4.8 TRAFFIC, CIRCULATION, AND PARKING

INTRODUCTION

This section presents an overview of the existing traffic and circulation system in the Project area. It also discusses the potential impacts to traffic and circulation as a result of the implementation of the Project. Where significant and adverse impacts are identified, mitigation measures are recommended to reduce such impacts to less than significant levels to the extent possible. The section summarizes the findings of a traffic report prepared for the Project by Linscott, Law & Greenspan, Engineers (June 2010). A complete copy of the traffic report has been included in ***Appendix 4.8*** *of the Environmental Impact Report (EIR).*

EXISTING CONDITIONS

The assessment of existing conditions relevant to this study includes a description of the highway and street system, traffic volumes on these facilities, and operating conditions of analyzed intersections and public transit services.

Regional Highway System

Regional access in the project vicinity is provided by the Glendale (SR-2) Freeway, the Ventura (SR-134) Freeway and the Golden State (I-5) Freeway. A brief description of the freeways is provided in the following paragraphs.

Interstate 5

I-5 (Golden State) Freeway is a north-south oriented freeway that extends between northern and southern California. Five mainline travel lanes are provided in each direction on the I-5 Freeway in the Glendale area. Northbound and southbound on- and off-ramps are provided at Colorado Street/Colorado Boulevard, southwest of the project site.

State Route 134 (Ventura Freeway)

SR (State Route)-134 (Ventura) Freeway is an east-west oriented freeway that extends from the I-210 Freeway in Pasadena to the US 101 in North Hollywood. Four mixed-flow travel lanes and one high occupancy vehicle (HOV) lane are provided in each direction on the SR-134 Freeway in the Glendale area. Full interchanges are provided at Pacific Avenue, Central Avenue/Brand Boulevard, and Glendale Avenue/Monterey Road. The SR-134 Freeway ramps at Central Avenue and Brand Boulevard are connected by one-way connector roadways (Goode Avenue and Sanchez Drive). At Central Avenue, a westbound on-ramp and an eastbound off-ramp are provided in connection with the Goode Avenue and

Sanchez Drive freeway frontage roadways. At Brand Boulevard, a westbound off-ramp and an eastbound on-ramp are provided in connection with these two freeway frontage roadways. At Glendale Avenue, an eastbound off-ramp, a southbound to eastbound loop on-ramp and a northbound to eastbound diamond on-ramp are provided. A westbound on and off ramp is provided at Monterey Road.

State Route 2 (Glendale Freeway)

SR-2 (Glendale) Freeway is a north/south freeway that extends from just south of the I-5 Freeway near Echo Park to the south to just north of the I-210 Freeway near La Canada Flintridge to the north. The northerly terminus of the freeway occurs at Foothill Boulevard. At Colorado Street, a partial diamond interchange provides a southbound on-ramp and a northbound off-ramp.

Local Street System

Immediate access to the project site is via Broadway and Maryland Avenue. The following six study intersections were selected for analysis by City of Glendale Traffic & Transportation Division staff in order to determine potential impacts related to the proposed project:

1. Brand Boulevard/Broadway
2. Brand Boulevard/Harvard Street
3. Maryland Avenue/Broadway
4. Maryland Avenue/Harvard Street
5. Louise Street/Broadway
6. Louise Street/Harvard Street

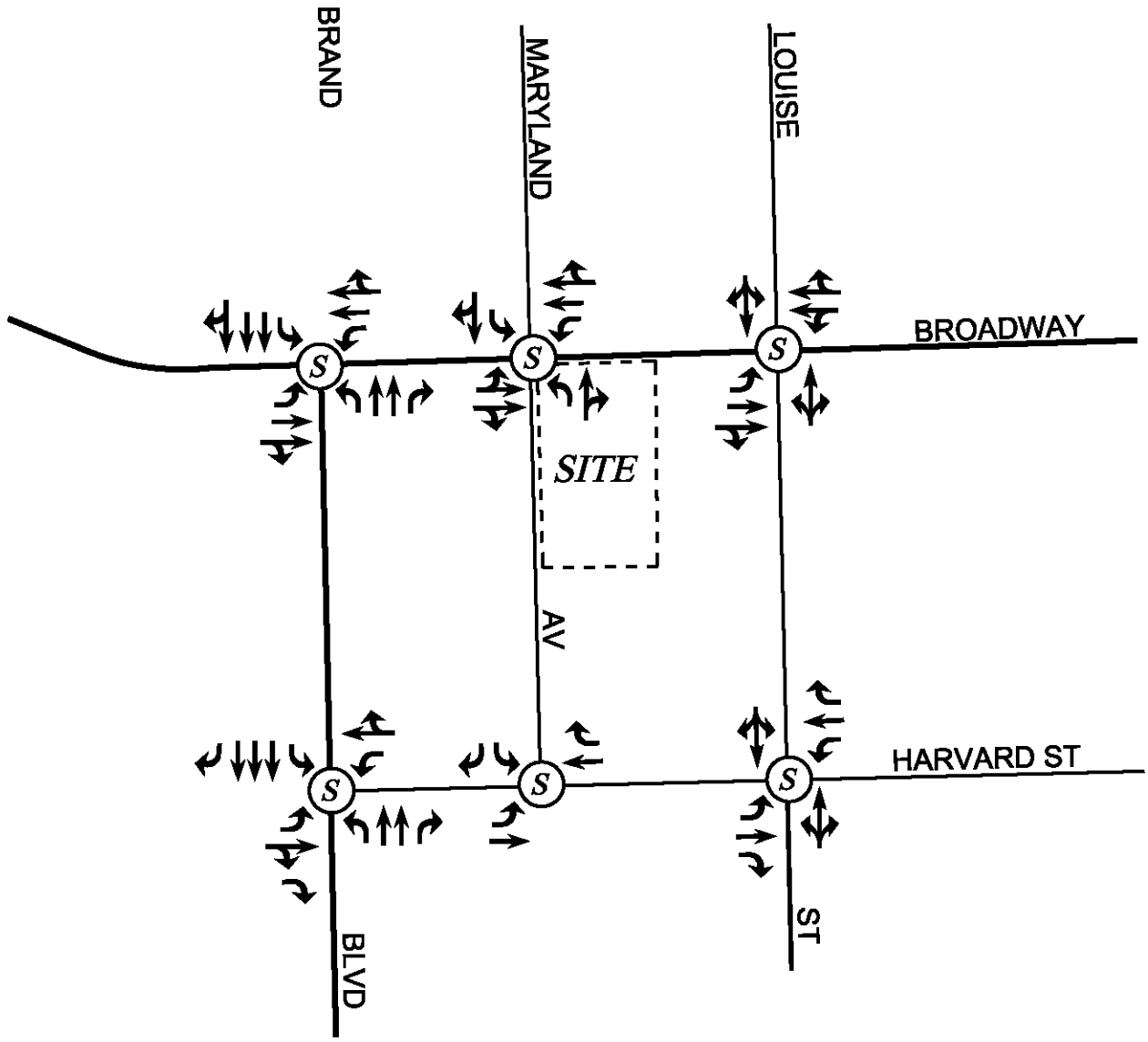
All of the study intersections selected for analysis are currently controlled by traffic signals. The existing lane configurations at the six study intersections are shown in **Figure 4.8-1, Existing Lane Configurations**.

Roadway Descriptions

A brief description of the important roadways in the project site vicinity is provided below.

Brand Boulevard

Brand Boulevard is a north-south oriented roadway that is located west of the project site. Brand Boulevard is designated as a Major Arterial between Glenoaks Boulevard and the southerly City



Legend:

(S) SIGNALIZED INTERSECTION

NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-1**

Existing Lane Configurations

boundary in the Circulation Element of the City of Glendale General Plan. Three through travel lanes are provided in the southbound direction and two through travel lanes are provided in the northbound direction in the project vicinity. Exclusive left-turn lanes are provided in both directions at the major intersections in the project vicinity. Exclusive right-turn lanes are provided at various major intersections in the project vicinity. Two-hour angled and parallel parking is generally provided along both sides of Brand Boulevard between the hours of 6:00 AM and 10:00 PM, except near the SR-134 Freeway ramp intersections. Brand Boulevard is posted for a speed limit of 25 miles per hour within the study area.

Maryland Avenue

Maryland Avenue is a north-south oriented roadway that borders the project site on the west. Maryland Avenue is designated as an Urban Collector in the Circulation Element of the City of Glendale General Plan. One through travel lane is provided in each direction in the project vicinity. Exclusive left-turn lanes are provided in both directions at the major intersections in the project vicinity. Curbside parking is prohibited on both sides of Maryland Avenue. Maryland Avenue is posted for a speed limit of 25 miles per hour within the study area.

Louise Street

Louise Street is a north-south oriented roadway that is located east of the project site. Louise Street is designated as an Urban Collector between Glenoaks Boulevard and Colorado Street in the Circulation Element of the City of Glendale General Plan. One through travel lane is provided in each direction in the project vicinity. Two-hour metered parking is generally provided along both sides of Louise Street between the hours of 9:00 AM and 6:00 PM. There is no posted speed limit on Louise Street in the project vicinity, thus it is assumed to be a prima-facie speed limit of 25 miles per hour, consistent with the State of California Vehicle Code.

Broadway

Broadway is an east-west oriented roadway that is located immediately north of the project site. Broadway is designated as a Minor Arterial in the Circulation Element of the City of Glendale General Plan. Two through travel lanes are generally provided in the each direction in the project vicinity. Exclusive left-turn lanes are provided in both directions at the major intersections in the project vicinity. Curbside parking is prohibited on both sides of Broadway. There is no posted speed limit on Broadway in the project vicinity, thus it is assumed to be a prima-facie speed limit of 25 miles per hour, consistent with the City of Glendale Municipal Code.

Harvard Street

Harvard Street is an east-west oriented roadway that is located south of the project site. Harvard Street is designated as an Urban Collector in the Circulation Element of the City of Glendale General Plan. One through travel lane is generally provided in the each direction in the project vicinity. Exclusive left-turn lanes are provided in both directions at the major intersections in the project vicinity. Two-hour metered parking is generally provided along both sides of Louise Street between the hours of 6:00 AM and 10:00 PM. There is no posted speed limit on Harvard Street in the project vicinity, thus it is assumed to be a prima-facie speed limit of 25 miles per hour, consistent with the State of California Vehicle Code.

Existing Public Bus Transit Service

Public bus transit service in the project vicinity is currently provided by the Metropolitan Transportation Authority (MTA) and the City of Glendale Beeline.

MTA Metro Bus Transit Services

MTA provides bus transit service along major roadways within the project vicinity. MTA operates seven local Metro Bus transit routes and one Metro Rapid transit route in the vicinity of the project site. Most of the MTA bus transit routes provide headways of two to six buses per hour during the morning and afternoon peak hours.

City of Glendale Bus Transit Services

The City of Glendale provides bus transit service within the study area with its Beeline shuttle bus service. In the traffic analysis study area, Glendale Beeline service is provided along Brand Boulevard and Central Avenue. Glendale Beeline also provides express service to the Glendale Transportation Center (GTC) along Brand Boulevard. Glendale Beeline operates five local transit routes in the immediate vicinity of the project site. Most of the Beeline transit routes provide headways of three to four buses per hour during the morning and afternoon peak hours.

The closest Glendale Beeline service to the project site is provided via Beeline Routes 1, 2, 3 and 4 with stops located no more than one block from the project site. Based on the *Glendale Beeline 2009 Line-by-Line Analysis Final Report*, prepared by Dan Boyle & Associates, Inc., systemwide over 70 percent of all riders report walking to the bus stop to access the transit system and over 80 percent of passengers walk to their final destination. This study also includes maps for each route which include an overlay of the Residential Transit Orientation Index (RTOI). The RTOI was designed to measure the orientation towards transit use based on demographic characteristics such as income, zero-vehicle households, population

density, among others. The area of the proposed project is classified as being within a census block of "very high" transit orientation and thus, transit use is most likely to occur.

