS-2?				2				2				2	
Override Capacity				0				0				0	

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	133	1	133	0	133	1	133	0	133	1	133
	Left-Through		0				0				0	
	Through	1175	2	**588**	49	1224	2	**612**	-4	1220	2	**610**
	Through-Right		0				0				0	
	Right	182	1	133	0	182	1	124	0	182	1	124
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
SOUTHBOUND	Left	96	1	**96**	0	96	1	**96**	0	96	1	**96**
	Left-Through		0				0				0	
	Through	692	1	364	37	729	1	383	-2	727	2	364
	Through-Right		1				1				0	
	Right	36	0	36	0	36	0	36	0	36	1	0
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
EASTBOUND	Left	247	1	247	0	247	1	247	0	247	1	247
	Left-Through		0				0				0	
	Through	842	1	**465**	24	866	1	**477**	-1	865	1	**476**
	Through-Right		1				1				1	
	Right	87	0	87	0	87	0	87	0	87	0	87
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
WESTBOUND	Left	98	1	**98**	19	117	1	**117**	-1	116	1	**116**
	Left-Through		0				0				0	
	Through	474	2	237	0	493	2	247	0	493	2	247
	Through-Right		0				0				0	
	Right	96	1	48	0	96	1	48	0	96	1	48
	Left-Through-Right		0				0				0	
	Left-Right		0				0				0	
CRITICAL VOLUMES		*North-South:*		684		*North-South:*		708		*North-South:*		706
		East-West:		563		*East-West:*		594		*East-West:*		592
		SUM:		1247		*SUM:*		1302		*SUM:*		1298
VOLUME/CAPACITY *(V/C)* RATIO:				0.831				0.868				0.865
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.731**				**0.768**				**0.765**
LEVEL OF SERVICE (LOS):				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

ıange in *v/c* due to project:	0.037	Δ*v/c* after mitigation:	0.034
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mason Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
1	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	56	1	**56**	0	56	**56**	1	62	1	**62**	0	62	1	**62**	0	62	1	**62**
	Left-Through		0							0				0				0	
	Through	626	1	371	17	643	379	16	700	1	414	17	717	1	422	-1	716	1	422
	Through-Right		1							1				1				1	
	Right	115	0	115	0	115	115	1	127	0	127	0	127	0	127	0	127	0	127
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	113	1	113	0	113	113	41	165	1	165	0	165	1	165	0	165	1	165
	Left-Through		0							0				0				0	
	Through	1389	1	**789**	22	1411	**800**	39	1558	1	**902**	22	1580	1	**913**	-1	1579	1	**912**
	Through-Right		1							1				1				1	
	Right	188	0	188	0	188	188	39	245	0	245	0	245	0	245	0	245	0	245
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	38	1	38	0	38	38	10	52	1	52	0	52	1	52	0	52	1	52
	Left-Through		0							0				0				0	
	Through	285	1	**170**	22	307	**181**	9	321	1	**194**	22	343	1	**205**	-1	342	1	**204**
	Through-Right		1							1				1				1	
	Right	54	0	54	0	54	54	7	66	0	66	0	66	0	66	0	66	0	66
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	180	1	**180**	0	180	**180**	7	204	1	**204**	0	204	1	**204**	0	204	1	**204**
	Left-Through		0							0				0				0	
	Through	440	1	240	17	457	249	12	493	1	277	17	510	1	285	-1	509	1	285
	Through-Right		1							1				1				1	
	Right	40	0	40	0	40	40	16	60	0	60	0	60	0	60	0	60	0	60
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		845	North-South:		856	North-South:			964	North-South:			975	North-South:			974
		East-West:		350	East-West:		361	East-West:			398	East-West:			409	East-West:			408
		SUM:		1195	SUM:		1217	SUM:			1362	SUM:			1384	SUM:			1382
VOLUME/CAPACITY (*V/C*) RATIO:				0.797			0.811				0.908				0.923				0.921
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.697**			**0.711**				**0.808**				**0.823**				**0.821**
LEVEL OF SERVICE (LOS):				**B**			**C**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.015	Δ*v/c* after mitigation:	0.013
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Mason Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
1	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	58	1	58	0	58	58	1	64	1	64	0	64	1	64	0	64	1	64
	Left-Through		0							0				0				0	
	Through	1211	1	**664**	24	1235	**676**	28	1352	1	**741**	24	1376	1	**753**	-1	1375	1	**752**
	Through-Right		1							1				1				1	
	Right	117	0	117	0	117	117	1	129	0	129	0	129	0	129	0	129	0	129
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	101	1	**101**	0	101	**101**	22	132	1	**132**	0	132	1	**132**	0	132	1	**132**
	Left-Through		0							0				0				0	
	Through	634	1	348	19	653	357	21	714	1	398	19	733	1	408	-1	732	1	407
	Through-Right		1							1				1				1	
	Right	61	0	61	0	61	61	15	82	0	82	0	82	0	82	0	82	0	82
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	150	1	**150**	0	150	**150**	35	199	1	**199**	0	199	1	**199**	0	199	1	**199**
	Left-Through		0							0				0				0	
	Through	466	1	265	19	485	274	9	519	1	295	19	538	1	304	-1	537	1	304
	Through-Right		1							1				1				1	
	Right	63	0	63	0	63	63	1	70	0	70	0	70	0	70	0	70	0	70
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	62	1	62	0	62	62	1	69	1	69	0	69	1	69	0	69	1	69
	Left-Through		0							0				0				0	
	Through	306	1	**223**	24	330	**235**	7	342	1	**266**	24	366	1	**278**	-1	365	1	**277**
	Through-Right		1							1				1				1	
	Right	140	0	140	0	140	140	36	189	0	189	0	189	0	189	0	189	0	189
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		765	North-South:		777	North-South:			873	North-South:			885	North-South:			884
		East-West:		373	East-West:		385	East-West:			465	East-West:			477	East-West:			476
		SUM:		1138	SUM:		1162	SUM:			1338	SUM:			1362	SUM:			1360
	VOLUME/CAPACITY (V/C) RATIO:			0.759			0.775				0.892				0.908				0.907
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.659**			**0.675**				**0.792**				**0.808**				**0.807**
	LEVEL OF SERVICE (LOS):			**B**			**B**				**C**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.016	Δ*v/c* after mitigation:	0.015
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
2	East-West Street:	Lassen Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	94	1	**94**	17	111	**111**	12	115	1	**115**	17	132	1	**132**	-1	131	1	**131**
	Left-Through		0							0				0				0	
	Through	289	2	145	52	341	171	15	331	2	166	52	383	2	192	-3	380	2	190
	Through-Right		0							0				0				0	
	Right	72	1	24	17	89	30	1	80	1	26	17	97	1	32	-1	96	1	32
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	42	1	42	0	42	42	0	46	1	46	0	46	1	46	0	46	1	46
	Left-Through		0							0				0				0	
	Through	868	2	**434**	66	934	**467**	9	958	2	**479**	66	1024	2	**512**	-4	1020	2	**510**
	Through-Right		0							0				0				0	
	Right	26	1	19	0	26	19	6	34	1	26	0	34	1	26	0	34	1	26
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	14	1	14	0	14	14	1	16	1	16	0	16	1	16	0	16	1	16
	Left-Through		0							0				0				0	
	Through	523	1	**334**	0	523	**345**	10	582	1	**372**	0	582	1	**383**	0	582	1	**382**
	Through-Right		1							1				1				1	
	Right	144	0	144	22	166	166	4	161	0	161	22	183	0	183	-1	182	0	182
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	97	1	**97**	22	119	**119**	2	108	1	**108**	22	130	1	**130**	-1	129	1	**129**
	Left-Through		0							0				0				0	
	Through	600	1	309	0	600	309	49	705	1	363	0	705	1	363	0	705	1	363
	Through-Right		1							1				1				1	
	Right	18	0	18	0	18	18	0	20	0	20	0	20	0	20	0	20	0	20
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		528	*North-South:*		578	*North-South:*			594	*North-South:*			644	*North-South:*			641
		East-West:		431	*East-West:*		464	*East-West:*			480	*East-West:*			513	*East-West:*			511
		SUM:		959	*SUM:*		1042	*SUM:*			1074	*SUM:*			1157	*SUM:*			1152
VOLUME/CAPACITY *(V/C)* RATIO:				0.639			0.695				0.716				0.771				0.768
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.539**			**0.595**				**0.616**				**0.671**				**0.668**
LEVEL OF SERVICE (LOS):				**A**			**A**				**B**				**B**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.055	Δ*v/c* after mitigation:	0.052
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
2	East-West Street:	Lassen Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	85	1	85	24	109	109	6	99	1	99	24	123	1	123	-1	122	1	122
	Left-Through		0							0				0				0	
	Through	667	2	**334**	73	740	**370**	5	734	2	**367**	73	807	2	**404**	-4	803	2	**402**
	Through-Right		0							0				0				0	
	Right	170	1	129	24	194	144	0	186	1	141	24	210	1	156	-1	209	1	155
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	20	1	**20**	0	20	**20**	0	22	1	**22**	0	22	1	**22**	0	22	1	**22**
	Left-Through		0							0				0				0	
	Through	297	2	149	56	353	177	10	335	2	168	56	391	2	196	-3	388	2	194
	Through-Right		0							0				0				0	
	Right	7	1	1	0	7	1	2	10	1	0	0	10	1	0	0	10	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	12	1	12	0	12	12	7	20	1	20	0	20	1	20	0	20	1	20
	Left-Through		0							0				0				0	
	Through	785	1	**431**	0	785	**441**	46	904	1	**501**	0	904	1	**510**	0	904	1	**510**
	Through-Right		1							1				1				1	
	Right	77	0	77	19	96	96	13	97	0	97	19	116	0	116	-1	115	0	115
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	82	1	**82**	19	101	**101**	0	90	1	**90**	19	109	1	**109**	-1	108	1	**108**
	Left-Through		0							0				0				0	
	Through	432	1	228	0	432	228	12	484	1	255	0	484	1	255	0	484	1	255
	Through-Right		1							1				1				1	
	Right	23	0	23	0	23	23	0	25	0	25	0	25	0	25	0	25	0	25
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		354	*North-South:*		390	*North-South:*			389	*North-South:*			426	*North-South:*			424
		East-West:		513	*East-West:*		542	*East-West:*			591	*East-West:*			619	*East-West:*			618
		SUM:		867	*SUM:*		932	*SUM:*			980	*SUM:*			1045	*SUM:*			1042
VOLUME/CAPACITY *(V/C)* RATIO:				0.578			0.621				0.653				0.697				0.695
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.478**			**0.521**				**0.553**				**0.597**				**0.595**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.044	Δ*v/c* after mitigation:	0.042
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
3	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	74	1	**74**	17	91	**91**	5	86	1	**86**	17	103	1	**103**	-1	102	1	**102**
Left-Through		0							0				0				0	
Through	471	2	236	87	558	279	28	543	2	272	87	630	2	315	-5	625	2	313
Through-Right		0							0				0				0	
Right	102	1	23	0	102	23	3	115	1	27	0	115	1	27	0	115	1	27
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	100	1	100	0	100	100	0	109	1	109	0	109	1	109	0	109	1	109
Left-Through		0							0				0				0	
Through	1008	2	**504**	110	1118	**559**	15	1117	2	**559**	110	1227	2	**614**	-6	1221	2	**611**
Through-Right		0							0				0				0	
Right	144	1	140	0	144	140	0	157	1	153	0	157	1	153	0	157	1	153
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	8	1	8	0	8	8	0	9	1	9	0	9	1	9	0	9	1	9
Left-Through		0							0				0				0	
Through	387	1	**234**	0	387	**245**	32	455	2	**228**	0	455	2	**228**	0	455	2	**228**
Through-Right		1							0				0				0	
Right	81	0	81	22	103	103	23	112	1	69	22	134	1	83	-1	133	1	82
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	158	1	**158**	0	158	**158**	4	177	1	**177**	0	177	1	**177**	0	177	1	**177**
Left-Through		0							0				0				0	
Through	634	1	331	0	634	331	33	726	2	363	0	726	2	363	0	726	2	363
Through-Right		1							0				0				0	
Right	27	0	27	0	27	27	0	30	1	0	0	30	1	0	0	30	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		578	*North-South:*		650	*North-South:*			645	*North-South:*			717	*North-South:*			713
	East-West:		392	*East-West:*		403	*East-West:*			405	*East-West:*			405	*East-West:*			405
	SUM:		970	*SUM:*		1053	*SUM:*			1050	*SUM:*			1122	*SUM:*			1118
VOLUME/CAPACITY *(V/C)* RATIO:			0.647			0.702				0.700				0.748				0.745
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.547**			**0.602**				**0.600**				**0.648**				**0.645**
LEVEL OF SERVICE (LOS):			**A**			**B**				**A**				**B**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.048	Δ*v/c* after mitigation:	0.045
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth (%):	1.5	Conducted by:	JO	Date:	10/4/2014
3	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			2			2			2				2				2	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	103	1	103	24	127	127	18	131	1	131	24	155	1	155	-1	154	1	154
	Left-Through		0							0				0				0	
	Through	742	2	**371**	122	864	**432**	13	824	2	**412**	122	946	2	**473**	-7	939	2	**470**
	Through-Right		0							0				0				0	
	Right	118	1	70	0	118	70	2	131	1	78	0	131	1	78	0	131	1	78
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	52	1	**52**	0	52	**52**	0	57	1	**57**	0	57	1	**57**	0	57	1	**57**
	Left-Through		0							0				0				0	
	Through	404	2	202	93	497	249	25	467	2	234	93	560	2	280	-2	558	2	279
	Through-Right		0							0				0				0	
	Right	27	1	0	0	27	0	0	30	1	0	0	30	1	0	0	30	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	76	1	76	0	76	76	0	83	1	83	0	83	1	83	0	83	1	83
	Left-Through		0							0				0				0	
	Through	455	2	**228**	0	455	**228**	28	526	2	**263**	0	526	2	**263**	0	526	2	**263**
	Through-Right		0							0				0				0	
	Right	128	1	77	19	147	84	6	146	1	81	19	165	1	88	-1	164	1	87
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	96	1	**96**	0	96	**96**	2	107	1	**107**	0	107	1	**107**	0	107	1	**107**
	Left-Through		0							0				0				0	
	Through	414	2	207	0	414	207	27	480	2	240	0	480	2	240	0	480	2	240
	Through-Right		0							0				0				0	
	Right	70	1	44	0	70	44	0	77	1	49	0	77	1	49	0	77	1	49
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	North-South:		423	North-South:		484	North-South:			469	North-South:			530	North-South:			527
		East-West:		324	East-West:		324	East-West:			370	East-West:			370	East-West:			370
		SUM:		747	SUM:		808	SUM:			839	SUM:			900	SUM:			897
	VOLUME/CAPACITY (V/C) RATIO:			0.498			0.539				0.559				0.600				0.598
	V/C LESS ATSAC/ATCS ADJUSTMENT:			0.398			0.439				0.459				0.500				0.498
	LEVEL OF SERVICE (LOS):			A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project: 0.041 — Δ*v/c* after mitigation: 0.039

