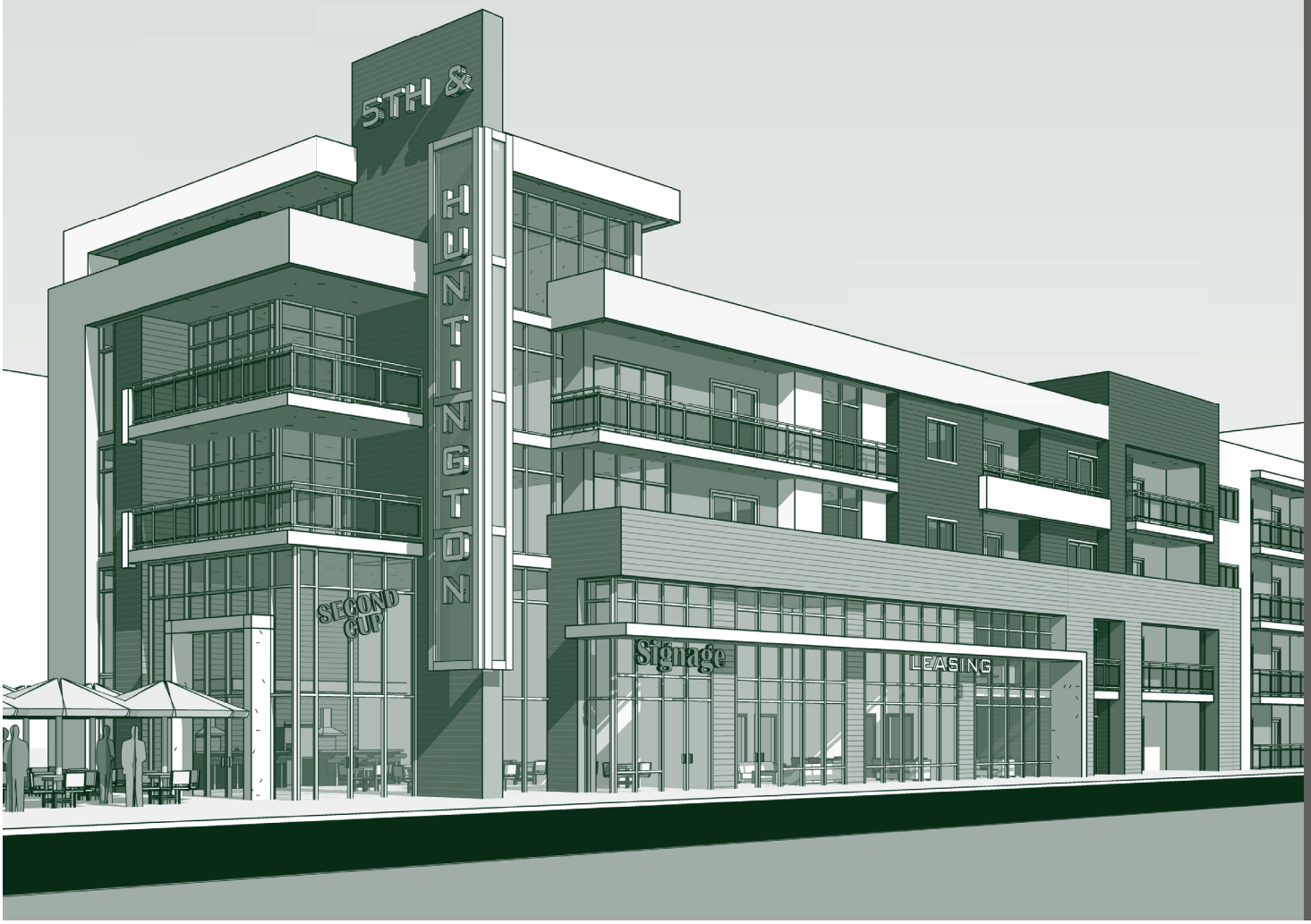
5th & Huntington Specific Plan

CITY OF MONROVIA

May 21, 2013



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CITY OF MONROVIA

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Acknowledgements

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5th & Huntington Specific Plan

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Chapter 1
Introduction

1. Introduction

1.1 Role and Function of Specific Plans

A specific plan is a tool for the systematic implementation of the Monrovia General Plan for a particular property or properties. The specific plan effectively establishes a link between implementing policies of the General Plan and an individual development proposal in a defined area.