Further, as shown in Figure 1-5 of the *Glendale Downtown Mobility Study* (Car Ownership in the Downtown Area), it was determined that 20 percent of downtown residents do not own vehicles. Thus, the project's trip generation forecast, reflects the above characteristics of the downtown area.

Congestion Management Program

The Congestion Management Program (CMP) is a state-mandated program that was enacted by the State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system.

CMP Intersections

There are no CMP intersection monitoring locations in the project vicinity. The CMP TIA guidelines require that intersection monitoring locations must be examined if the proposed project will add 50 or more trips during either the AM or PM weekday peak periods.

CMP Freeways

The following CMP freeway monitoring locations in the project vicinity have been identified:

- CMP Station: No. 1005 Segment: I-5 Freeway south of Colorado Boulevard Extension
- CMP Station: No. 1055 Segment: SR-134 Freeway east of Central Avenue

Level of Service Methodology

Intersections

In the City of Glendale, the technique used to assess the operation of a signalized intersection is known as the Intersection Capacity Utilization (ICU) method. This method determines volume-to-capacity (v/c) ratios on a critical lane basis. The overall intersection v/c ratio is subsequently assigned a level of service (LOS) value to describe intersection operations. Level of service varies from LOS A (free flow) to LOS F (jammed condition). LOS definitions for signalized intersections are provided in **Table 4.8-1, Level of Service Definitions for Signalized Intersections**.

Table 4.8-1
Level of Service Definitions for Signalized Intersections

LOS	Description	Volume/Capacity Ratio
A	Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.000–0.600
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.	0.601–0.700
C	Level of service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	0.701–0.800
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.801–0.900
E	Level of Service E is considered the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent.	0.901–1.000
F	Level of Service F is considered unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	>1.000

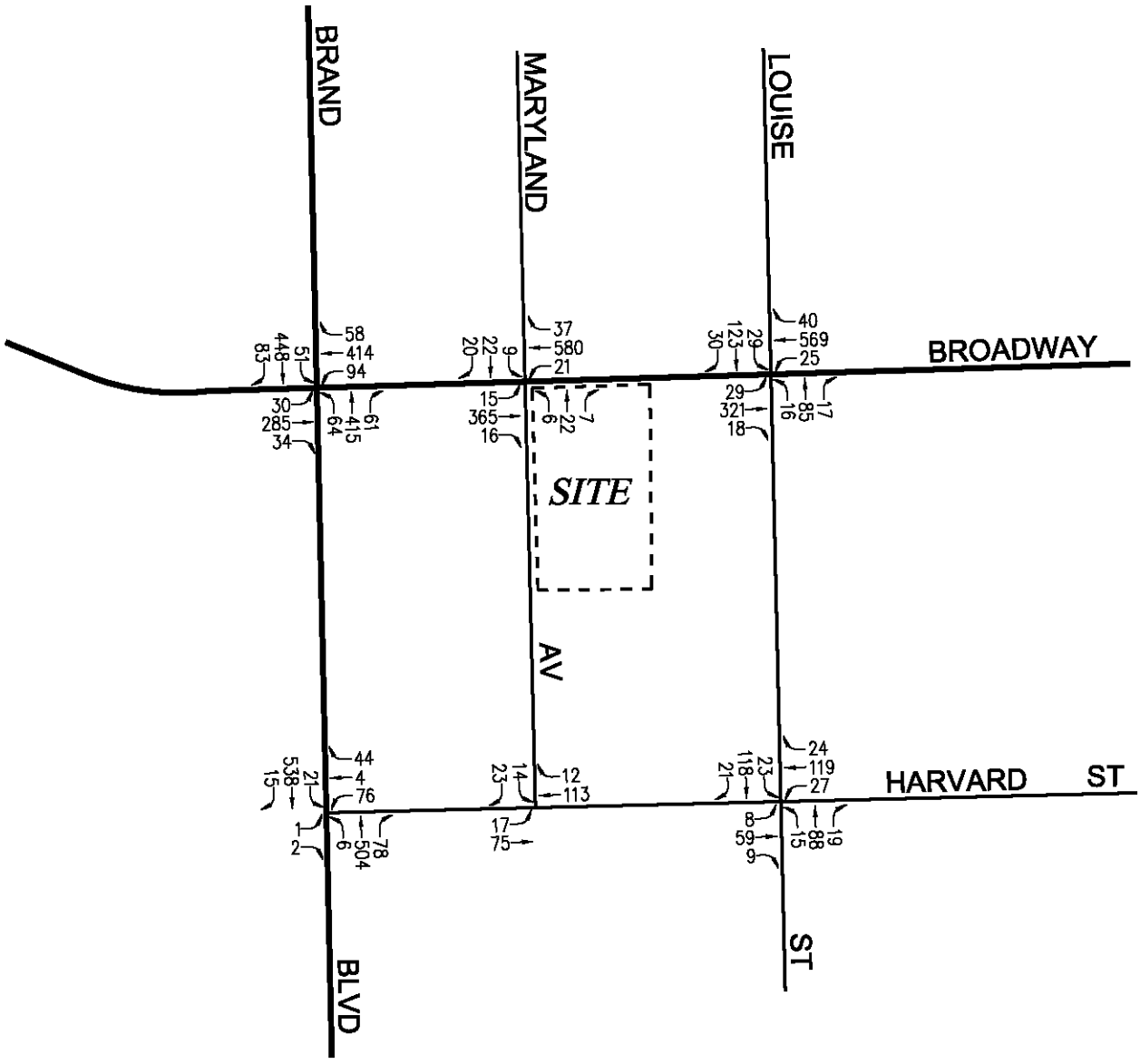
Linscott, Law & Greenspan, Engineers.

Existing Traffic

Traffic Counts

Manual traffic counts of vehicular turning movements were conducted at each of the six study intersections during the weekday morning and afternoon commuter periods to determine the peak hour traffic volumes. Traffic volumes at the study intersections show the typical peak periods between 7:00 and 9:00 AM generally associated with the peak morning commuter hours, and 4:00 and 6:00 PM generally associated with the afternoon commuter hours. These periods are generally associated with peak commuter hours in the Metropolitan Los Angeles area, including the City of Glendale.

The peak period manual traffic counts were conducted at the study intersections in early May 2010. It should be noted that schools were in session when the traffic counts were conducted. The existing traffic volumes on area roadways are shown in **Figure 4.8-2, Existing Average Daily Traffic Volumes AM Peak Hour** and **Figure 4.8-3, Existing Average Daily Traffic Volumes PM Peak Hour.**

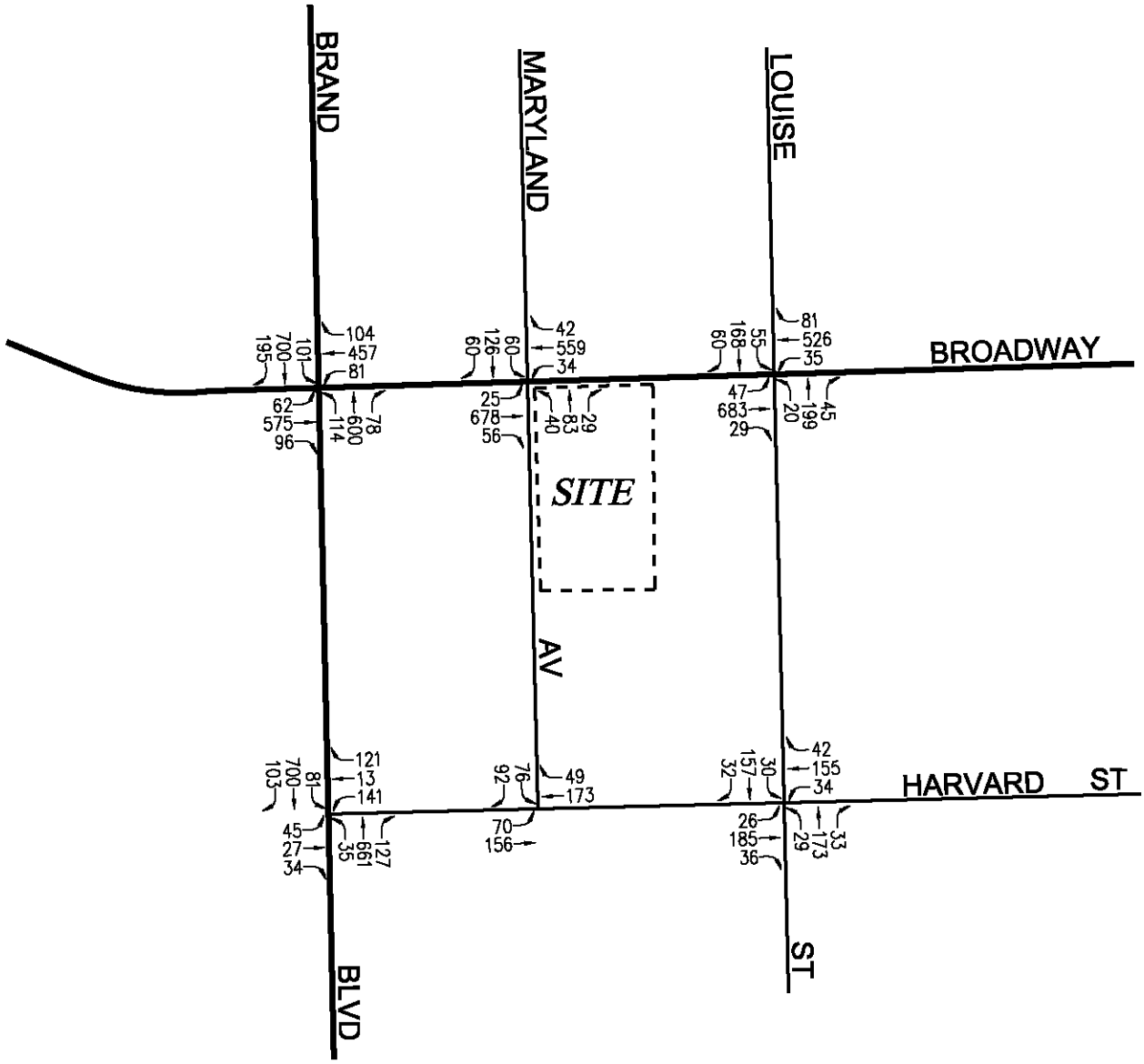


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-2**

Existing Average Daily Traffic Volumes AM Peak Hour



NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-3**

Existing Average Daily Traffic Volumes PM Peak Hour

Intersections

The existing LOS for study area intersections are based upon manual morning and afternoon peak hour intersection turning-movement counts conducted in 2010.

As indicated in **Table 4.8-2, Existing Weekday Volume-to-Capacity Ratios and Levels of Service**, all six study intersections are presently operating at LOS D or better during the AM and PM peak hours under existing conditions.

Table 4.8-2
Existing Weekday Volume-to-Capacity Ratios and Levels of Service

No.	Intersection	Peak Hour	V/C Ratio	Level of Service
1	Brand Boulevard/Broadway	AM	0.428	A
		PM	0.618	B
2	Brand Boulevard/Harvard Street	AM	0.319	A
		PM	0.473	A
3	Maryland Avenue/Broadway	AM	0.328	A
		PM	0.500	A
4	Maryland Avenue/Harvard Street	AM	0.196	A
		PM	0.309	A
5	Louise Street/Broadway	AM	0.440	A
		PM	0.533	A
6	Louise Street/Harvard Street	AM	0.290	A
		PM	0.403	A

Linscott, Law & Greenspan, Engineers.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

The following thresholds for determining the significance of impacts related to transportation/traffic are contained in the environmental checklist form in Appendix G of the most recent update of the *California Environmental Quality Act (CEQA) Guidelines*. The *State CEQA Guidelines* state that a significant impact would occur if the Project would:

- cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections);

- exceed, either individually or cumulatively, a Level of Service standard established by the county congestion management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**);
- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- result in inadequate emergency access;
- result in inadequate parking capacity; or
- conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**).