Significant impacted? NO — Fully mitigated? N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
4	East-West Street:	Prairie Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	82	1	**82**	0	82	**82**	0	90	1	**90**	0	90	1	**90**	0	90	1	**90**
Left-Through		0							0				0				0	
Through	558	2	279	70	628	314	26	636	2	318	70	706	2	353	-4	702	2	351
Through-Right		0							0				0				0	
Right	235	1	224	0	235	224	7	264	1	244	0	264	1	244	0	264	1	244
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	170	1	170	45	215	215	5	191	1	191	45	236	1	236	-2	234	1	234
Left-Through		0							0				0				0	
Through	969	2	**485**	89	1058	**529**	40	1100	2	**550**	89	1189	2	**595**	-5	1184	2	**592**
Through-Right		0							0				0				0	
Right	31	1	30	0	31	30	0	34	1	33	0	34	1	33	0	34	1	33
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	3	1	3	0	3	**3**	0	3	1	**3**	0	3	1	**3**	0	3	1	**3**
Left-Through		0							0				0				0	
Through	48	1	**48**	22	70	70	11	63	1	63	22	85	1	85	-1	84	1	84
Through-Right		0							0				0				0	
Right	22	1	0	0	22	0	0	24	1	0	0	24	1	0	0	24	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	23	1	**23**	0	23	23	15	40	1	40	0	40	1	40	0	40	1	40
Left-Through		0							0				0				0	
Through	28	0	58	18	46	**111**	28	59	0	**102**	18	77	0	**155**	-1	76	0	**152**
Through-Right		1							1				1				1	
Right	30	0	0	35	65	0	10	43	0	0	35	78	0	0	-2	76	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		567	*North-South:*		611	*North-South:*			640	*North-South:*			685	*North-South:*			682
	East-West:		71	*East-West:*		114	*East-West:*			105	*East-West:*			158	*East-West:*			155
	SUM:		638	*SUM:*		725	*SUM:*			745	*SUM:*			843	*SUM:*			837
VOLUME/CAPACITY *(V/C)* RATIO:			0.425			0.483				0.497				0.562				0.558
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.325**			**0.383**				**0.397**				**0.462**				**0.458**
LEVEL OF SERVICE (LOS):			**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.065	Δ*v/c* after mitigation:	0.061
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
4	East-West Street:	Prairie Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	31	1	31	0	31	31	0	34	1	34	0	34	1	34	0	34	1	34
	Left-Through		0							0				0				0	
	Through	800	2	**400**	100	900	**450**	26	901	2	**451**	100	1001	2	**501**	-1	1000	2	**500**
	Through-Right		0							0				0				0	
	Right	91	1	23	0	91	23	13	113	1	34	0	113	1	34	0	113	1	34
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	40	1	**40**	39	79	**79**	8	52	1	**52**	39	91	1	**91**	-2	89	1	**89**
	Left-Through		0							0				0				0	
	Through	479	2	240	77	556	278	19	543	2	272	77	620	2	310	-3	617	2	309
	Through-Right		0							0				0				0	
	Right	57	1	10	0	57	10	0	62	1	11	0	62	1	11	0	62	1	11
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	94	1	**94**	0	94	**94**	0	103	1	**103**	0	103	1	**103**	0	103	1	**103**
	Left-Through		0							0				0				0	
	Through	57	1	57	19	76	76	28	90	1	90	19	109	1	109	-1	108	1	108
	Through-Right		0							0				0				0	
	Right	81	1	66	0	81	66	0	89	1	72	0	89	1	72	0	89	1	72
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	136	1	136	0	136	136	9	158	1	158	0	158	1	158	0	158	1	158
	Left-Through		0							0				0				0	
	Through	73	0	**171**	25	98	**246**	18	98	0	**211**	25	123	0	**286**	-1	122	0	**282**
	Through-Right		1							1				1				1	
	Right	98	0	0	50	148	0	6	113	0	0	50	163	0	0	-3	160	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		440	*North-South:*		529	*North-South:*			503	*North-South:*			592	*North-South:*			589
		East-West:		265	*East-West:*		340	*East-West:*			314	*East-West:*			389	*East-West:*			385
		SUM:		705	*SUM:*		869	*SUM:*			817	*SUM:*			981	*SUM:*			974
VOLUME/CAPACITY *(V/C)* RATIO:				0.470			0.579				0.545				0.654				0.649
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.370**			**0.479**				**0.445**				**0.554**				**0.549**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.109	Δ*v/c* after mitigation:	0.104
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
5	East-West Street:	Nordhoff Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB--	3
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	217	1	**217**	0	217	**217**	16	253	1	**253**	0	253	1	**253**	0	253	1	**253**
Left-Through		0							0				0				0	
Through	722	2	361	88	810	405	28	817	2	409	88	905	2	453	-35	870	2	435
Through-Right		0							0				0				0	
Right	94	1	49	0	94	49	16	119	1	60	0	119	1	60	0	119	1	60
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	41	1	41	14	55	55	0	45	1	45	14	59	1	59	-1	58	1	58
Left-Through		0							0				0				0	
Through	824	2	**412**	69	893	**447**	50	951	2	**476**	69	1020	2	**510**	-34	986	2	**493**
Through-Right		0							0				0				0	
Right	217	1	146	21	238	132	0	237	1	159	21	258	1	145	-1	257	1	176
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	71	1	**71**	35	106	**106**	0	78	1	**78**	35	113	1	**113**	-32	81	1	**81**
Left-Through		0							0				0				0	
Through	467	2	176	0	467	176	18	529	2	265	0	529	2	265	0	529	2	265
Through-Right		1							0				0				0	
Right	61	0	61	0	61	61	20	87	1	0	0	87	1	0	0	87	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	90	1	90	0	90	90	20	118	1	118	0	118	1	118	0	118	1	118
Left-Through		0							0				0				0	
Through	854	2	**302**	0	854	**308**	33	967	2	**484**	0	967	2	**484**	0	967	2	**484**
Through-Right		1							0				0				0	
Right	53	0	53	18	71	71	0	58	1	36	18	76	1	47	-1	75	1	46
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		629	*North-South:*		664	*North-South:*			729	*North-South:*			763	*North-South:*			746
	East-West:		373	*East-West:*		414	*East-West:*			562	*East-West:*			597	*East-West:*			565
	SUM:		1002	*SUM:*		1078	*SUM:*			1291	*SUM:*			1360	*SUM:*			1311
VOLUME/CAPACITY *(V/C)* RATIO:			0.729			0.784				0.939				0.989				0.953
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.629**			**0.684**				**0.839**				**0.889**				**0.853**
LEVEL OF SERVICE (LOS):			**B**			**B**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.050	Δ*v/c* after mitigation:	0.014
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
5	East-West Street:	Nordhoff Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB-- 3	NB--	0	SB--	3
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	66	1	**66**	0	66	**66**	7	79	1	**79**	0	79	1	**79**	0	79	1	**79**
Left-Through		0							0				0				0	
Through	756	2	378	67	823	412	38	865	2	433	67	932	2	466	-33	899	2	450
Through-Right		0							0				0				0	
Right	112	1	39	0	112	39	7	129	1	45	0	129	1	45	0	129	1	45
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	61	1	61	19	80	80	0	67	1	67	19	86	1	86	-1	85	1	85
Left-Through		0							0				0				0	
Through	762	2	**381**	97	859	**430**	26	859	2	**430**	97	956	2	**478**	-35	921	2	**461**
Through-Right		0							0				0				0	
Right	94	1	0	29	123	0	0	103	1	0	29	132	1	0	-1	131	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	165	1	165	27	192	192	0	180	1	180	27	207	1	207	-31	176	1	176
Left-Through		0							0				0				0	
Through	898	2	**308**	0	898	**308**	21	1003	2	**502**	0	1003	2	**502**	0	1003	2	**502**
Through-Right		1							0				0				0	
Right	26	0	26	0	26	26	8	36	1	0	0	36	1	0	0	36	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	147	1	**147**	0	147	**147**	8	169	1	**169**	0	169	1	**169**	0	169	1	**169**
Left-Through		0							0				0				0	
Through	523	2	192	0	523	197	15	587	2	294	0	587	2	294	0	587	2	294
Through-Right		1							0				0				0	
Right	54	0	54	13	67	67	0	59	1	26	13	72	1	29	0	72	1	30
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		447	*North-South:*		496	*North-South:*			509	*North-South:*			557	*North-South:*			540
	East-West:		455	*East-West:*		455	*East-West:*			671	*East-West:*			671	*East-West:*			671
	SUM:		902	*SUM:*		951	*SUM:*			1180	*SUM:*			1228	*SUM:*			1211
VOLUME/CAPACITY *(V/C)* RATIO:			0.656			0.692				0.858				0.893				0.881
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.556**			**0.592**				**0.758**				**0.793**				**0.781**
LEVEL OF SERVICE (LOS):			**A**			**A**				**C**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.035	Δ*v/c* after mitigation:	0.023
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
6	East-West Street:	Parthenia Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	108	1	108	0	108	108	16	134	1	134	0	134	1	134	0	134	1	134
	Left-Through		0							0				0				0	
	Through	938	2	**469**	62	1000	**500**	53	1079	2	**540**	62	1141	2	**571**	-33	1108	2	**554**
	Through-Right		0							0				0				0	
	Right	129	1	73	0	129	73	17	158	1	83	0	158	1	83	0	158	1	83
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	117	1	**117**	10	127	**127**	1	129	1	**129**	10	139	1	**139**	-1	138	1	**138**
	Left-Through		0							0				0				0	
	Through	837	2	419	49	886	443	89	1004	2	502	49	1053	2	527	-32	1021	2	511
	Through-Right		0							0				0				0	
	Right	75	1	26	10	85	29	0	82	1	28	10	92	1	32	-1	91	1	31
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	99	1	**99**	13	112	**112**	0	108	1	**108**	13	121	1	**121**	-1	120	1	**120**
	Left-Through		0							0				0				0	
	Through	765	1	413	0	765	413	10	846	1	466	0	846	1	466	0	846	1	466
	Through-Right		1							1				1				1	
	Right	60	0	60	0	60	60	20	86	0	86	0	86	0	86	0	86	0	86
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	112	1	112	0	112	112	28	150	1	150	0	150	1	150	0	150	1	150
	Left-Through		0							0				0				0	
	Through	912	1	**534**	0	912	**541**	26	1023	1	**601**	0	1023	1	**608**	0	1023	2	**512**
	Through-Right		1							1				1				0	
	Right	156	0	156	13	169	169	8	179	0	179	13	192	0	192	-1	191	1	122
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		586	*North-South:*		627	*North-South:*			669	*North-South:*			710	*North-South:*			692
		East-West:		633	*East-West:*		653	*East-West:*			709	*East-West:*			729	*East-West:*			632
		SUM:		1219	*SUM:*		1280	*SUM:*			1378	*SUM:*			1439	*SUM:*			1324
VOLUME/CAPACITY *(V/C)* RATIO:				0.813			0.853				0.919				0.959				0.883
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.713**			**0.753**				**0.819**				**0.859**				**0.783**
LEVEL OF SERVICE (LOS):				C			C				D				D				C