A specific plan may be as general as setting forth broad policy concepts or it may provide detail for every facet of a development: the type, location, and intensity of uses; the design and capacity of infrastructure; the resources used to finance public improvements; and design guidelines

1.2 Authority for Specific Plans

The authority for preparing and adopting specific plans is established by the California Government Code, Title 8, Division 1, Chapter 3, Article 8, Sections 65450 through 65457. These provisions require that a specific plan be consistent with the adopted general plan of the jurisdiction within which it is located. In turn, all subsequent subdivision, development, public works projects, and zoning regulations for the defined area must be consistent with the adopted specific plan.

As with a general plan, the authority for adoption of the specific plan is vested with the local legislative body—the Monrovia City Council—pursuant to Section 65453(a). However, unlike the general plan, which is required to be adopted by resolution, the City Council has two options for specific plan adoption: 1) adoption by resolution, which is designed to be policy driven, or 2) adoption by ordinance, which is regulatory by design.

1.3 Required Specific Plan Content

The range of issues contained in a specific plan is left to the discretion of the decision-making body; however, all specific plans, per Sections 65450–65457 of the Government Code must at a minimum address the following:

(a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

(1) The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
(2) The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within

the area covered by the plan and needed to support the land uses described in the plan.

(3) Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.

(4) A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

1.4 The Purpose of this Specific Plan

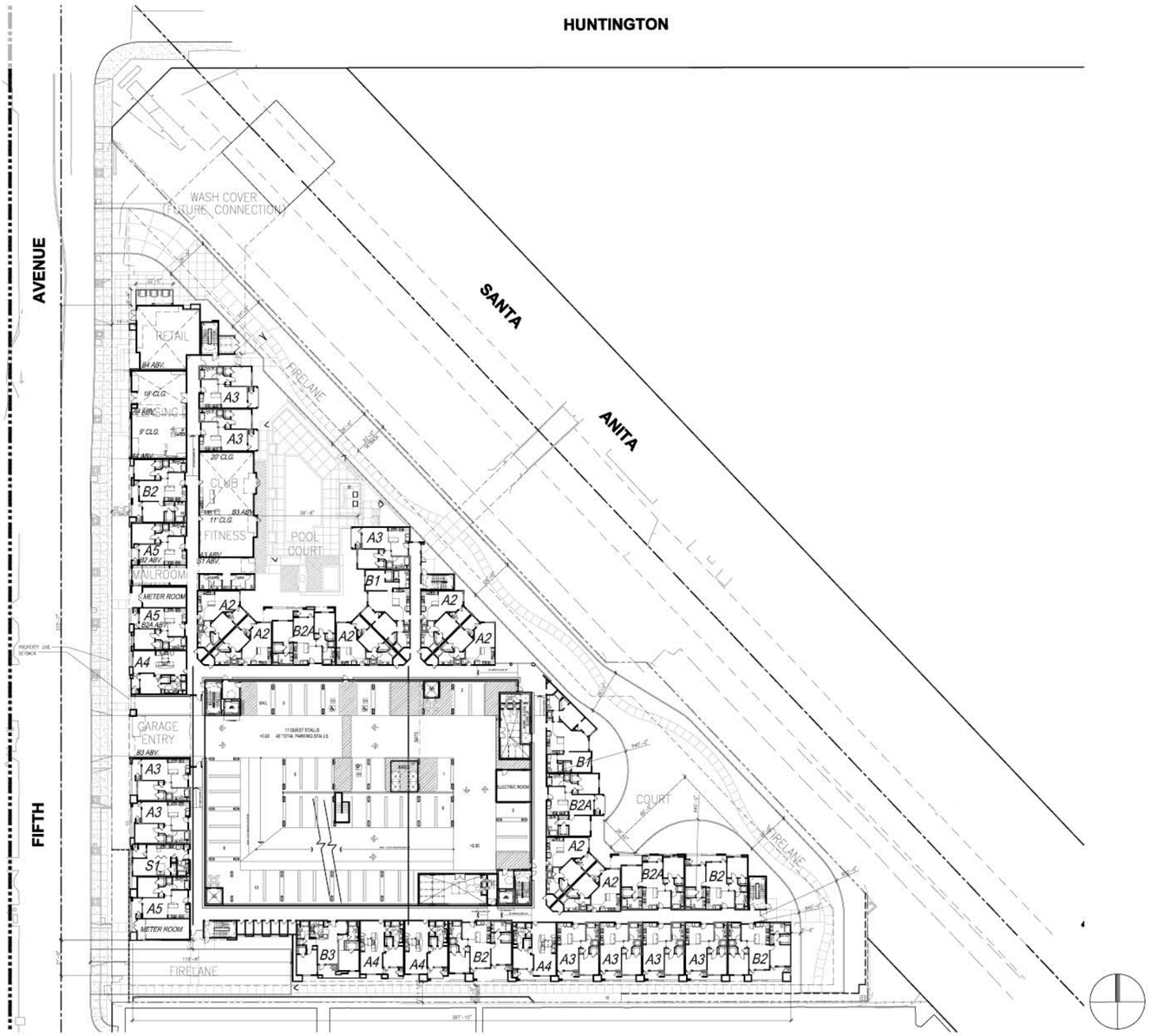
The 5th & Huntington Specific Plan has been prepared to allow for the development of 154 residential units and 1,340 square feet of retail use on a 2.86-acre property on Fifth Avenue, south of Huntington Drive in the City of Monrovia. This Specific Plan establishes use regulations, development standards, and design guidelines tailored to the unique needs of the 5th & Huntington development at this location.