City of Glendale

According to the City's criteria for calculating the level of impact due to traffic generated by the proposed project, a significant transportation impact is determined based on the criteria presented in **Table 4.8-3, City of Glendale Intersection Impact Threshold Criteria**.

Table 4.8-3
City of Glendale Intersection Impact Threshold Criteria

Final v/c	Level of Service	Project-Related Increase in v/c
>0.800-0.900	D	Equal to or greater than 0.020
>0.900-1.000	E	Equal to or greater than 0.020
>1.000	F	Equal to or greater than 0.020

Linscott, Law & Greenspan, Engineers.

Congestion Management Program

In addition, freeway and intersection monitoring locations have been evaluated in accordance with the standards included in the *2004 Congestion Management Program for Los Angeles County*. A significant impact on the freeway system or intersection monitoring location is defined as follows:

- A significant impact occurs when the Project increases traffic demand on a CMP facility by 2 percent of capacity (v/c greater than or equal to 0.02), causing or worsening LOS F (v/c > 1.00); if the facility is already LOS F, a significant impact occurs when the Project increases traffic demand on a CMP facility by 2 percent of capacity (v/c greater than or equal to 0.02).

The CMP document also states the following:

- "Calculation of LOS based on D/C ratios is a surrogate for the speed-based LOS used by Caltrans for traffic operational analysis. LOS F(1) through F(3) designations are assigned where severely congested (less than 25 mph) conditions prevail for more than 1 hour, converted to an estimate of peak hour demand in the table above. Note that calculated LOS F traffic demands may therefore be greater than observed traffic volumes."

Project Traffic

Trip Generation

Traffic volumes expected to be generated by the project during the AM and PM peak hours, as well as on a daily basis, were estimated using rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual, 8th Edition, 2008. ITE Land Use Code 230 (Apartment) trip generation rates were used to forecast traffic volumes expected to be generated by the residential component of the proposed project. ITE Land Use Code 932 (High-Turnover [Sit-Down] Restaurant) trip generation rates were used to forecast traffic volumes expected to be generated by the restaurant use proposed to occupy the ground floor of the development.

In consultation with the City of Glendale Traffic & Transportation Division, adjustments were made to the vehicular trip generation forecast to account for pass-by trips, walk-in trips, transit trips, and internal capture trips associated with the residential and commercial components due to the urban/downtown location of the project site. The project's location encourages these types of travel modes as an alternative to the private automobile. It should be noted that trip credits for the vacant Circuit City building were not included in the Broadway Lofts trip generation forecasts so as to provide a conservative analysis of potential traffic impacts.

Table 4.8-4, Trip Generation, exhibits the ITE land use codes for trip generation purposes, project peak hour volumes, and project daily traffic volumes. The traffic generation forecast for the Project is summarized in **Table 4.8-4**. As presented in **Table 4.8-4**, the proposed project is expected to generate 251 net new vehicle trips (110 inbound trip and 141 outbound trips) during the AM peak hour. During the PM peak hour, the proposed project is expected to generate 260 net new vehicle trips (158 inbound trips and 102 outbound trips). Over a 24-hour period, the proposed project is forecasted to generate 2,918 net new daily trip ends during a typical weekday (1,459 inbound trips and 1,459 outbound trips).

Table 4.8-4
Trip Generation[1]

Land Use	Size	Volumes[2]	AM Peak Hour Volumes[2]			PM Peak Hour Volumes[2]		
			In	Out	Total	In	Out	Total
Apartment [3]	248 du	1,649	25	101	126	100	54	154
Less 50% [4]		(825)	(13)	(51)	(64)	(50)	(27)	(77)
Apartment Subtotal	-	825	12	50	62	50	27	77
Restaurant/Entertainment [5]	12,585 sf	1,600	75	70	145	83	57	140
Less 25% [6]		(400)	(19)	(18)	(37)	(21)	(14)	(35)
Restaurant/Entertainment Subtotal	-	1,200	56	52	108	62	43	105
Restaurant [5]	14,057 sf	1,787	84	78	162	93	64	157
Less 50% [6]		(894)	(42)	(39)	(81)	(47)	(32)	(79)
Restaurant Subtotal	-	894	42	39	81	46	32	78
Total	-	2,918	110	141	251	158	102	260

Linscott, Law & Greenspan, Engineers, 2010.

[1] *ITE "Trip Generation," 8th Edition, 2008*

[2] *Trips are one-way traffic movements, entering or leaving.*

[3] *ITE Land Use Code 220 Apartment*

[4] *Trip reduction to reflect the studio apartment characteristics including walk-in/transit/internal capture trips based on a review of transit availability, the project characteristics, the characteristics, the characteristics of the surrounding project area, and construction with the City of Glendale Traffic and Transportation Division staff.*

[5] *ITE Land Use Code 932 High-Turnover (sit-down) Restaurant*

[6] *Trip reduction to reflect the pass-by trip characteristics of a restaurant, as well as walk-in/transit/internal capture trips based on a review of transit availability, the project characteristics, the characteristics, the characteristics of the surrounding project area, and construction with the City of Glendale Traffic and Transportation Division staff.*

Trip Distribution

The principal ingress routes for the project site were determined based on the accessibility via the nearby freeway ramp system and appropriate arterial routes. Principal freeway routes in the City of Glendale include the SR-134 (Ventura) Freeway, SR-2 (Glendale) Freeway and the I-5 (Golden State) Freeway. The project site is also situated within an area that provides desirable access via arterial streets surrounding the site. Key arterials providing access to the project study area include: Brand Boulevard, Broadway, Colorado Street, Glendale Boulevard, and Central Avenue.

Two traffic distribution patterns were developed and based on the proposed project residential and commercial land uses, the planned site access scheme, existing traffic patterns, characteristics of the surrounding roadway system, and nearby population and employment centers. The residential traffic distribution pattern, as shown on Figure 8-1 in the traffic study located in **Appendix 4.8** of the Draft EIR,

(particularly at intersections near the project site) was determined based on the on-site access associated with the residential tenants of the proposed project. The proposed residential guests and commercial land use patrons, visitors and employees will park within the City's existing Marketplace public parking structure. The commercial/residential guest traffic distribution pattern, as shown on Figure 8-2 in the traffic study located in **Appendix 4.8** of the Draft EIR, was developed based on the existing access scheme associated with the Marketplace public parking structure. The residential and commercial/residential guest trip distribution patterns developed for the proposed project were developed in consultation with to the City's Traffic & Transportation Division staff.

The forecast project traffic volumes at the study intersections for the AM and PM peak hours are displayed in **Figure 4.8–4, Project Traffic Volumes AM Peak Hour** and **Figure 4.8–5**, **Project Traffic Volumes PM Peak Hour,** respectively.

Related Project Traffic

A forecast of on-street traffic conditions prior to occupancy of the proposed project was prepared by incorporating the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the proposed project can be evaluated within the context of the cumulative impact of all ongoing development. The list of related projects was based on information on file at the City of Glendale Planning Department, Glendale Redevelopment Agency staff, as well as recently accepted traffic impact analysis reports prepared for projects in the vicinity of the proposed Broadway Lofts project site. The list of related projects in the project site area is presented in **Section 4.0**. Traffic volumes expected to be generated by the related projects were calculated using rates provided in the ITE *Trip Generation* manual. The related projects trip generation is located in the traffic study located in **Appendix 4.8** of the Draft EIR.

Ambient Traffic Growth

In order to account for area-wide regional growth not included herein as a related project, the existing traffic volumes were increased at an annual rate of 1 percent to the year 2012 (i.e., the anticipated year of project buildout). A review of the background traffic growth estimates for the San Fernando Valley published in the 2004 Congestion Management Program for Los Angeles County, indicate a 1 percent increase per year between 1998 and 2012. Thus, the annual growth rate of 1 percent increase per year to the year 2012 is consistent and appropriate. Application of this ambient growth factor in addition to the forecast traffic generated by the related projects allows for a conservative forecast of future traffic volumes in the project study area.

Impact Analysis

Each applicable threshold of significance is listed below followed by analysis of the significance of any potential impacts and the identification of mitigation measures that would lessen or avoid potential impacts. Finally, the significance of potential impacts after implementation of all identified mitigation measures is presented.

Threshold: **Would the project cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?**

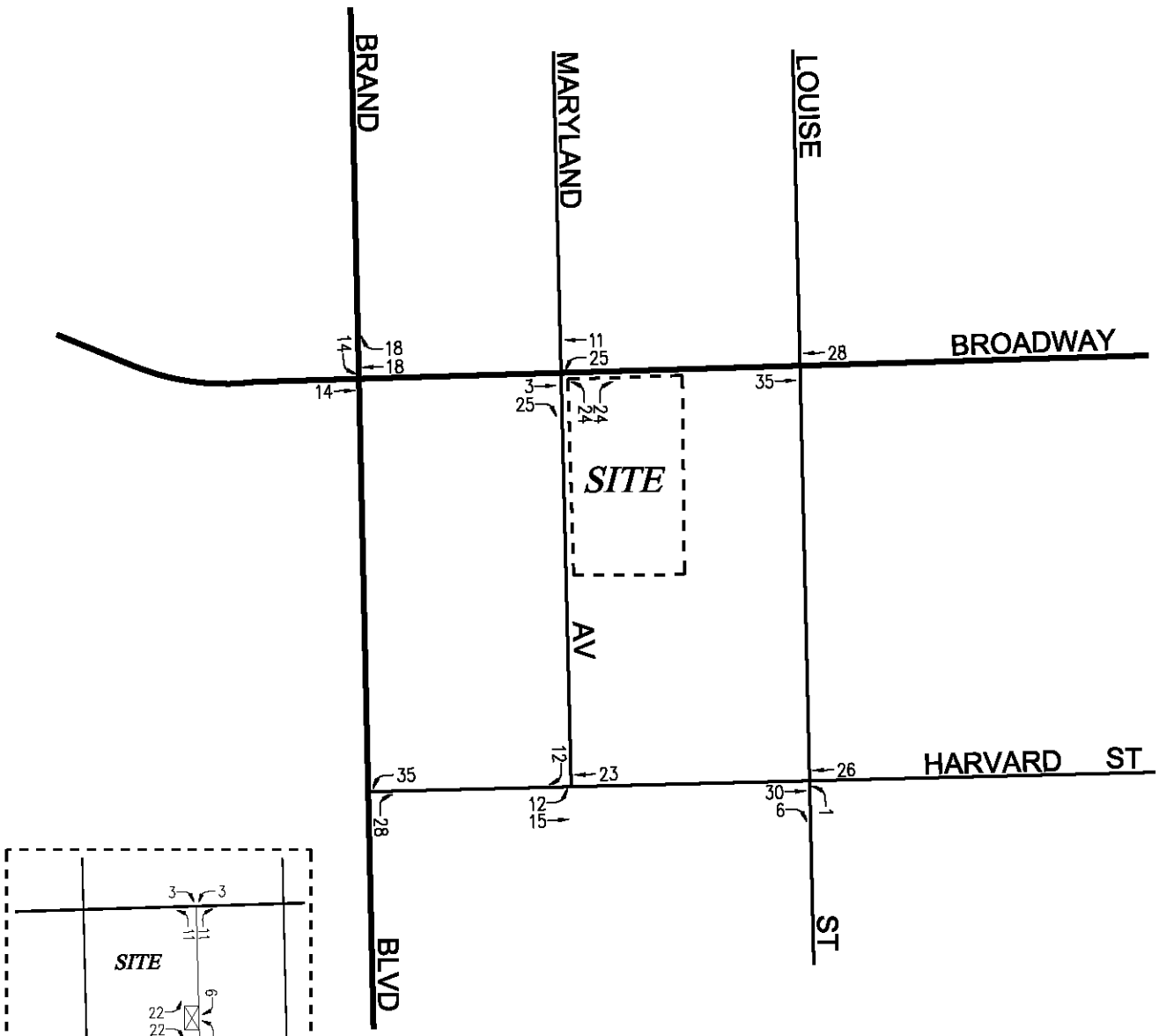
Construction Impacts

Project construction would generate traffic from construction worker travel, as well as the arrival and departure of trucks delivering construction materials to the site and the removal of debris generated by on-site demolition activities and excavation. Both the number of construction workers and trucks would vary throughout the construction process in order to maintain a reasonable schedule of completion.