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.040	Δ*v/c* after mitigation:	-0.036
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
6	East-West Street:	Parthenia Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	55	1	**55**	0	55	**55**	7	67	1	**67**	0	67	1	**67**	0	67	1	**67**
	Left-Through		0							0				0				0	
	Through	828	2	414	52	880	440	47	952	2	476	52	1004	2	502	-32	972	2	486
	Through-Right		0							0				0				0	
	Right	133	1	73	0	133	73	14	159	1	88	0	159	1	88	0	159	1	88
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	120	1	120	15	135	135	7	138	1	138	15	153	1	153	-1	152	1	152
	Left-Through		0							0				0				0	
	Through	1041	2	**521**	68	1109	**555**	33	1171	2	**586**	68	1239	2	**620**	-34	1205	2	**603**
	Through-Right		0							0				0				0	
	Right	102	1	53	15	117	62	0	112	1	58	15	127	1	68	-1	126	1	67
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	99	1	99	11	110	110	0	108	1	108	11	119	1	119	-1	118	1	118
	Left-Through		0							0				0				0	
	Through	857	1	**469**	0	857	**469**	18	955	1	**526**	0	955	1	**526**	0	955	1	**526**
	Through-Right		1							1				1				1	
	Right	81	0	81	0	81	81	8	97	0	97	0	97	0	97	0	97	0	97
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	121	1	**121**	0	121	**121**	11	143	1	**143**	0	143	1	**143**	0	143	1	**143**
	Left-Through		0							0				0				0	
	Through	730	1	400	0	730	406	12	810	1	445	0	810	1	451	0	810	2	405
	Through-Right		1							1				1				0	
	Right	70	0	70	11	81	81	3	80	0	80	11	91	0	91	-1	90	1	14
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		576	*North-South:*		610	*North-South:*			653	*North-South:*			687	*North-South:*			670
		East-West:		590	*East-West:*		590	*East-West:*			669	*East-West:*			669	*East-West:*			669
		SUM:		1166	*SUM:*		1200	*SUM:*			1322	*SUM:*			1356	*SUM:*			1339
VOLUME/CAPACITY *(V/C)* RATIO:				0.777			0.800				0.881				0.904				0.893
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.677**			**0.700**				**0.781**				**0.804**				**0.793**
LEVEL OF SERVICE (LOS):				**B**			**C**				**C**				**D**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.023	Δ*v/c* after mitigation:	0.012
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
7	East-West Street:	Roscoe Boulevard	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases			4			4			4				4				4	
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0				0				0	
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--		0	NB-- 0 SB--		0	NB-- 0 SB--		0		NB-- 0 SB--		0		NB-- 0 SB--		0	
		EB-- 0 WB--		0	EB-- 0 WB--		0	EB-- 0 WB--		0		EB-- 0 WB--		0		EB-- 0 WB--		0	
	ATSAC-1 or ATSAC+ATCS-2?			2			2			2				2				2	
	Override Capacity			0			0			0				0				0	
NORTHBOUND	Left	131	1	**131**	0	131	**131**	0	143	1	**143**	0	143	1	**143**	0	143	1	**143**
	Left-Through		0							0				0				0	
	Through	810	2	405	44	854	427	67	953	2	477	44	997	2	499	-32	964	2	482
	Through-Right		0							0				0				0	
	Right	149	1	76	0	149	76	0	163	1	83	0	163	1	83	0	163	1	83
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	106	1	106	7	113	113	16	132	1	132	7	139	1	139	0	139	1	139
	Left-Through		0							0				0				0	
	Through	885	2	**443**	35	920	**460**	84	1052	2	**526**	35	1087	2	**544**	-32	1054	2	**527**
	Through-Right		0							0				0				0	
	Right	102	1	21	7	109	24	16	128	1	30	7	135	1	32	0	135	1	32
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	162	1	162	9	171	**171**	20	197	1	**197**	9	206	1	**206**	0	206	1	**206**
	Left-Through		0							0				0				0	
	Through	976	2	**361**	0	976	361	8	1075	2	397	0	1075	2	397	0	1075	2	397
	Through-Right		1							1				1				1	
	Right	106	0	106	0	106	106	0	116	0	116	0	116	0	116	0	116	0	116
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	147	1	**147**	0	147	147	0	161	1	161	0	161	1	161	0	161	1	161
	Left-Through		0							0				0				0	
	Through	844	2	342	0	844	**345**	13	936	2	**385**	0	936	2	**388**	0	936	2	**388**
	Through-Right		1							1				1				1	
	Right	183	0	183	9	192	192	20	220	0	220	9	229	0	229	0	229	0	229
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*		574	*North-South:*		591	*North-South:*			669	*North-South:*			687	*North-South:*			670
		East-West:		508	*East-West:*		516	*East-West:*			582	*East-West:*			594	*East-West:*			594
		SUM:		1082	*SUM:*		1107	*SUM:*			1251	*SUM:*			1281	*SUM:*			1264
	VOLUME/CAPACITY *(V/C)* RATIO:			0.787			0.805				0.910				0.932				0.919
	V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.687**			**0.705**				**0.810**				**0.832**				**0.819**
	LEVEL OF SERVICE (LOS):			**B**			**C**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.022	Δ*v/c* after mitigation:	0.010
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Winnetka Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
7	East-West Street:	Roscoe Boulevard	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			4			4			4			4			4				4
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	151	1	**151**	0	151	**151**	0	165	1	**165**	0	165	1	**165**	0	165	1	**165**
Left-Through		0							0				0				0	
Through	828	2	414	37	865	433	55	960	2	480	37	997	2	499	-32	965	2	483
Through-Right		0							0				0				0	
Right	160	1	101	0	160	101	0	175	1	110	0	175	1	110	0	175	1	110
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	126	1	126	10	136	136	7	145	1	145	10	155	1	155	0	155	1	155
Left-Through		0							0				0				0	
Through	993	2	**497**	49	1042	**521**	32	1118	2	**559**	49	1167	2	**584**	-32	1135	2	**568**
Through-Right		0							0				0				0	
Right	101	1	25	10	111	32	7	117	1	30	10	127	1	37	0	127	1	37
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	152	1	152	7	159	159	8	174	1	174	7	181	1	181	0	181	1	181
Left-Through		0							0				0				0	
Through	1109	2	**426**	0	1109	**426**	17	1230	2	**471**	0	1230	2	**471**	0	1230	2	**471**
Through-Right		1							1				1				1	
Right	168	0	168	0	168	168	0	184	0	184	0	184	0	184	0	184	0	184
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	119	1	**119**	0	119	**119**	0	130	1	**130**	0	130	1	**130**	0	130	1	**130**
Left-Through		0							0				0				0	
Through	852	2	320	0	852	322	11	943	2	356	0	943	2	358	0	943	2	358
Through-Right		1							1				1				1	
Right	107	0	107	7	114	114	8	125	0	125	7	132	0	132	0	132	0	132
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		648	*North-South:*		672	*North-South:*			724	*North-South:*			749	*North-South:*			733
	East-West:		545	*East-West:*		545	*East-West:*			601	*East-West:*			601	*East-West:*			601
	SUM:		1193	*SUM:*		1217	*SUM:*			1325	*SUM:*			1350	*SUM:*			1334
VOLUME/CAPACITY *(V/C)* RATIO:			0.868			0.885				0.964				0.982				0.970
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.768**			**0.785**				**0.864**				**0.882**				**0.870**
LEVEL OF SERVICE (LOS):			C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.018	Δ*v/c* after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
8	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	67	1	**67**	0	67	**67**	7	80	1	**80**	0	80	1	**80**	0	80	1	**80**
Left-Through		0							0				0				0	
Through	698	2	349	35	733	367	65	828	2	414	35	863	2	432	-2	861	2	431
Through-Right		0							0				0				0	
Right	159	1	41	0	159	30	13	187	1	56	0	187	1	45	0	187	1	46
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	91	1	91	0	91	91	0	100	1	100	0	100	1	100	0	100	1	100
Left-Through		0							0				0				0	
Through	1325	1	**796**	44	1369	**818**	24	1473	1	**882**	44	1517	1	**904**	-2	1515	2	**758**
Through-Right		1							1				1				0	
Right	266	0	266	0	266	266	0	291	0	291	0	291	0	291	0	291	1	276
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	28	1	28	0	28	28	0	31	1	31	0	31	1	31	0	31	1	31
Left-Through		0							0				0				0	
Through	401	1	**230**	17	418	**239**	26	464	1	**267**	17	481	1	**276**	-1	480	1	**275**
Through-Right		1							1				1				1	
Right	59	0	59	0	59	59	5	70	0	70	0	70	0	70	0	70	0	70
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	236	1	**236**	22	258	**258**	4	262	1	**262**	22	284	1	**284**	-1	283	1	**283**
Left-Through		0							0				0				0	
Through	830	2	415	0	830	415	14	922	2	461	0	922	2	461	0	922	2	461
Through-Right		0							0				0				0	
Right	26	1	0	0	26	0	0	28	1	0	0	28	1	0	0	28	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		863	North-South:		885	North-South:			962	North-South:			984	North-South:			838
	East-West:		466	East-West:		497	East-West:			529	East-West:			560	East-West:			558
	SUM:		1329	SUM:		1382	SUM:			1491	SUM:			1544	SUM:			1396
VOLUME/CAPACITY (V/C) RATIO:			0.886			0.921				0.994				1.029				0.931
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.786			0.821				0.894				0.929				0.831
LEVEL OF SERVICE (LOS):			C			D				D				E				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.035	Δ*v/c* after mitigation:	-0.063
Significant impacted?	YES	Fully mitigated?	YES

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
8	East-West Street:	Plummer Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	133	1	133	0	133	133	4	149	1	149	0	149	1	149	0	149	1	149
Left-Through		0							0				0				0	
Through	1175	2	**588**	49	1224	**612**	38	1323	2	**662**	49	1372	2	**686**	-4	1368	2	**684**
Through-Right		0							0				0				0	
Right	182	1	133	0	182	124	9	208	1	148	0	208	1	138	0	208	1	139
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	96	1	**96**	0	96	**96**	0	105	1	**105**	0	105	1	**105**	0	105	1	**105**
Left-Through		0							0				0				0	
Through	692	1	364	37	729	383	45	802	1	421	37	839	1	439	-2	837	2	419
Through-Right		1							1				1				0	
Right	36	0	36	0	36	36	0	39	0	39	0	39	0	39	0	39	1	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	247	1	247	0	247	247	0	270	1	270	0	270	1	270	0	270	1	270
Left-Through		0							0				0				0	
Through	842	1	**465**	24	866	**477**	13	934	1	**517**	24	958	1	**529**	-1	957	1	**529**
Through-Right		1							1				1				1	
Right	87	0	87	0	87	87	5	100	0	100	0	100	0	100	0	100	0	100
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	98	1	**98**	19	117	**117**	14	121	1	**121**	19	140	1	**140**	-1	139	1	**139**
Left-Through		0							0				0				0	
Through	474	2	237	0	474	237	23	541	2	271	0	541	2	271	0	541	2	271
Through-Right		0							0				0				0	
Right	96	1	48	0	96	48	0	105	1	53	0	105	1	53	0	105	1	53
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		684	North-South:		708	North-South:			767	North-South:			791	North-South:			789
	East-West:		563	East-West:		594	East-West:			638	East-West:			669	East-West:			668
	SUM:		1247	SUM:		1302	SUM:			1405	SUM:			1460	SUM:			1457
VOLUME/CAPACITY (V/C) RATIO:			0.831			0.868				0.937				0.973				0.971
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.731			0.768				0.837				0.873				0.871
LEVEL OF SERVICE (LOS):			C			C				D				D				D

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.036	Δ*v/c* after mitigation:	0.034
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
9	East-West Street:	Prairie Street	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	142	1	**142**	0	142	**142**	18	173	1	**155**	0	173	1	**155**	0	173	1	**155**
Left-Through		0							0				0				0	
Through	991	2	341	0	991	341	37	1121	2	381	0	1121	2	381	0	1121	2	381
Through-Right		1							1				1				1	
Right	32	0	32	0	32	32	9	44	0	44	0	44	0	44	0	44	0	44
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	9	1	9	0	9	9	19	29	1	19	0	29	1	19	0	29	1	19
Left-Through		0							0				0				0	
Through	1209	1	**783**	0	1209	**816**	9	1331	1	**857**	0	1331	1	**890**	0	1331	1	**889**
Through-Right		1							1				1				1	
Right	356	0	356	66	422	422	0	389	0	389	66	455	0	455	-2	453	0	453
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	24	1	**24**	35	59	**59**	21	47	1	**26**	35	82	1	**61**	-2	80	1	**59**
Left-Through		0							0				0				0	
Through	12	0	51	52	64	103	5	18	0	72	52	70	0	124	-3	67	0	121
Through-Right		1							1				1				1	
Right	39	0	0	0	39	0	0	43	0	0	0	43	0	0	0	43	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	23	1	23	0	23	23	7	32	1	32	0	32	1	32	0	32	1	32
Left-Through		0							0				0				0	
Through	52	0	**78**	66	118	**144**	42	99	0	**113**	66	165	0	**179**	-4	161	1	**140**
Through-Right		1							1				1				0	
Right	26	0	0	0	26	0	44	72	0	0	0	72	0	0	0	72	1	26
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	North-South:		925	North-South:		958	North-South:			1012	North-South:			1045	North-South:			1044
	East-West:		102	East-West:		203	East-West:			139	East-West:			240	East-West:			199
	SUM:		1027	SUM:		1161	SUM:			1151	SUM:			1285	SUM:			1243
VOLUME/CAPACITY (V/C) RATIO:			0.685			0.774				0.767				0.857				0.829
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.585**			**0.674**				**0.667**				**0.757**				**0.729**
LEVEL OF SERVICE (LOS):			**A**			**B**				**B**				**C**				**C**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.090	Δ*v/c* after mitigation:	0.062
Significant impacted?	YES	Fully mitigated?	NO

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
9	East-West Street:	Prairie Street	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND																		
Left	41	1	**41**	0	41	**41**	14	59	1	**59**	0	59	1	**59**	0	59	1	**59**
Left-Through		0							0				0				0	
Through	1243	2	431	0	1243	431	18	1377	2	479	0	1377	2	479	0	1377	2	479
Through-Right		1							1				1				1	
Right	50	0	50	0	50	50	4	59	0	59	0	59	0	59	0	59	0	59
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
SOUTHBOUND																		
Left	28	1	28	0	28	28	44	75	1	75	0	75	1	75	0	75	1	75
Left-Through		0							0				0				0	
Through	894	1	**464**	0	894	**492**	37	1015	1	**526**	0	1015	1	**554**	0	1015	1	**553**
Through-Right		1							1				1				1	
Right	34	0	34	56	90	90	0	37	0	37	56	93	0	93	-2	91	0	91
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
EASTBOUND																		
Left	285	1	**285**	49	334	**334**	0	312	1	**312**	49	361	1	**361**	-3	358	1	**358**
Left-Through		0							0				0				0	
Through	111	0	269	73	184	342	32	153	0	340	73	226	0	413	-4	222	0	409
Through-Right		1							1				1				1	
Right	158	0	0	0	158	0	14	187	0	0	0	187	0	0	0	187	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
WESTBOUND																		
Left	46	1	46	0	46	46	4	54	1	54	0	54	1	54	0	54	1	54
Left-Through		0							0				0				0	
Through	31	0	**52**	56	87	**108**	22	56	0	**108**	56	112	0	**164**	-3	109	0	**161**
Through-Right		1							1				1				1	
Right	21	0	0	0	21	0	29	52	0	0	0	52	0	0	0	52	0	0
Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0	
CRITICAL VOLUMES	*North-South:*		505	*North-South:*		533	*North-South:*			585	*North-South:*			613	*North-South:*			612
	East-West:		337	*East-West:*		442	*East-West:*			420	*East-West:*			525	*East-West:*			519
	SUM:		842	*SUM:*		975	*SUM:*			1005	*SUM:*			1138	*SUM:*			1131
VOLUME/CAPACITY *(V/C)* RATIO:			0.561			0.650				0.670				0.759				0.754
V/C LESS ATSAC/ATCS ADJUSTMENT:			**0.461**			**0.550**				**0.570**				**0.659**				**0.654**
LEVEL OF SERVICE (LOS):			**A**			**A**				**A**				**B**				**B**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.089	Δ*v/c* after mitigation:	0.084
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
10	East-West Street:	Nordhoff Place	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	142	1	**142**	22	164	**164**	7	162	1	**162**	22	184	1	**184**	-1	183	1	**183**
	Left-Through		0							0				0				0	
	Through	995	2	350	0	995	350	47	1135	2	399	0	1135	2	399	0	1135	2	399
	Through-Right		1							1				1				1	
	Right	56	0	56	0	56	56	0	61	0	61	0	61	0	61	0	61	0	61
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	76	1	76	0	76	76	0	83	1	83	0	83	1	83	0	83	1	83
	Left-Through		0							0				0				0	
	Through	1074	2	**374**	0	1074	**374**	44	1218	2	**424**	0	1218	2	**424**	0	1218	2	**424**
	Through-Right		1							1				1				1	
	Right	49	0	49	0	49	49	0	54	0	54	0	54	0	54	0	54	0	54
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	5	1	**5**	0	5	**5**	0	5	1	**5**	0	5	1	**5**	0	5	1	**5**
	Left-Through		0							0				0				0	
	Through	16	1	16	17	33	33	20	37	1	37	17	54	1	54	-1	53	1	53
	Through-Right		1							1				1				1	
	Right	34	0	0	17	51	0	0	37	0	0	17	54	0	0	-1	53	0	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	56	1	56	0	56	56	0	61	1	61	0	61	1	61	0	61	1	61
	Left-Through		0							0				0				0	
	Through	106	1	106	22	128	128	23	139	1	139	22	161	1	**161**	-1	160	1	**160**
	Through-Right		0							0				0				0	
	Right	173	1	**135**	0	173	**135**	0	189	1	**148**	0	189	1	148	0	189	1	148
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		North-South:		516	North-South:		538	North-South:			586	North-South:			608	North-South:			607
		East-West:		140	East-West:		140	East-West:			153	East-West:			166	East-West:			165
		SUM:		656	SUM:		678	SUM:			739	SUM:			774	SUM:			772
VOLUME/CAPACITY (V/C) RATIO:				0.437			0.452				0.493				0.516				0.515
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.337**			**0.352**				**0.393**				**0.416**				**0.415**
LEVEL OF SERVICE (LOS):				**A**			**A**				**A**				**A**				**A**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.023	Δ*v/c* after mitigation:	0.022
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
10	East-West Street:	Nordhoff Place	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			2			2			2			2			2				2
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

	MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	73	1	73	19	92	92	28	108	1	108	19	127	1	127	-1	126	1	126
	Left-Through		0							0				0				0	
	Through	1143	2	**437**	0	1143	**437**	63	1313	2	**499**	0	1313	2	**499**	0	1313	2	**499**
	Through-Right		1							1				1				1	
	Right	168	0	168	0	168	168	0	184	0	184	0	184	0	184	0	184	0	184
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	139	1	**139**	0	139	**139**	0	152	1	**152**	0	152	1	**152**	0	152	1	**152**
	Left-Through		0							0				0				0	
	Through	897	2	308	0	897	308	41	1022	2	350	0	1022	2	350	0	1022	2	350
	Through-Right		1							1				1				1	
	Right	26	0	26	0	26	26	0	28	0	28	0	28	0	28	0	28	0	28
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	77	1	77	0	77	77	0	84	1	84	0	84	1	84	0	84	1	84
	Left-Through		0							0				0				0	
	Through	95	1	95	24	119	119	11	115	1	**115**	24	139	1	**139**	-1	138	1	**138**
	Through-Right		1							1				1				1	
	Right	146	0	**110**	24	170	**124**	0	160	0	106	24	184	0	121	-1	183	0	120
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	183	1	**183**	0	183	**183**	30	230	1	**230**	0	230	1	**230**	0	230	1	**230**
	Left-Through		0							0				0				0	
	Through	65	1	65	19	84	84	11	82	1	82	19	101	1	101	-1	100	1	100
	Through-Right		0							0				0				0	
	Right	190	1	121	0	190	121	0	208	1	132	0	208	1	132	0	208	1	132
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		576	*North-South:*		576	*North-South:*			651	*North-South:*			651	*North-South:*			651
		East-West:		293	*East-West:*		307	*East-West:*			345	*East-West:*			369	*East-West:*			368
		SUM:		869	*SUM:*		883	*SUM:*			996	*SUM:*			1020	*SUM:*			1019
VOLUME/CAPACITY *(V/C)* RATIO:				0.579			0.589				0.664				0.680				0.679
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.479			0.489				0.564				0.580				0.579
LEVEL OF SERVICE (LOS):				A			A				A				A				A

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.016	Δ*v/c* after mitigation:	0.015
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
11	East-West Street:	Nordhoff Street / Way	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Chatsworth MGA

No. of Phases			3			3			3			3			3				3
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?			0			0			0			0			0				0
Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB-- 0	NB--	0	SB--	0
	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB-- 0	EB--	0	WB--	0
ATSAC-1 or ATSAC+ATCS-2?			2			2			2			2			2				2
Override Capacity			0			0			0			0			0				0

MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	146	1	**146**	0	146	**146**	0	160	1	**160**	0	160	1	**160**	0	160	1	**160**
	Left-Through		0							0				0				0	
	Through	1089	2	394	22	1111	401	40	1231	2	444	22	1253	2	451	-1	1252	2	451
	Through-Right		1							1				1				1	
	Right	92	0	92	0	92	92	0	101	0	101	0	101	0	101	0	101	0	101
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	22	1	22	0	22	22	7	31	1	31	0	31	1	31	0	31	1	31
	Left-Through		0							0				0				0	
	Through	938	2	**469**	17	955	**478**	75	1101	2	**551**	17	1118	2	**559**	-1	1117	2	**559**
	Through-Right		0							0				0				0	
	Right	154	1	86	0	154	86	20	188	1	107	0	188	1	107	0	188	1	107
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	137	1	**137**	0	137	**137**	13	163	1	**163**	0	163	1	**163**	0	163	1	**163**
	Left-Through		0							0				0				0	
	Through	364	2	140	14	378	145	0	398	2	199	14	412	2	206	-1	411	2	206
	Through-Right		1							0				0				0	
	Right	57	0	57	0	57	57	0	62	1	0	0	62	1	0	0	62	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	81	1	81	0	81	81	0	89	1	89	0	89	1	89	0	89	1	89
	Left-Through		0							0				0				0	
	Through	807	2	**275**	18	825	**281**	0	882	2	**441**	18	900	2	**450**	-1	899	2	**450**
	Through-Right		1							0				0				0	
	Right	19	0	19	0	19	19	0	21	1	6	0	21	1	6	0	21	1	6
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
CRITICAL VOLUMES		*North-South:*		615	*North-South:*		624	*North-South:*			711	*North-South:*			719	*North-South:*			719
		East-West:		412	*East-West:*		418	*East-West:*			604	*East-West:*			613	*East-West:*			613
		SUM:		1027	*SUM:*		1042	*SUM:*			1315	*SUM:*			1332	*SUM:*			1332
VOLUME/CAPACITY *(V/C)* RATIO:				0.721			0.731				0.923				0.935				0.935
V/C LESS ATSAC/ATCS ADJUSTMENT:				**0.621**			**0.631**				**0.823**				**0.835**				**0.835**
LEVEL OF SERVICE (LOS):				**B**			**B**				**D**				**D**				**D**

REMARKS:

Version: 1i Beta; 8/4/2011

PROJECT IMPACT

Change in *v/c* due to project:	0.012	Δ*v/c* after mitigation:	0.012
Significant impacted?	NO	Fully mitigated?	N/A

Level of Service Worksheet
(Circular 212 Method)

I/S #:	North-South Street:	Corbin Avenue	Year of Count:	2013	Ambient Growth: (%):	1.5	Conducted by:	JO	Date:	10/4/2014
11	East-West Street:	Nordhoff Street / Way	Projection Year:	2019	Peak Hour:	PM	Reviewed by:		Project:	Chatsworth MGA

		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	MOVEMENT	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
	No. of Phases		3			3			3				3				3		
	Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0			0			0				0				0		
	Right Turns: FREE-1, NRTOR-2 or OLA-3?	NB-- 0 SB--	0		NB-- 0 SB--	0		NB-- 0 SB--	0			NB-- 0 SB--	0			NB-- 0 SB--	0		
		EB-- 0 WB--	0		EB-- 0 WB--	0		EB-- 0 WB--	0			EB-- 0 WB--	0			EB-- 0 WB--	0		
	ATSAC-1 or ATSAC+ATCS-2?		2			2			2				2				2		
	Override Capacity		0			0			0				0				0		
NORTHBOUND	Left	56	1	**56**	0	56	**56**	0	61	1	**61**	0	61	1	**61**	0	61	1	**61**
	Left-Through		0							0				0				0	
	Through	977	2	355	19	996	361	77	1145	2	414	19	1164	2	420	-1	1163	2	420
	Through-Right		1							1				1				1	
	Right	88	0	88	0	88	88	0	96	0	96	0	96	0	96	0	96	0	96
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
SOUTHBOUND	Left	63	1	63	0	63	63	43	112	1	112	0	112	1	112	0	112	1	112
	Left-Through		0							0				0				0	
	Through	1060	2	**530**	24	1084	**542**	32	1191	2	**596**	24	1215	2	**608**	-1	1214	2	**607**
	Through-Right		0							0				0				0	
	Right	138	1	15	0	138	15	0	151	1	8	0	151	1	8	0	151	1	8
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
EASTBOUND	Left	246	1	**246**	0	246	**246**	17	286	1	286	0	286	1	286	0	286	1	286
	Left-Through		0							0				0				0	
	Through	718	2	283	19	737	289	0	785	2	**393**	19	804	2	**402**	-1	803	2	**402**
	Through-Right		1							0				0				0	
	Right	131	0	131	0	131	131	0	143	1	113	0	143	1	113	0	143	1	113
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
WESTBOUND	Left	119	1	119	0	119	119	0	130	1	**130**	0	130	1	**130**	0	130	1	**130**
	Left-Through		0							0				0				0	
	Through	432	2	**158**	15	447	**163**	0	472	2	236	15	487	2	244	-1	486	2	243
	Through-Right		1							0				0				0	
	Right	41	0	41	0	41	41	0	45	1	0	0	45	1	0	0	45	1	0
	Left-Through-Right		0							0				0				0	
	Left-Right		0							0				0				0	
	CRITICAL VOLUMES	*North-South:*	586		*North-South:*	598		*North-South:*	657			*North-South:*	669			*North-South:*	668		
		East-West:	404		*East-West:*	409		*East-West:*	523			*East-West:*	532			*East-West:*	532		
		SUM:	990		*SUM:*	1007		*SUM:*	1180			*SUM:*	1201			*SUM:*	1200		
	VOLUME/CAPACITY *(V/C)* RATIO:		0.695			0.707			0.828				0.843				0.842		
	V/C LESS ATSAC/ATCS ADJUSTMENT:		**0.595**			**0.607**			**0.728**				**0.743**				**0.742**		
	LEVEL OF SERVICE (LOS):		**A**			**B**			**C**				**C**				**C**		