Overview of Construction Phases

The construction of the project would consist of several main construction work efforts: Demolition/Excavation/Site Grading, Building Construction and Building Finishing. The total construction period would last approximately 22 months within four general periods or phases of construction. The following provides a general overview of the various phases of construction:

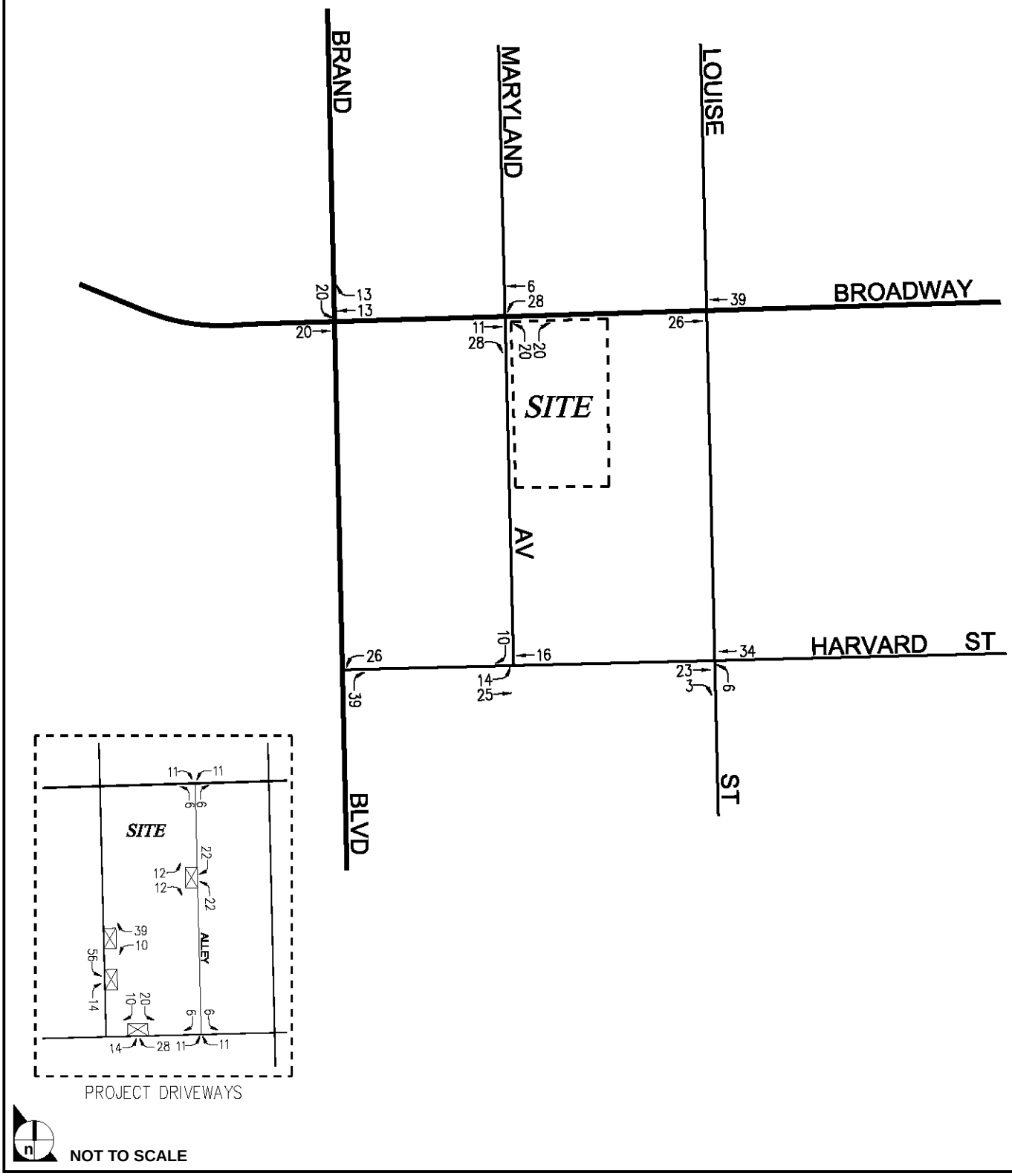
- Phase 1 (November 2010 through March 2011) consists of demolition/excavation/site grading and the start of sub-grade construction.
- Phase 2 (April 2011 through August 2011) consists of sub-grade construction and building construction.
- Phase 3 (September 2011 through February 2012) consists of building construction.
- Phase 4 (March 2012 through August 2012) consists of the last phase of building construction and architectural coatings.



SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-4**

Project Traffic Volumes AM Peak Hour



SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-5**

Project Traffic Volumes PM Peak Hour

Construction Assumptions

It is assumed that the site would be cleared and excavated and that after completion of the first phase of construction, building construction would commence. The equipment staging area during the initial phases of construction grading would occur along Broadway, Maryland Avenue and the alley adjacent to the project site. Also, at the start of construction, construction worker parking is envisioned to be accommodated within the City's Marketplace parking structure. At the appropriate time, the equipment staging and construction worker parking areas would be moved on site as space allows. Construction activity on the project site is anticipated to occur between the hours of 7:00 AM and 7:00 PM, with a single shift of construction workers.

Construction Traffic Trip Generation

Activities related to the building construction would generate a higher number of vehicle trips as compared to the anticipated Phase 1 construction period. Thus, the greatest potential for impact on the adjacent street system would occur during the building construction phases when the peak construction workforce is present.

Peak Construction Worker Demand

During the peak period of construction activities, a work force of 215 construction workers would be required. The construction workers are likely to work in a single shift (i.e., during the initial periods of this construction phase), beginning as early as 7:00 AM and ending as late as 7:00 PM. In general, the majority of the construction workers are expected to arrive and depart the project site during off-peak hours (i.e., arrive prior to 7:00 AM) thereby avoiding the AM commuter peak period. The peak hour of traffic at the study intersections in the vicinity of the site primarily occurs between 7:45 AM and 8:45 AM during the morning commuter period and between roughly 5:00 and 6:00 PM during the afternoon commuter period. Construction workers would remain on site throughout the day.

The number of construction worker vehicles is estimated using an average vehicle ridership (AVR) of 1.135 persons per vehicle (as provided in the South Coast Air Quality Management District in its *CEQA Air Quality Handbook*). Therefore, it is estimated that up to 189 inbound trips and 189 outbound trips on a daily basis would be generated by the construction workers during the peak construction phase at the site. The inbound construction worker trips would occur outside of the AM commuter peak hour; however, the outbound worker trips may occur during the PM commuter peak hour. It should be noted that the PM peak commuter period occurs between 4:00 and 6:00 PM, with little variation in traffic flow throughout the 2-hour period. Given a construction work schedule ending as early as 3:30 PM, it is anticipated that approximately half would leave the site between 3:30 to 4:00 PM and the remaining half

could leave the site between 4:00 and 4:30 PM, which overlaps with the PM commuter peak hour. Therefore, for purposes of this analysis, approximately half of the outbound construction worker trips (i.e., 95 outbound trips) may occur during the PM commuter peak hour. This is a very conservative estimate as many workers would remain on-site past 6:00 PM.

In general, construction-related traffic would be largely freeway oriented. Construction workers would likely arrive and depart via nearby on- and off-ramps serving the SR 134 Freeway. The most commonly used freeway ramps would be nearest the project site, including the SR 134 Freeway ramps at Central Avenue and Brand Boulevard. The construction work force would likely be generated from all parts of the Los Angeles region and are, thereby are assumed to arrive from all directions (e.g., 20 percent each from the I-5 Freeway, each direction on the SR-134 Freeway, the SR-2 Freeway, and 20 percent from the local Glendale area). This general distribution (i.e., 80 percent on the freeways and 20 percent on local roadways) would result in approximately 40 vehicles at any study intersection during the PM peak hour. This increase would not result in any significant impacts based on the City's significance criteria (i.e., consistent with the CMP criteria, if less than 50 vehicles are forecast no further analysis is required).

Based on information provided by the project applicant, construction workers will park on-site if at all possible. When not possible (e.g., during excavation) parking will be provided via off-premises parking facilities within the downtown area (i.e., the City's Marketplace Garage and/or other private parking facilities where surplus parking is available). Such off-site parking spaces shall be located within walking distance of the project site. For the latter stages of construction, parking will be provided within the project site.

Peak Construction Truck Demand

Heavy construction equipment would be located on-site during the demolition and excavation activities and would not travel to and from the project site on a daily basis. However, truck trips would be generated so as to remove material from the site, export soil from the site as well as to import material to the site. Based on information provided by the project applicant, a maximum of 10 material delivery trucks per day would be generated to/from the project site during construction activities. Therefore, peak truck trip generation would total up to 56 truck round-trips per day (56 inbound trucks and 56 outbound trucks) are anticipated. Assuming a material delivery period of 8 hours per day (beginning at 7:00 AM, with the last delivery at 3:00 PM), this corresponds to a total of seven trucks per hour. Since construction truck trips would occur along major roadways with the number of trips during the AM and PM peak hours being relatively limited, construction impacts from this particular type of construction activity source would be less than significant.

It is anticipated that delivery trucks/construction equipment would be brought onto the project site and be stored within the perimeter fence of the construction site, thus, no staging is expected to occur on the perimeter public streets. Therefore, detours around the construction site would not be required. Flagmen, however, would be used to control traffic movement during the ingress or egress of trucks and heavy equipment from the construction site. As noted in the Construction Traffic Impacts section, a Construction Traffic Control Plan will be developed to minimize potential conflicts between construction activity and through traffic.

Peak Construction Traffic Generation Summary

During peak building construction activities at the site (i.e., during Phase 3 construction activities), construction worker vehicles and trucks are forecast to generate 398 vehicle trips per day (199 inbound and 199 outbound).

The inbound construction worker trips are anticipated to occur outside of the AM commuter peak hour; however, the outbound construction worker trips may overlap with the PM commuter peak hour. It is estimated that approximately 95 outbound construction worker trips may be generated during the PM peak hour. The construction workforce would be generated from all parts of the Los Angeles region and thereby is assumed to arrive and depart from all directions (e.g., the I-5 Freeway, each direction on the SR-134 Freeway, the SR-2 Freeway, and from the local Glendale area). Based on a general distribution of 80 percent on the freeways and 20 percent on local roadways, no more than 40 vehicles are forecast at any study intersection during the PM peak hour. This increase would not to result in any significant impacts based on the City's significance criteria. Therefore, the traffic impacts associated with construction activities are determined to be less than significant.

Haul Routes

Approvals required by the City of Glendale for implementation of the proposed project include a Truck Haul Route program approved by the City of Glendale Department of Public Works. Based on current plans, haul trucks and delivery trucks would access the site via Broadway, Maryland Avenue and the adjacent alley. Trucks are expected to carry the export material to several receptor sites: the Scholl Canyon site (Glendale), Burbank Landfill No. 3 (Burbank), Sunshine Canyon site (Sylmar), or to the Bradley Landfill (Sun Valley).