REMARKS:

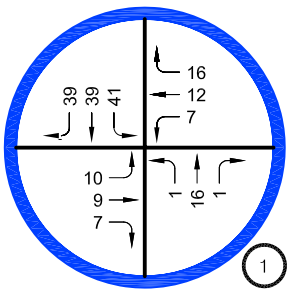
Version: 1i Beta; 8/4/2011

PROJECT IMPACT

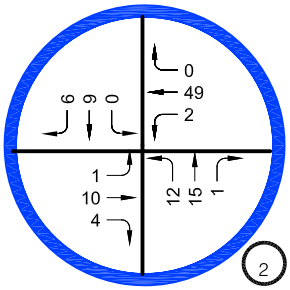
Change in *v/c* due to project:	0.015	Δ*v/c* after mitigation:	0.014
Significant impacted?	NO	Fully mitigated?	N/A

APPENDIX F

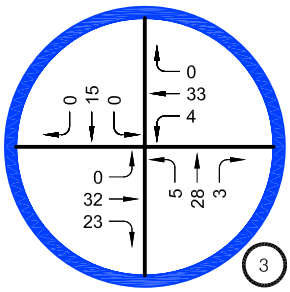
RELATED PROJECTS FLOW MAPS



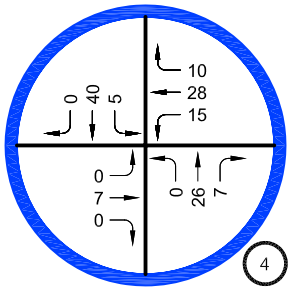
MASON AVE &
PLUMMER ST



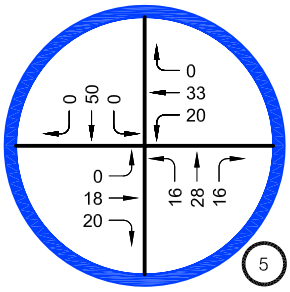
WINNETKA AVE &
LASSEN ST



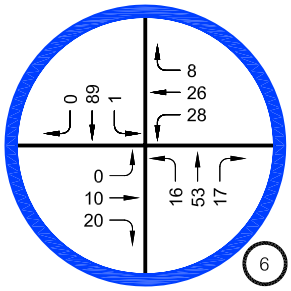
WINNETKA AVE &
PLUMMER ST



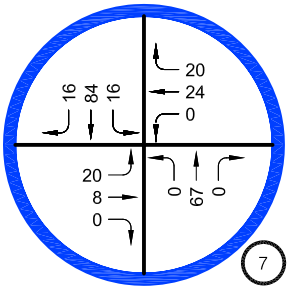
WINNETKA AVE &
PRAIRIE ST



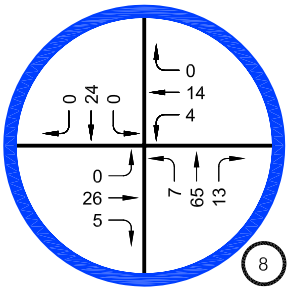
WINNETKA AVE &
NORDHOFF ST



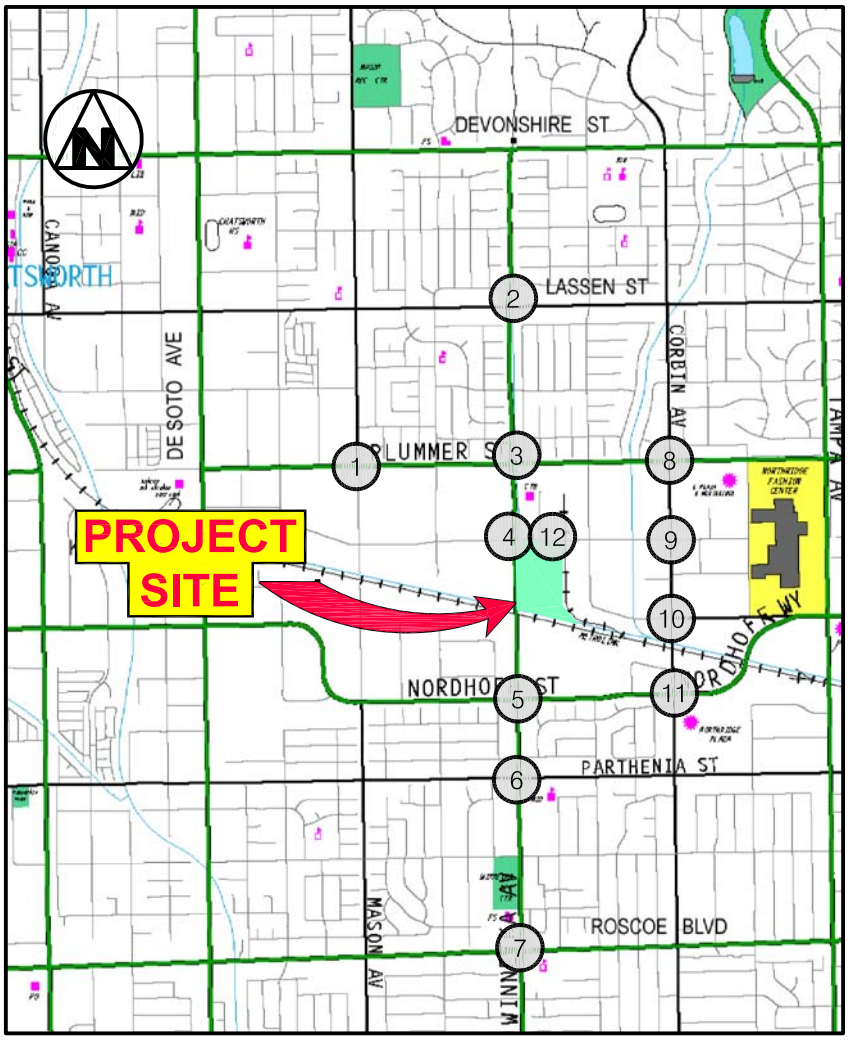
WINNETKA AVE &
PARTHENIA ST

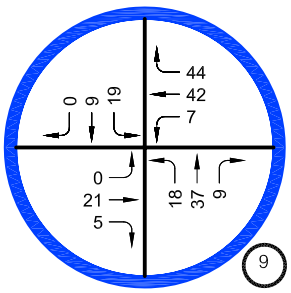


WINNETKA AVE &
ROSCOE BLVD

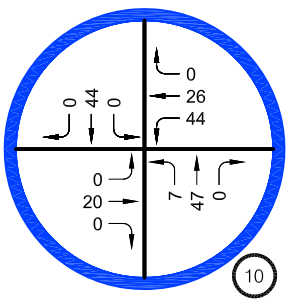


CORBIN AVE &
PLUMMER ST

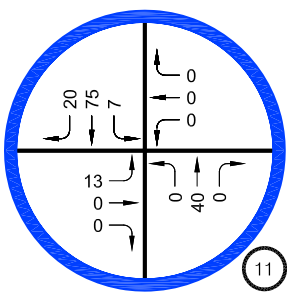




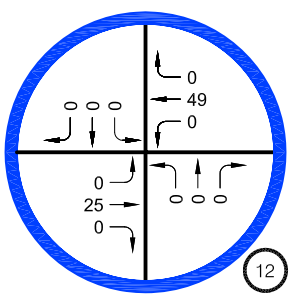
CORBIN AVE &
PRAIRIE ST



CORBIN AVE &
NORDHOFF PL



CORBIN AVE &
NORDHOFF ST / WAY

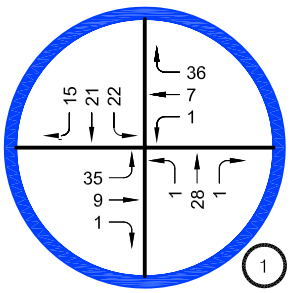


PENFIELD AVE &
PRAIRIE ST

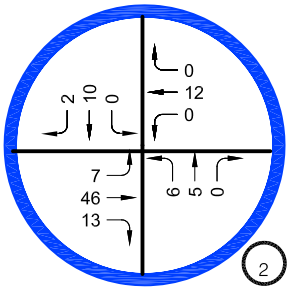
10/2014

RELATED PROJECT TRAFFIC VOLUME
AM PEAK HOUR

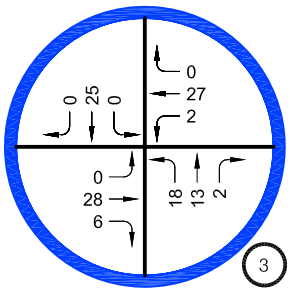
Overland Traffic Consultants, Inc.
24325 Main Street #202, Santa Clarita, CA 91321
(661)799-8423, OTC@overlandtraffic.com