Construction Traffic Impacts

With the required haul route approval, the off-peak arrival and departure of construction workers and the other construction management practices described above, impacts from construction activity would

be less than significant. Impacts would be further reduced with the implementation of the following design features:

- Maintain existing access for land uses in proximity of the project site;
- Limit any potential lane closures to off-peak travel periods;
- Schedule receipt of construction materials during non-peak travel periods, to the extent possible;
- Coordinate deliveries to reduce the potential of trucks waiting to unload for extended periods of time; and
- Prohibit parking by construction workers on adjacent streets and direct construction workers to available parking as determined in conjunction with City staff.

In order to minimize potential conflicts between construction activity and through traffic, a Construction Traffic Control Plan will be developed for use during project construction. The Construction Traffic Control Plan will identify all traffic control measures, signs, and delineators to be implemented by the construction contractor through the duration of demolition and construction activity. In addition, the City of Glendale Department of Public Works will review and be responsible for approval of the proposed Truck Haul Route program. Because of these requirements, and since construction-related trips would be relatively limited during the AM and PM peak hours, construction-related transportation impacts due to the construction of the project would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Operational Impacts - Intersections

Traffic impacts at the study intersections were analyzed for the following conditions:

- Existing conditions.
- Existing Plus Project Conditions.
- Year 2012 Pre-Project Conditions (Existing plus ambient growth and related projects traffic).
- Year 2012 With Project Conditions.
- Year 2012 With Project and Mitigation Conditions, if necessary.

The traffic volumes for each new condition were added to the volumes in the prior condition to determine the change in capacity utilization at the study intersections. Summaries of the v/c ratios and LOS values for the study intersections during the AM and PM peak hours are shown in **Table 4.8-5 LOS AM and PM Peak Hours**.

Table 4.8-5
LOS AM and PM Peak Hours

No.	Intersection	Peak Hour	Year 2010 (Existing)		Year 2010 with Project		Year 2012		Year 2012 with Project	
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
1	Brand Boulevard/	AM	0.428	A	0.448	A	0.464	A	0.484	A
	Broadway	PM	0.618	B	0.630	B	0.656	B	0.674	B
2	Brand Boulevard/	AM	0.319	A	0.341	A	0.347	A	0.369	A
	Harvard Street	PM	0.473	A	0.490	A	0.518	A	0.534	A
3	Maryland Avenue/	AM	0.328	A	0.346	A	0.341	A	0.359	A
	Broadway	PM	0.500	A	0.542	A	0.520	A	0.563	A
4	Maryland Avenue/	AM	0.196	A	0.212	A	0.209	A	0.239	A
	Harvard Street	PM	0.309	A	0.318	A	0.336	A	0.361	A
5	Louise Street/	AM	0.440	A	0.449	A	0.461	A	0.469	A
	Broadway	PM	0.533	A	0.542	A	0.568	A	0.578	A
6	Louise Street/	AM	0.290	A	0.307	A	0.316	A	0.333	A
	Harvard Street	PM	0.403	A	0.421	A	0.430	A	0.448	A

Linscott, Law & Greenspan, Engineers. 2010.

Existing Conditions

As indicated in **Table 4.8-2**, all six of the study intersections are presently operating at LOS D or better during the AM and PM peak hours under existing conditions.

Existing Plus Project Conditions

In order to determine the operating conditions of the street system under existing plus project conditions, traffic to be generated by the proposed project was added to the year 2010 existing traffic conditions. The existing plus project traffic volumes (existing traffic volumes plus proposed project traffic volumes) at the study intersections during the AM and PM peak hours are shown in **Figure 4.8-6, Existing with Project Traffic Volumes AM Peak Hour,** and **4.8-7, Existing with Project Traffic Volumes PM Peak Hour**, respectively.

As shown in **Table 4.8-5**, all intersections would continue to operate at LOS D or better with addition of project traffic. Application of the City's "significance" criteria to the year 2010 existing plus project scenario indicates that none of the study intersections would be significantly impacted by the proposed project. Therefore, no traffic mitigation measures are required or recommended.

Future Pre-Project Conditions

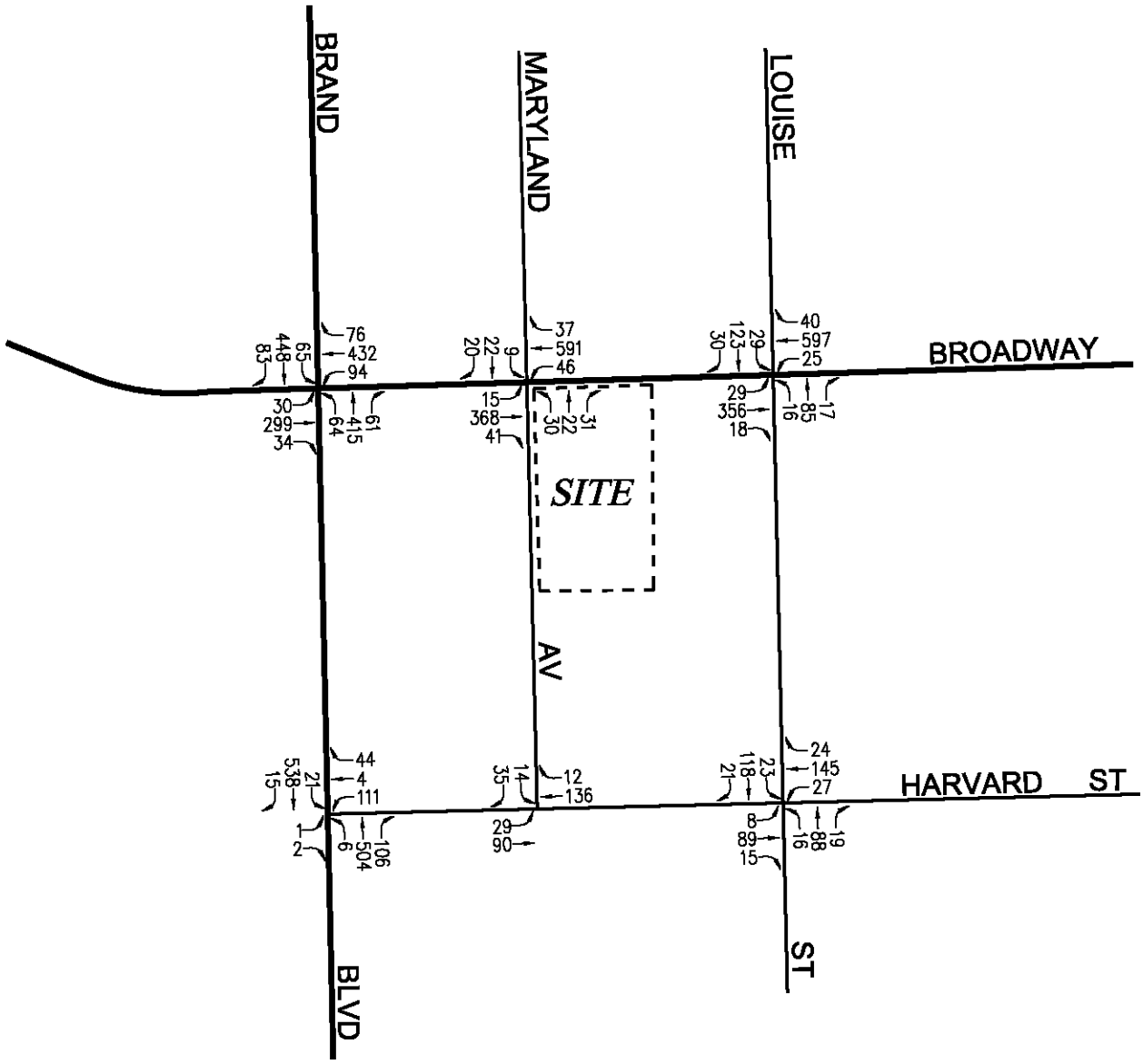
The future year 2012 pre-project conditions were forecast based on the addition of traffic generated by the related projects, as well as the growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors (i.e., ambient growth). As presented in **Table 4.8-5,** all six study intersections are expected to continue operating at LOS D or better during the AM and PM peak hours with the addition of ambient traffic growth and the traffic due to the related projects (future pre-project conditions).

The future pre-project (existing, ambient growth and related projects) traffic volumes at the study intersections during the AM and PM peak hours are presented in **Figure 4.8-8, Year 2012 Traffic Volumes AM Peak Hour,** and **4.8-9, Year 2012 Traffic Volumes PM Peak Hour**, respectively.

Future With Project Conditions

In order to determine the operating conditions of the street system under the year 2012 future with project conditions, traffic to be generated by the proposed project was added to the year 2012 future pre-project conditions. As shown in **Table 4.8-5**, all intersections would continue to operate a LOS D or better with the addition of project traffic. Application of the City's significance criteria to the year 2012 with proposed project scenario indicates that none of the study intersections would be significantly impacted by the proposed project. Therefore, no traffic mitigation measures are required or recommended.

The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the AM and PM peak hours are illustrated in **Figure 4.8-10, Year 2012 with Project Traffic Volumes AM Peak Hour,** and **4.8-11, Year 2012 with Project Traffic Volumes PM Peak Hour.**

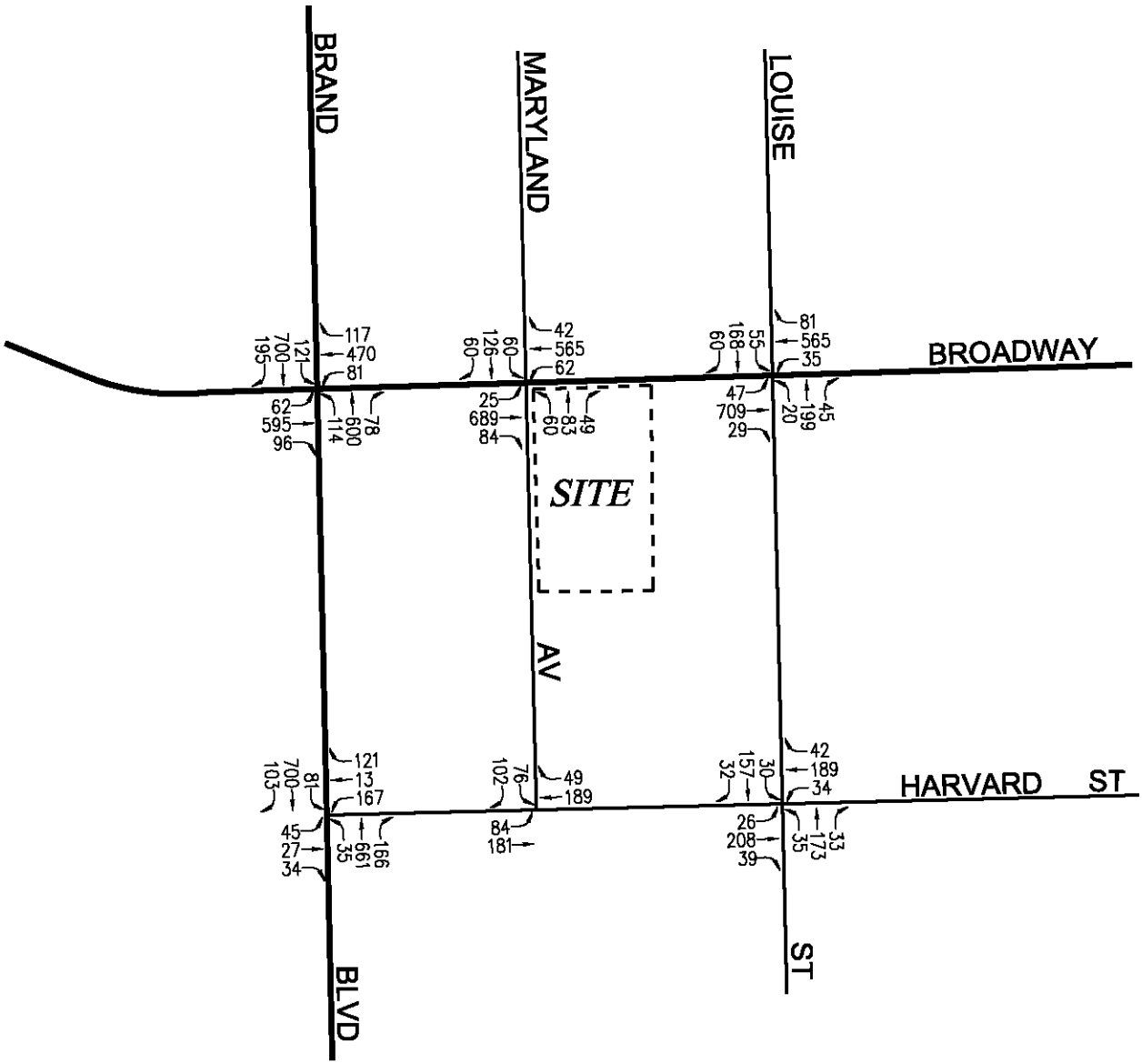


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-6**

Existing with Project Traffic Volumes AM Peak Hour

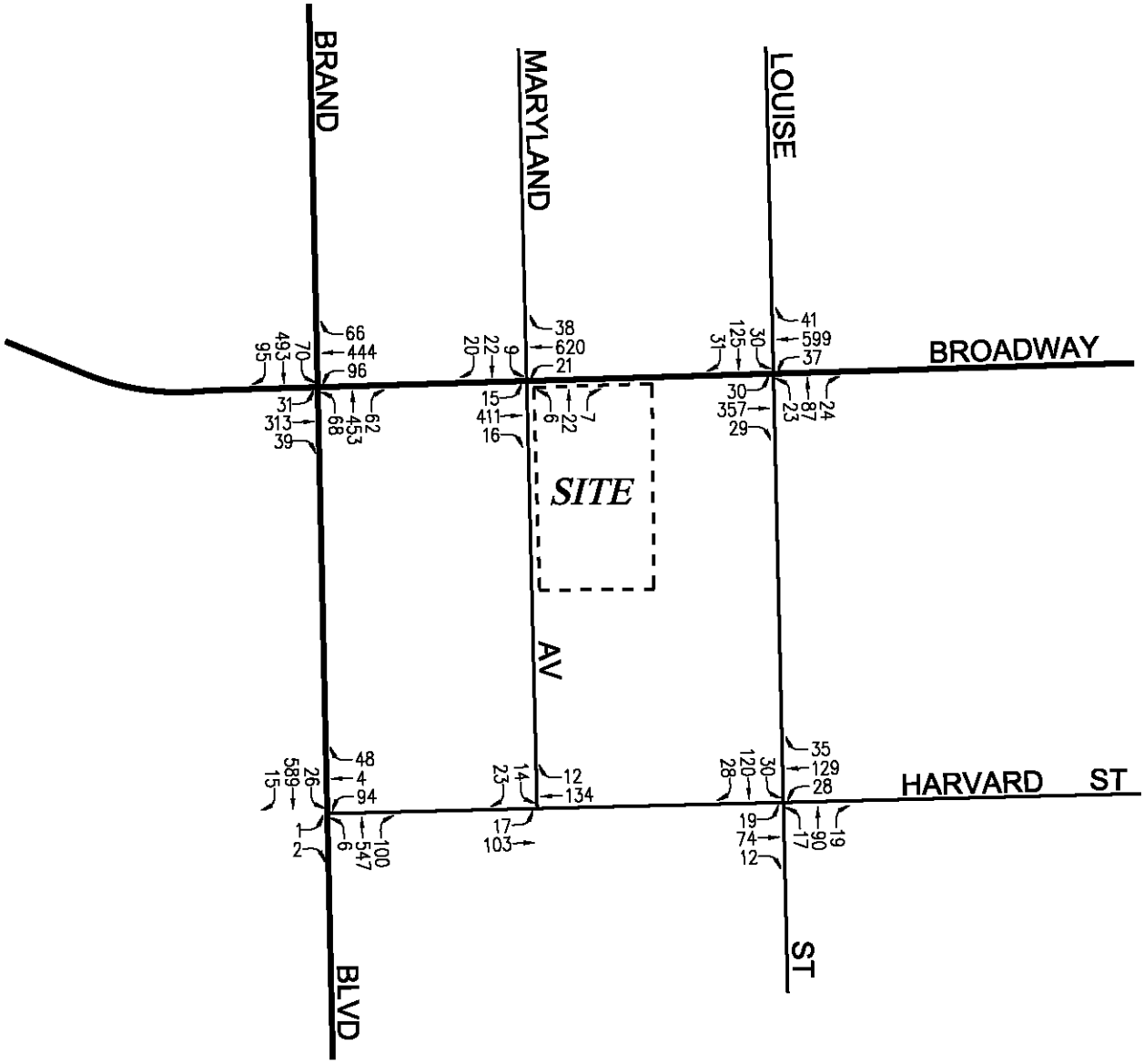


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-7**

Existing with Project Traffic Volumes PM Peak Hour

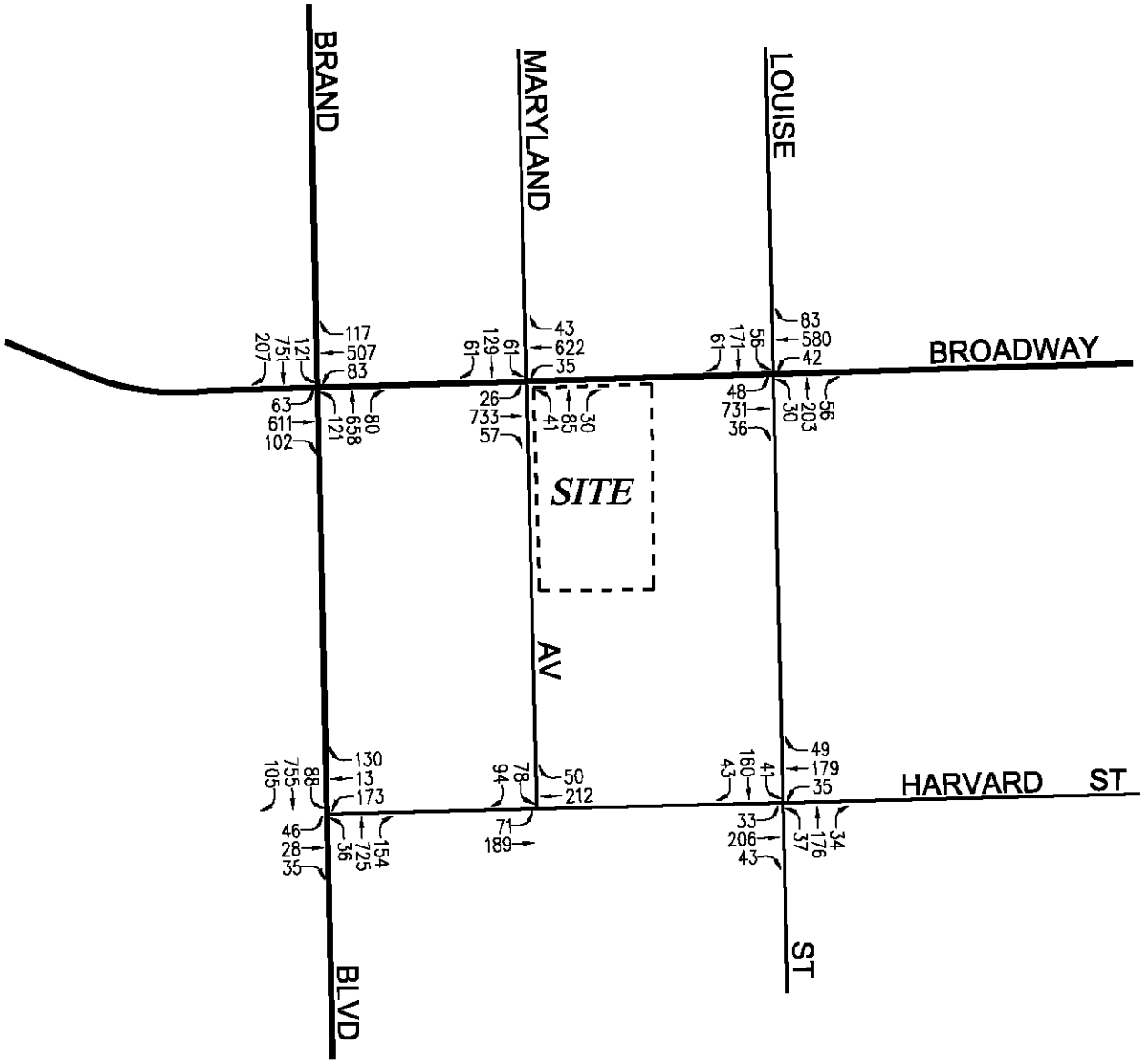


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-8**

Year 2012 Traffic Volumes AM Peak Hour

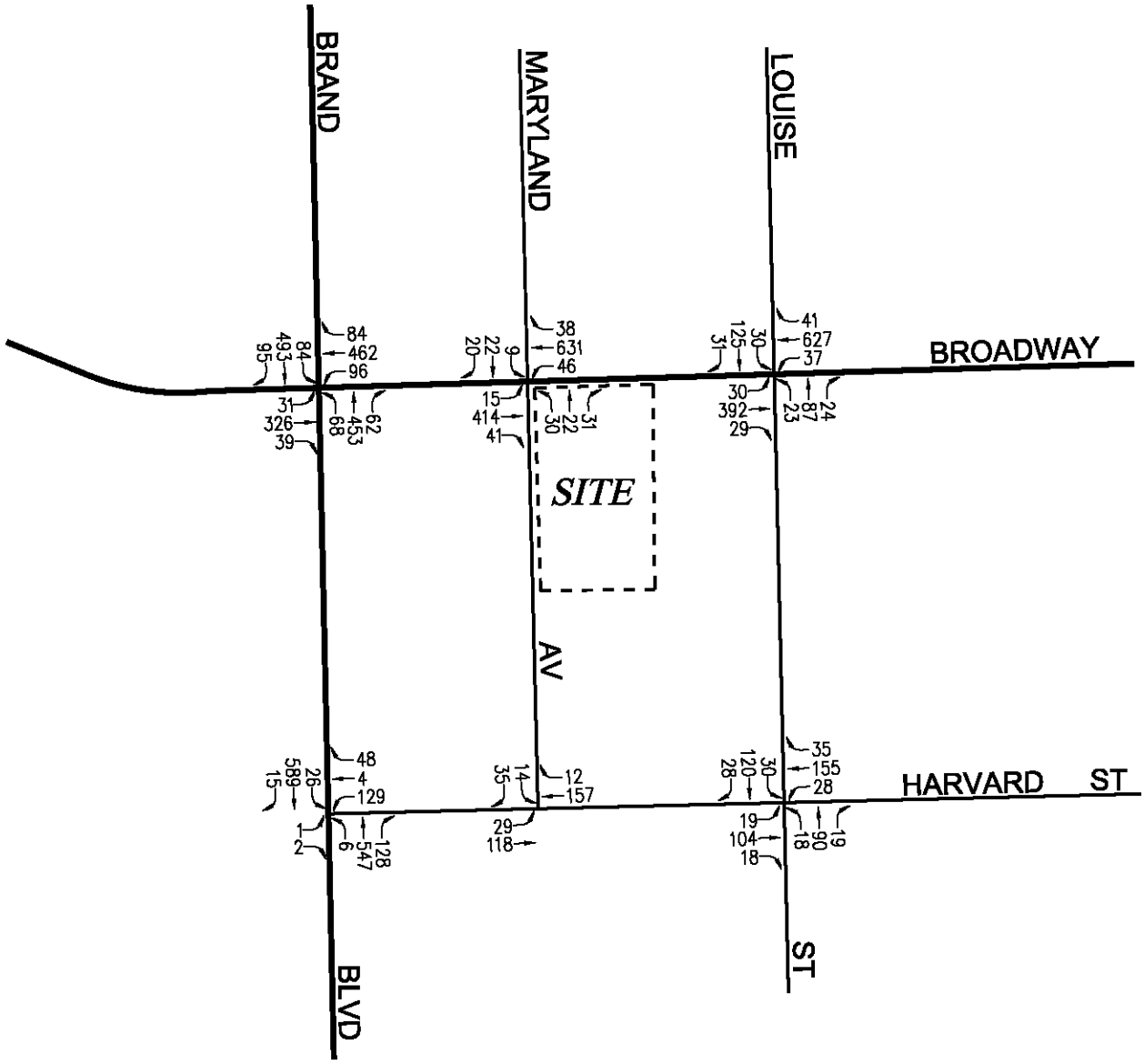


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-9**

Year 2012 Traffic Volumes PM Peak Hour

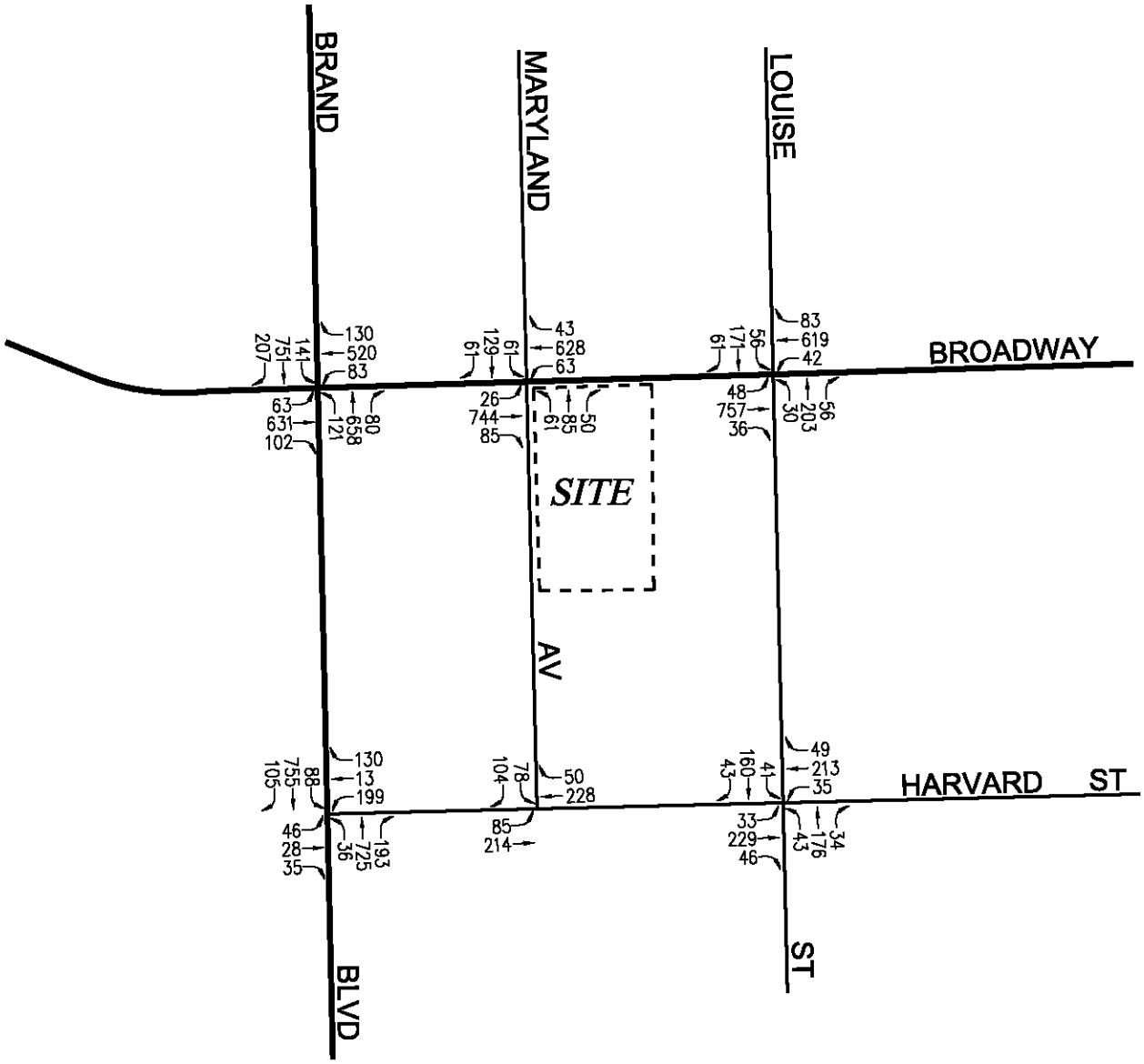


NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-10**

Year 2012 with Project Traffic Volumes AM Peak Hour



NOT TO SCALE

SOURCE: Linscott, Law & Greenspan – June 2010

FIGURE **4.8-11**

Year 2012 with Project Traffic Volumes PM Peak Hour

Threshold: **Would the project exceed, either individually or cumulatively, a Level of Service standard established by the county congestion management agency for designated roads or highways.**

As required by the 2004 Congestion Management Program for Los Angeles County, a Traffic Impact Assessment (TIA) has been prepared to determine the potential impacts on designated monitoring locations on the CMP highway system. The analysis has been prepared in accordance with procedures outlined in the *2004 Congestion Management Program for Los Angeles County*, County of Los Angeles Metropolitan Transportation Authority, July 2004.

Intersections

There are no CMP intersection monitoring locations in the project vicinity. The CMP TIA guidelines require that intersection monitoring locations must be examined if the proposed project will add 50 or more trips during either the AM or PM weekday peak periods. The proposed project will not add 50 or more trips during the AM or PM peak hours at any CMP monitoring intersections which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to intersection monitoring locations that are part of the CMP highway system is required.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Freeways

The following CMP freeway monitoring locations in the project vicinity have been identified:

- CMP Station: No. 1005 Segment: I-5 Freeway south of Colorado Boulevard Extension
- CMP Station: No. 1055 Segment: SR-134 Freeway east of Central Avenue

The CMP TIA guidelines require that freeway monitoring locations must be examined if the proposed project will add 150 or more trips (in either direction) during either the AM or PM weekday peak periods. The proposed project will not add 150 or more trips (in either direction) during either the AM or PM weekday peak hours to the CMP freeway monitoring locations, which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, no further review of potential impacts to freeway monitoring locations that are part of the CMP highway system is required. While the CMP

thresholds for analysis of freeway monitoring locations was not exceeded, two freeway segments along the SR-134 Freeway were analyzed for potential project impacts based on comments received from the State of California Department of Transportation in response to the Notice of Preparation associated with the Environmental Impact Report. Please refer to the Freeway Segment Analysis section below.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Transit

As required by the *2004 Congestion Management Program for Los Angeles County*, a review has been made of the CMP transit service. As previously discussed, existing transit service is provided in the vicinity of the proposed Broadway Lofts project.

The project trip generation, as shown in **Table 4.8-4**, was adjusted by values set forth in the CMP (i.e., person trips equal 1.4 times vehicle trips, and transit trips equal 3.5 percent of the total person trips) to estimate transit trip generation. Pursuant to the CMP guidelines, the proposed project is forecast to generate demand for 12 net new transit trips (five inbound trips and seven outbound trips) during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is anticipated to generate demand for 13 net new transit trips (eight inbound trips and five outbound trips). Over a 24-hour period, the proposed project is forecast to generate demand for 143 daily transit trips.