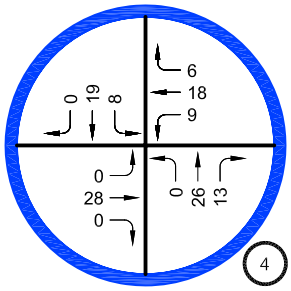
MASON AVE &
PLUMMER ST



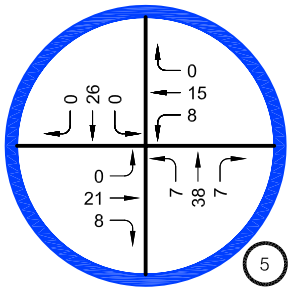
WINNETKA AVE &
LASSEN ST



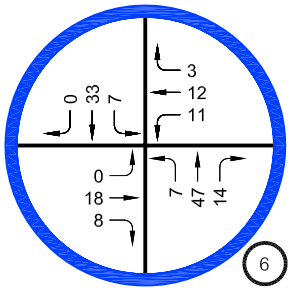
WINNETKA AVE &
PLUMMER ST



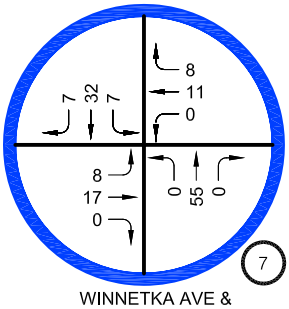
WINNETKA AVE &
PRAIRIE ST



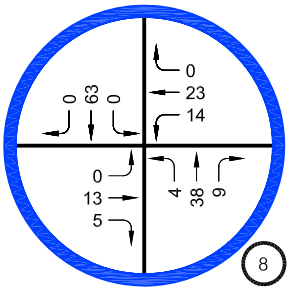
WINNETKA AVE &
NORDHOFF ST



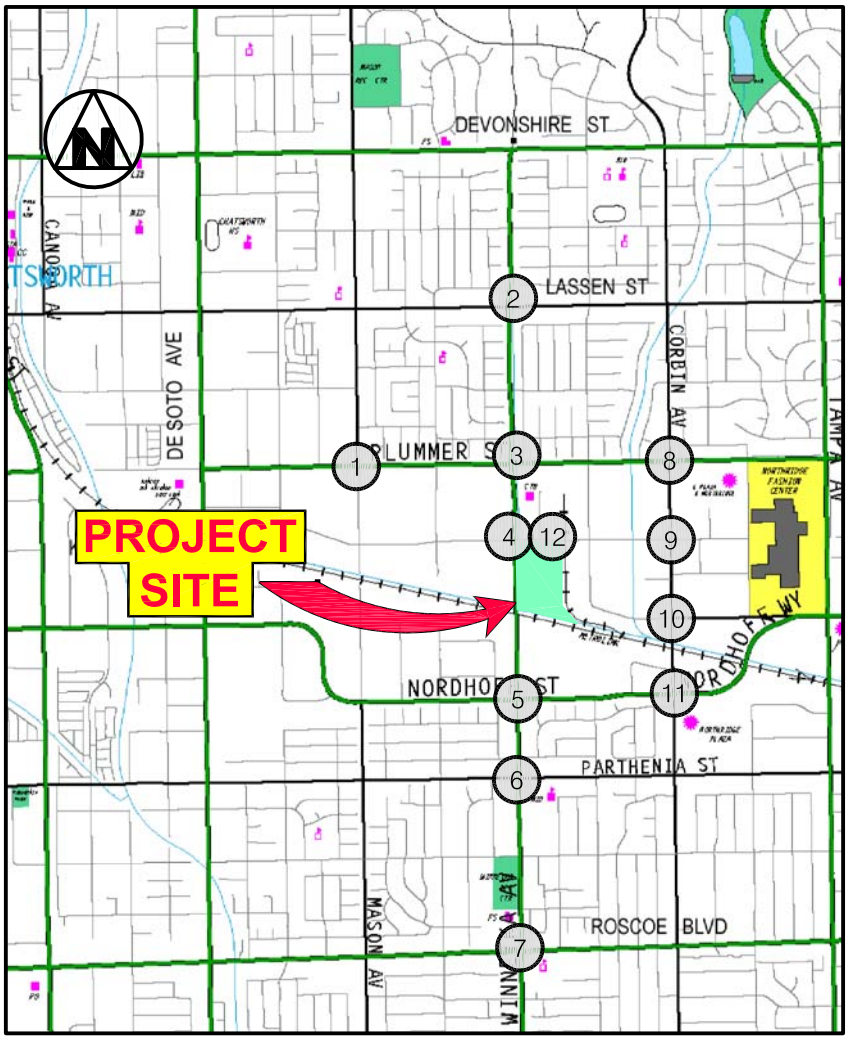
WINNETKA AVE &
PARTHENIA ST

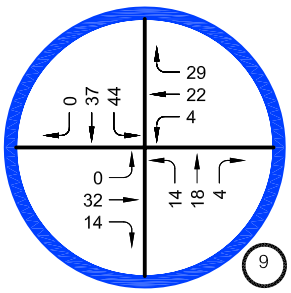


WINNETKA AVE &
ROSCOE BLVD

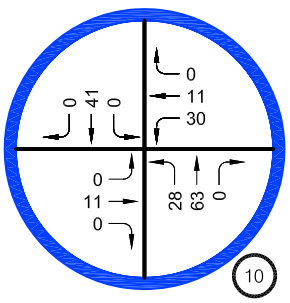


CORBIN AVE &
PLUMMER ST

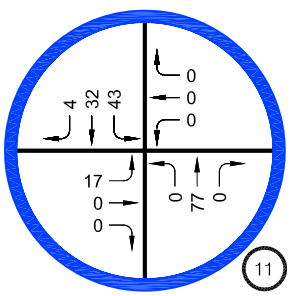




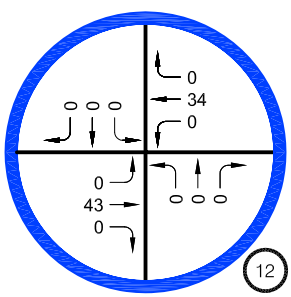
CORBIN AVE &
PRAIRIE ST



CORBIN AVE &
NORDHOFF PL



CORBIN AVE &
NORDHOFF ST / WAY



PENFIELD AVE &
PRAIRIE ST

10/2014

RELATED PROJECT TRAFFIC VOLUME
PM PEAK HOUR

Overland Traffic Consultants, Inc.
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(661)799-8423, OTC@overlandtraffic.com

APPENDIX G

PROJECT DRIVEWAY DATA

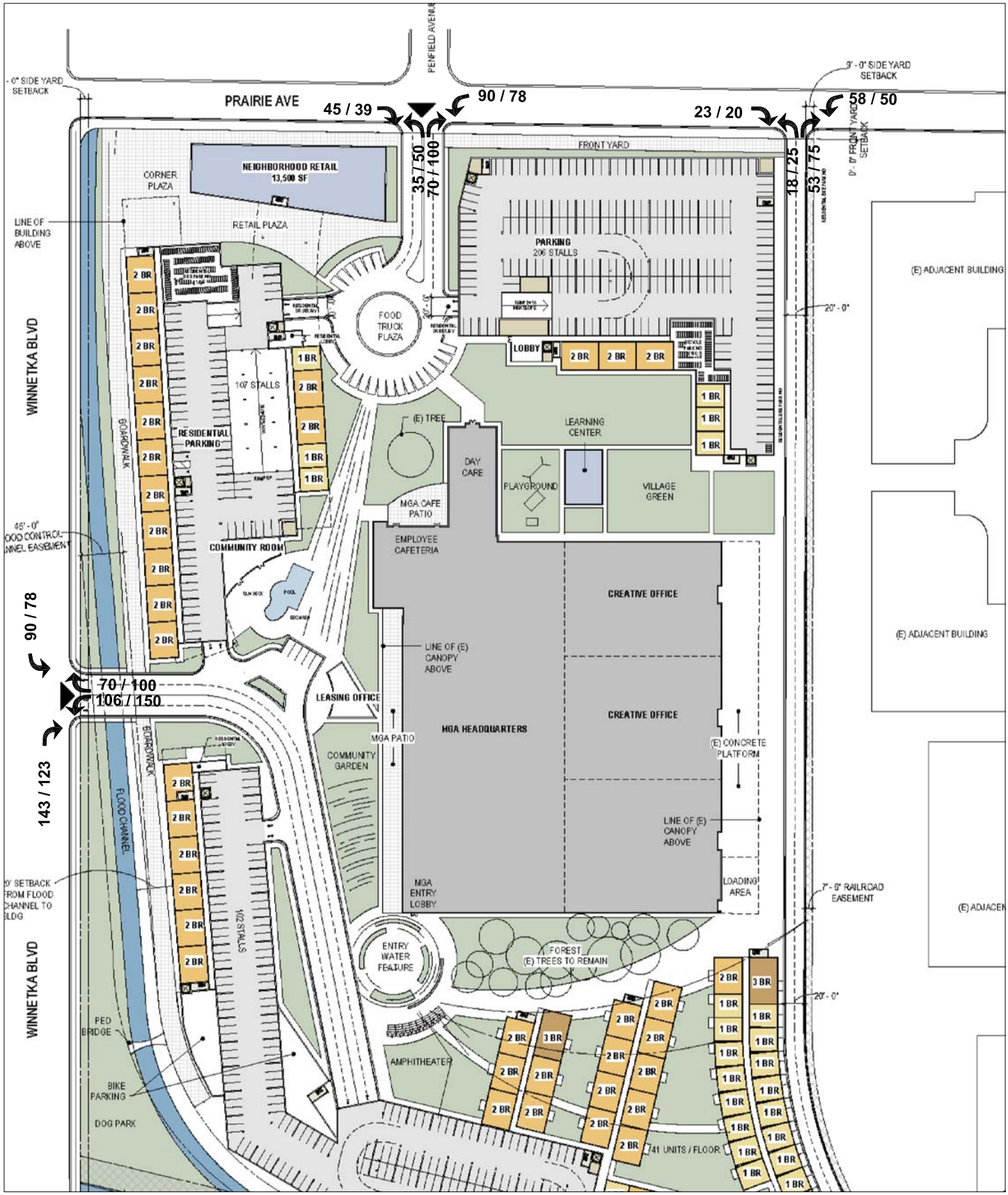

EXHIBIT G

1/2014

PEAK HOUR DRIVEWAY VOLUME
AM AND PM PROJECT TRAFFIC

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Appendix H

TRAFFIC SIGNAL WARRANT
FOR MGA WINNETKA AVENUE DRIVEWAY

The California Manual on Uniform Traffic Control Devices (MUTCD) is a document published by the State of California, Department of Transportation and issued to adopt uniform standards and specification for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code.

This California MUTCD incorporates Federal Highway Administration's MUTCD (FHWA) of the United States Department of Transportation (USDOT).

Traffic Signals

Warrant 3 - Peak Hour

The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor street traffic suffers undue delay when entering or crossing the major street.