Bus routes are provided adjacent to or in close proximity to the project site. These 13 transit lines provide service for an average (i.e., an average of the directional number of buses during the peak hours) of approximately 92 buses serving the project area during the AM peak hour and roughly 88 buses serving the project area during the PM peak hour. Therefore, based on the above calculated AM and PM peak hour transit trips, this would correspond to an average less than one new transit rider per bus due to the proposed project. It is anticipated that the existing transit service in the project area will adequately accommodate the project generated transit trips. Thus, given the low number of generated transit trips per bus, no impacts on existing or future transit services in the project area are expected to occur as a result of the proposed project.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Freeway Segment Analysis

This section describes the analysis of the project on the regional freeway system in the immediate vicinity of the project site. Two freeway segments on the SR-134 Freeway (west of Central Avenue and east of Brand Boulevard) were selected for analysis by City of Glendale Traffic & Transportation Division staff in order to determine potential impacts related to the proposed project. These two freeway segments were selected for analysis based on their proximity to the project site and are forecast to experience a relatively greater percentage of project-related vehicular turning movements (e.g., at the SR-134 Freeway, both east and west of the project site). The I-5 Freeway and the SR-2 Freeway also provide regional access to the general Glendale area, but are not anticipated to be significantly impacted by project trips.

The impact of the project on the regional mainline freeway system has been determined based in part on the existing 2008 weekday peak hour traffic volumes data available on the State of California Department of Transportation (Caltrans) website. The year 2008 traffic volumes were increased by Caltrans' annual average growth rate of 1 percent per year to reflect year 2010 existing conditions. The selected freeway segment lane configurations used in the analysis are based on information obtained from field reviews and review of the Caltrans California State Highway Log - District 7. The freeway impact analysis is based on the number of mainline freeway lanes only, including High Occupancy Vehicle lanes. Along some freeway segments, auxiliary lanes are provided to facilitate entering and exiting freeway traffic to and from the freeway mainline. Although some of the freeway auxiliary lanes accommodate through traffic, these have not been considered so as to provide a conservative analysis of freeway impacts due to the proposed project.

Weekday Freeway Analysis

Based on the above information, the results of the weekday freeway impact analysis associated with the AM and PM peak hours associated with the project are summarized in **Table 4.8-6, Freeway Impact Analysis**. As presented in **Table 4.8-6**, the maximum increase in the freeway mainline traffic during the weekday AM peak hour time period is estimated to be 11 vehicles on westbound SR-134 Freeway, west of Central Avenue and 11 vehicles on eastbound SR-134 Freeway, east of Brand Boulevard. The maximum increase in the freeway mainline traffic during the weekday PM peak hour time period is estimated to be 13 vehicles on eastbound SR-134 Freeway, west of Central Avenue and 13 vehicles on westbound SR-134 Freeway, east of Brand Boulevard. These increases in overall mainline freeway traffic volumes correspond to a D/C increase of 0.001, or less than one fourth of 1 percent of the total capacity of the segments included in the analysis. Increases of this magnitude are likely not to be discernible to typical

motorists. Thus, no significant project-related mainline freeway impacts are anticipated along SR-134 Freeway during the weekday AM and PM peak hour time periods.

Table 4.8-6
Freeway Impact Analysis[1]

CMP No.	Intersection	Peak Hour	Dir.	Peak Hour Capacity	Existing 2010		Year 2012		Year 2012 with Project		Significance
					D/C[2]	LOS	D/C[2]	LOS	D/C[2]	LOS	
n/a	SR-134 West of Central Avenue	AM	EB	10,000	0.73	C	0.75	C	0.75	C	NO
			WB	10,000	1.06	F(0)	1.08	F(0)	1.08	F(0)	NO
		PM	EB	10,000	1.02	F(0)	1.04	F(0)	1.04	F(0)	NO
			WB	10,000	0.74	C	0.76	C	0.76	C	NO
1055	SR-134 East of Brand Boulevard	AM	EB	10,000	0.76	C	0.77	D	0.78	D	NO
			WB	10,000	1.10	F(0)	1.12	F(0)	1.12	F(0)	NO
		PM	EB	10,000	1.05	F(0)	1.08	F(0)	1.08	F(0)	NO
			WB	10,000	0.77	C	0.78	D	0.78	D	NO

Linscott, Law & Greenspan, Engineers. 2010.

1 Source: "2008 Traffic Volumes on California State Highways," Caltrans website. The year 2008 volumes were increased by Caltrans' annual average growth rate of 1.0% per year to reflect year 2010 existing conditions.

2 Demand to Capacity ration (D/C) calculated based on a capacity of 2,000 vehicles per hour applied to the through freeway lanes including HOV lanes. Auxiliary Lanes are excluded.

It can be concluded that during the weekday AM and PM peak commuter hours, no project-related freeway mainline significant impacts are anticipated on the SR-134 Freeway mainline freeway segments.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Thresholds: **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Would the project result in inadequate emergency access.

Impact Analysis: The Project would use the existing network of regional and local roadways located in the vicinity of the Project site. Access to the proposed residential driveway will be provided via the existing alley on the east side of the project site. The proposed residential guests and commercial land use patrons, visitors and employees will park within the existing City's Marketplace public parking structure. Access to the Marketplace public parking structure will remain unchanged.

The residential driveway is planned to be located along the west side of the alley which borders the project site to the east. This driveway will be located near the southerly portion of the project site and is planned to accommodate access for residents. This driveway will accommodate left-turn and right-turn ingress and egress turning movements. Outbound traffic at the driveway will operate under stop-sign control.

Sidewalks along the frontages of the Project site would be replaced to improve pedestrian access to the site. All pedestrian improvements would be designed to adhere to standard engineering practices and requirements by the City of Glendale Public Works and Fire departments. Given these precautions, the Project would not substantially increase traffic hazards associated with the Project site.

Furthermore, the Project has a high level of accessibility for emergency vehicles, both from a regional and a site perspective. Smaller emergency vehicles, such as police cars and ambulances, would be able to access the parking structure as necessary. As a result, project impacts on emergency vehicle access would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Threshold: Would the project result in inadequate parking capacity.

This analysis summarizes project parking based a forecast of residential parking demand and commercial parking demand (i.e., via a shared parking analysis for the commercial and guest parking components of the project within the Marketplace public parking structure). A total supply of 248 parking spaces is planned to be provided on-site for the proposed studio and loft residents and 170 non-reserved parking spaces within the Marketplace public parking structure would be provided for the commercial uses on the project site. Residential guest parking would also be accommodated in the Marketplace public parking structure.

Resident Parking Demand

As discussed above, 200 of the 248 residential units are studios and lofts that would range between 372 and 499 square feet in size and 48 of the residential units would be 615 square feet in size. The City's parking code requirement is 1.25 parking spaces per one-bedroom dwelling unit. The proposed residential units are smaller than typical one-bedroom dwelling units and are located within the Downtown Specific Plan area which includes nearby employment centers and commercial uses within walking distance as well as local transit service. Thus, in consultation with City staff, the resident parking demand was estimated to be 1.0 parking space per market-rate unit and affordable unit. Thus, the total parking demand for the residential tenants is estimated at 248 parking spaces which would be provided on site via a subterranean parking garage. This ratio is consistent with SB 1818, which amended government code provisions related to density bonuses for projects providing affordable housing. This legislation limits the amount of parking required for residential tenant and guest parking for affordable projects to 1.0 space per unit.

As shown in Figure 1-5 of the *Glendale Downtown Mobility Study* (Car Ownership in the Downtown Area), as high as 20 percent of the residents of downtown do not own vehicles. Refer to the **City of Glendale Bus Transit Services** section of **Section 4.8** of this Draft EIR for additional discussion regarding existing transit in proximity to the project site. This fact further supports the incorporation of the 1.0 space per unit parking ratio.

Shared Parking Demand

Review of Parking Demand Ratios

Based on a review of the recently published parking demand ratios contained within the ULI *Shared Parking* and ITE *Parking Generation* manuals, the City's Subdivision Ordinance, and approved Downtown Specific Plan, it is anticipated that application of the Code parking ratios would result in an overestimation of required residential tenant parking, residential guest parking, and commercial parking for the project.

Commercial Parking Demand

The commercial space is expected to generate a significant degree of walk-in patronage both from within the project, and from other surrounding downtown uses due to the project's downtown Glendale location. It should be noted that the commercial component of the project will be located on the ground level of the site and is envisioned to serve the residential tenants and guests, as well as the adjacent commercial and residential buildings. The project site is also located in an area that is well served by

several transit routes. Based on these factors and in consultation with City staff, the walk-in patronage for the restaurant/entertainment component of the project was estimated to be approximately 25 percent during the peak periods and walk-in patronage for the restaurant component of the project was estimated to be approximately 50 percent during the peak periods. Therefore, 95 parking spaces would adequately accommodate the restaurant/entertainment component of the project and 71 parking spaces would adequately accommodate the restaurant component of the project.

Residential Guest Parking Demand

The parking demand ratio identified in ULI *Shared Parking* is 0.15 guest spaces per residential unit. This would be expected to be more than adequate for the project, particularly given the project's location and proximity to downtown as well as to transit service, and given the small unit size composition. A further consideration that guest parking within the Marketplace parking structure may be lower than the ULI ratio is the fact that visitors who are guests to the residents of the proposed project may also combine their visit with shopping at the retail stores or dining at a restaurant. It should be noted that the ULI parking ratio for guests is consistent with or higher than that of other adjacent jurisdictions. For example, the City of Pasadena Municipal Code indicates a parking ratio of one guest parking space for each 10 units for multi-family residential projects both within the Central District, as well as other areas of the City. In addition, the City of Glendale undertook a review of parking demand for an affordable housing project which produced a parking demand rate of 0.17 space per unit. It is important to note that this project consisted of two and three bedroom units, was located outside of the downtown area, and is not comparable to the proposed project for these reasons. Therefore, based on discussions with City staff, a guest parking ratio of 0.15 spaces per residential unit was determined applicable for use in the parking demand analysis for the Broadway Lofts project. This results in a parking demand of 35 guest parking spaces for the market-rate units and two guest parking spaces for the affordable units. The total guest parking demand for market-rate and affordable units was calculated at 37 guest parking spaces which would be accommodated within the Marketplace public parking structure.

The above guest parking ratio and allocation (i.e., 37 spaces) can be considered a conservative forecast as the proposed apartment unit size is much smaller than typical apartment projects. Thus, the project will likely not generate guest parking ratios at the same rate as larger apartment unit projects.

Shared Parking Analysis for the Marketplace Parking Structure

As discussed above, the commercial parking and residential guest parking would be accommodated within the Marketplace public parking structure. The Marketplace public parking structure provides 1,128 parking spaces. Of these spaces, 170 were allocated on a non-reserved basis for the commercial use

on this site through a parking agreement. A shared parking analysis model has been prepared to determine if the Marketplace public parking structure can accommodate the parking demand for the proposed commercial use and the residential guest parking.

The peak parking demand for the restaurant/entertainment uses is 154 spaces during the weekday and 144 spaces during the weekend. These peak parking demand needs are less than the 170 spaces allocated for the commercial uses on this site through the existing and proposed parking agreement. The peak parking demand for the residential guests totals 37 spaces during the weekday and weekend conditions, respectively. The total parking demand for the restaurant use and residential guests totals 191 and 181 spaces during the weekday and weekend conditions, respectively.

The weekday peak shared parking demand for the Marketplace public parking structure is forecast to occur at 7:00 PM when 1,053 parking spaces are needed. The existing parking supply of 1,128 spaces is anticipated to satisfy the weekday peak shared parking demand which includes the Broadway Lofts restaurant and residential guest parking demand as well as all of the other vacant uses that have agreements with the City. A corresponding surplus of 75 parking spaces is forecast during this peak weekday condition. The commercial parking demand is less than the 170 parking spaces allocated for the commercial uses on this site in the existing and proposed parking agreement. The residential guest parking can also be accommodated in this 170 space supply for the majority of the day. The combined commercial and residential guest parking demand would only exceed this 170 space supply between 6:00 PM and 9:00 PM, when the combined demand would be 172 spaces at 6:00 PM, 191 spaces at 7:00 and 8:00 PM and 177 spaces at 9:00 PM. During these evening hours, the parking structure has the sufficient supply to accommodate the parking needed for this and other uses while maintaining a surplus of vacant spaces.

The weekend peak shared parking demand for the Marketplace public parking structure is forecast to occur at 2:00 PM when 1,059 parking spaces are needed. At 2:00 PM the combined commercial and residential guest parking demands of the Broadway Lofts project is 104 spaces, well under the 170 spaces allocated for use by this project. Thus, the existing parking supply of 1,128 spaces is anticipated to satisfy the weekend peak shared parking demand which includes the Broadway Lofts restaurant and residential guest parking demand as well as all of the other vacant uses that have agreements with the City. A corresponding surplus of 69 parking spaces is forecast during this peak weekend condition. The commercial and residential guest parking demand needed for the project would only be greater than 170 spaces during 7:00 and 8:00 PM, when this demand would be 180 and 181 spaces. These are non-peak periods when the structure has a surplus of parking available.

Summary of Parking Analysis

It is concluded that the proposed parking supply in the Marketplace public parking structure is expected to more than accommodate the forecast peak commercial parking demand for the Broadway Lofts. In addition, for all but a few weekday hours and two weekend hours, all guest parking demand can also be accommodated within the 170 space allocation (i.e., through agreement with the City). Based on the sum of the peak parking demand requirements for the entire Marketplace parking structure, the weekday peak parking demand is forecast to occur at 7:00 PM in which the off-site parking demand for the Broadway Lofts project totals 191 spaces (154 commercial spaces and 37 residential guest spaces). The weekend peak parking demand for the Marketplace parking structure is forecast to occur at 2:00 PM in which the off-site parking demand for the proposed project is 104 spaces (97 commercial spaces and 7 residential guest spaces). Although the proposed project parking demand is over the parking agreement supply of 170 spaces within the Marketplace parking structure when residential guest parking needs are added to the commercial needs, the available parking supply in the Marketplace parking structure is more than sufficient to meet this forecast demand. Therefore, no significant impacts with respect to parking are anticipated.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

The following cumulative impacts analysis evaluates the impact of the Project and related projects on traffic and circulation, as discussed in **Section 4.0, Environmental Impact Analysis**. A list of the related projects is provided in **Table 4.0-1** of this EIR. The list was compiled based upon information on file at the City of Glendale Planning Department, Glendale Redevelopment Agency staff and recent traffic reports prepared for projects in the vicinity of the Project.

Construction

It is anticipated that construction of related projects would result in periods of heavy truck traffic as a result of the delivery of construction materials and the hauling of demolition materials and excavation. Although the time frame for construction of these projects is uncertain, as well as the degree to which construction of these projects will overlap and the location at which impacts could occur, it is possible that the construction of these related projects could affect roadway segments and intersections, which

could result in a significant cumulative impact. However, as discussed under **Project Impacts**, the Project will be required to implement numerous measures to reduce construction-related traffic impacts, including preparation and implementation of a truck haul route plan and a construction traffic control plan, and the commute of workers to the Project site during non-peak hours. Consequently, the Project's contribution to construction-related traffic is not cumulatively considerable and thus, the Project's cumulative impacts are less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.

Operational

The Project's cumulative impact was determined by adding project traffic with 2012 pre-project traffic conditions. To determine 2012 traffic conditions, existing traffic was combined with related-project and areawide growth. As discussed in the analysis above, no significant impacts would occur in the future project scenarios with addition of traffic from the related projects and ambient growth. Therefore, cumulative impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: None are required.

Level of Significance After Mitigation: Less than significant.