Standard:

The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-muinute periods) of an average day:

1. The total stopped time delay experienced by the traffic on one minor street approach (one direction only) controlled by a stop sign equals or exceeds: 4 vehicle hours for a one lane approach; or 5 vehicles hours for a two lane approach, and
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

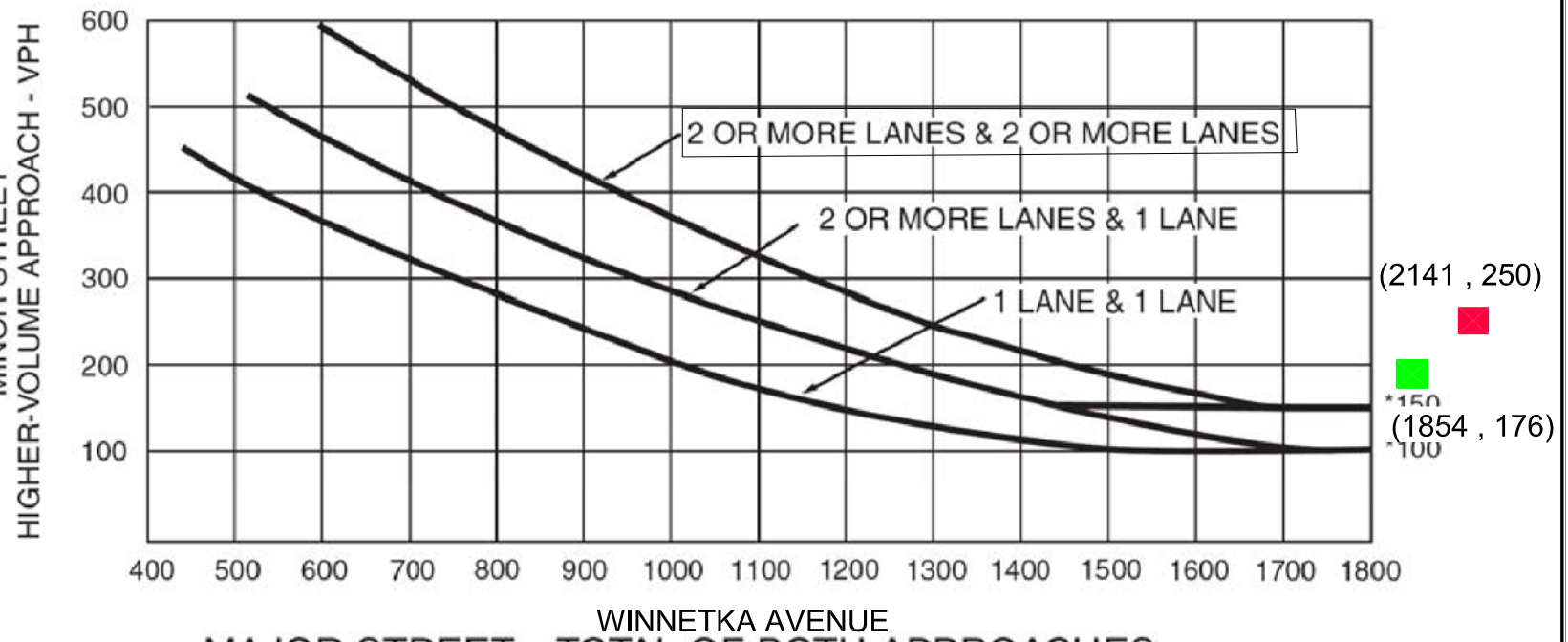
The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher volume minor street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.

WINNETKA AVENUE AND MGA DRIVEWAY
2019 Peak Hour Traffic Signal Warrant

EXHIBIT H2

Figure 4C-3. Warrant 3, Peak Hour

WINNETKA AVENUE AND MGA DRIVEWAY
FUTURE CUMULATIVE WITH PROJECT



MGA DRIVEWAY

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

WEEKDAY AM PEAK HOUR
WEEKDAY PM PEAK HOUR

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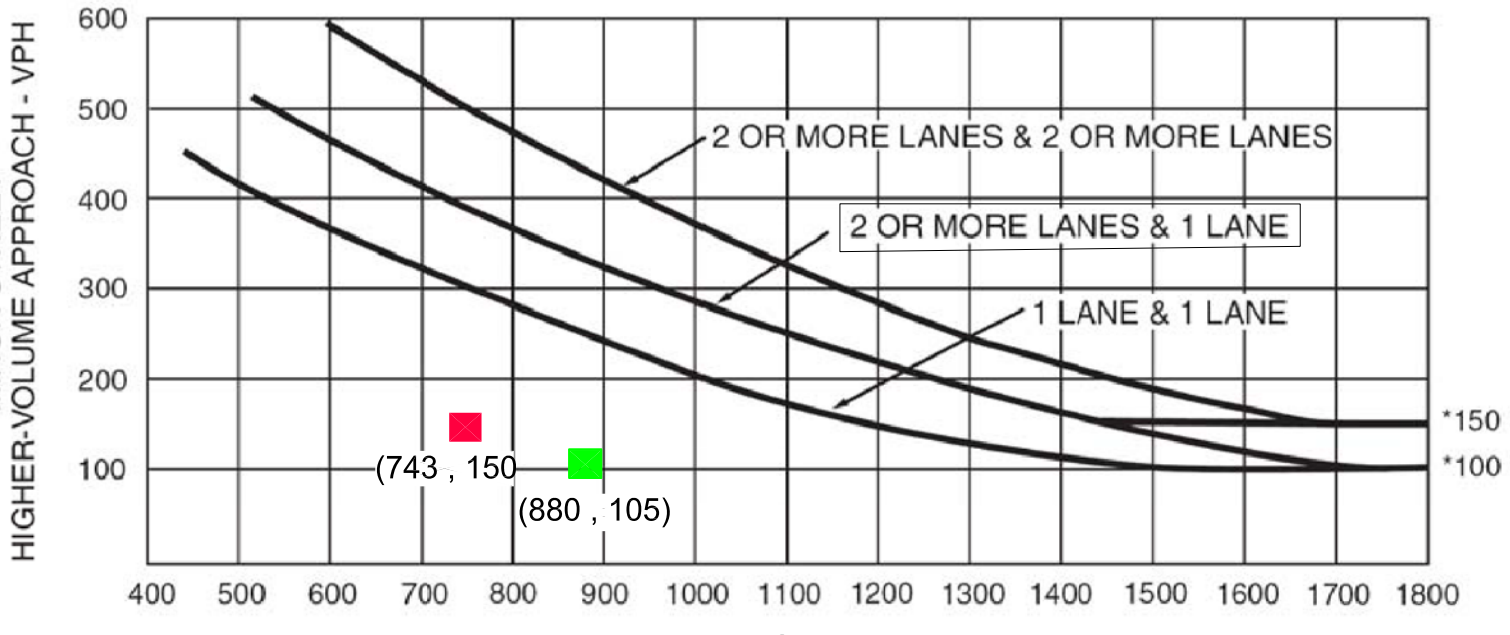
PRAIRIE STREET AND MGA DRIVEWAY
2019 Peak Hour Traffic Signal Warrant

EXHIBIT H1

MGA DRIVEWAY / PENFIELD AVENUE

Figure 4C-3. Warrant 3, Peak Hour

PRAIRIE STREET AND MGA DRIVEWAY
FUTURE CUMULATIVE WITH PROJECT



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

WEEKDAY AM PEAK HOUR
WEEKDAY PM PEAK HOUR

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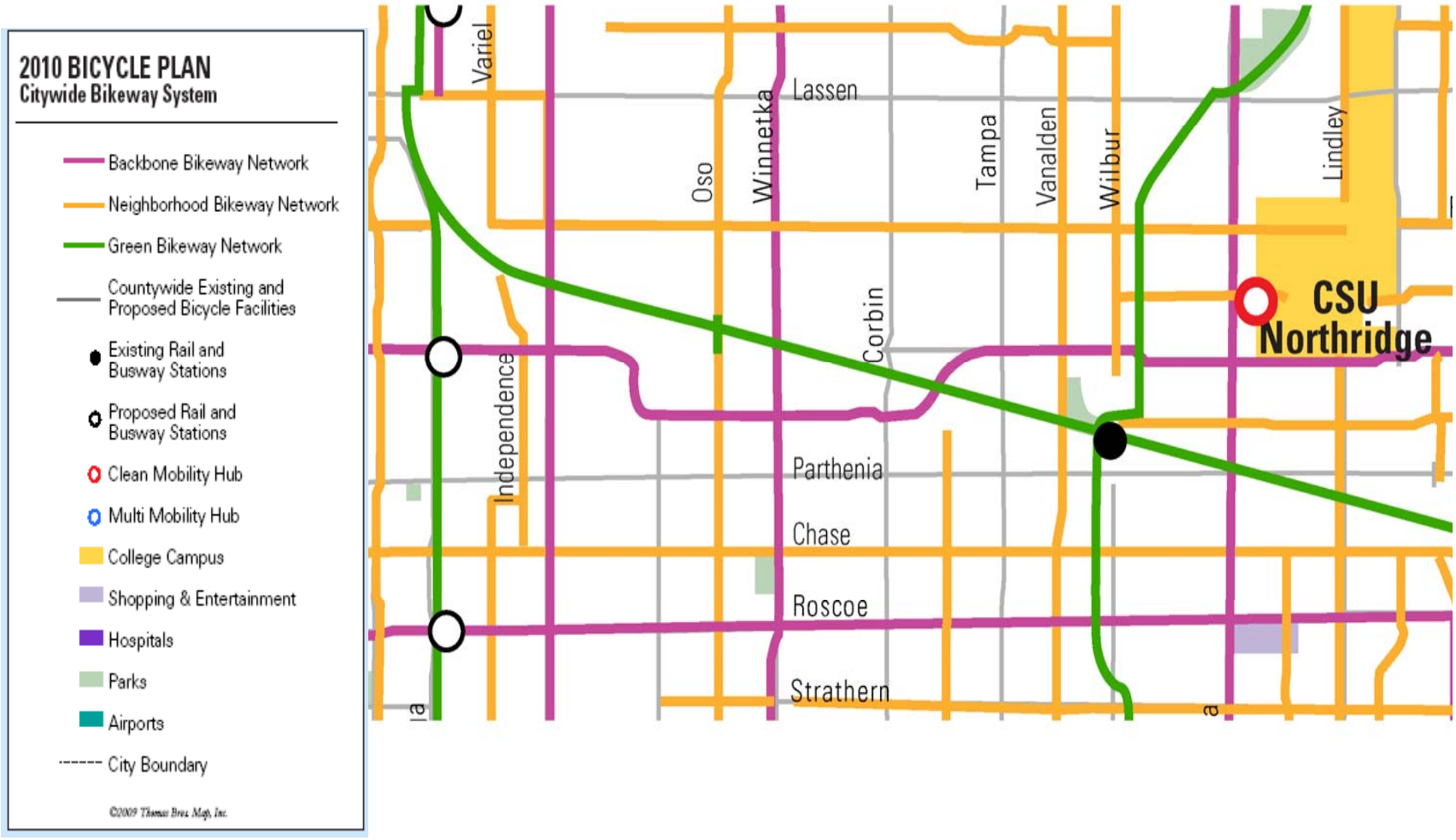
APPENDIX H

City Los Angeles 2010 Bicycle Plan Study Area Map


2010 BICYCLE PLAN
Citywide Bikeway System
Backbone Bikeway Network
Neighborhood Bikeway Network
Green Bikeway Network
Countywide Existing and Proposed Bicycle Facilities
Existing Rail and Busway Stations
Proposed Rail and Busway Stations
Clean Mobility Hub
Multi Mobility Hub
College Campus
Shopping & Entertainment
Hospitals
Parks
Airports
City Boundary
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Winnetka
Lassen
Tampa
Vanalden
Wilbur
Lindley
Corbin
Independence
CSU Northridge
Parthenia
Chase
Roscoe
Strathern