1.5 Overview View of the 5th & Huntington Development

This Specific Plan allows for development of a mixed-use project on two contiguous parcels located at 1110 and 1212 South Fifth Avenue (Figure 1-1). The design provides for a four-floor building of approximately 187,700 gross square feet, with 154 rental units (approximately 131,400 square feet), approximately 1,340 square feet of retail use with 200 square feet of outside space, a leasing office, and common recreation and social areas, as shown in Figure 1-2. Resident, retail customer, and residential guest parking will be provided in a six-level parking structure, which is wrapped by the residential/retail building structure.

Figure 1-1: Location Map

Figure 1-2: Overview of Plan



1.6 Contents of this Specific Plan

The 5th & Huntington Specific Plan is organized as follows:

Chapter	Content
1. Introduction	This chapter provides an explanation of the role and function of specific plans, the purpose of the 5th & Huntington Specific Plan, a summary of the proposed development, and the planning context – location, setting, and context of planning issues. This chapter also describes the Specific Plan's relationship to the City's General Plan and Zoning Ordinance.
2. Land Use Plan and Architectural Style	This chapter includes the conceptual and development-specific land use plan and architectural style.
3. Circulation Plan	This chapter includes the conceptual and development-specific vehicular and non-vehicular circulation plan.
4. Development Standards and Landscape Guidelines	This chapter sets forth site planning, building, parking, architectural, and landscape architectural provisions.
5. Implementation	This chapter discusses the implementation, administration, and amendment process for the Specific Plan.
6. Sustainability	This chapter discusses sustainable concepts employed in the initial planning and design of the Specific Plan and for sustainable concepts to be implemented in the design, construction, and use of the development.
Appendices	The technical studies supporting the project's design are included as appendices to the Specific Plan.

1.7 Location and Plan Boundary

The Specific Plan area consists of three contiguous parcels totaling approximately 2.86 acres located at 1110 and 1212 South Fifth Avenue. More specifically, the triangular shaped property is adjacent to the western corporate boundary with the City of Arcadia, as shown in Figure 1-1. The site is bordered by Huntington Drive, Fifth Avenue, and Santa Anita Wash, as shown in Figure 1-3. Fifth Avenue, a two-lane local street terminates as a cul-de-sac approximately 135 feet south of the Specific Plan area. Just south of Fifth Avenue's termination is the METRO railroad tracks. North and east of the project site is Interstate 210 (I-210), with interchange ramps located within one-quarter mile of the Specific Plan area.

Figure 1-3: Vicinity Map

The project will involve the merging of existing assessor parcels PN: 8507-008-039, APN: 8507-008-040, and APN: 8507-008-012—into a single 2.86-acre lot (124,715 square feet) parcel, as shown in Figure 1-4.

1.8 Property Ownership

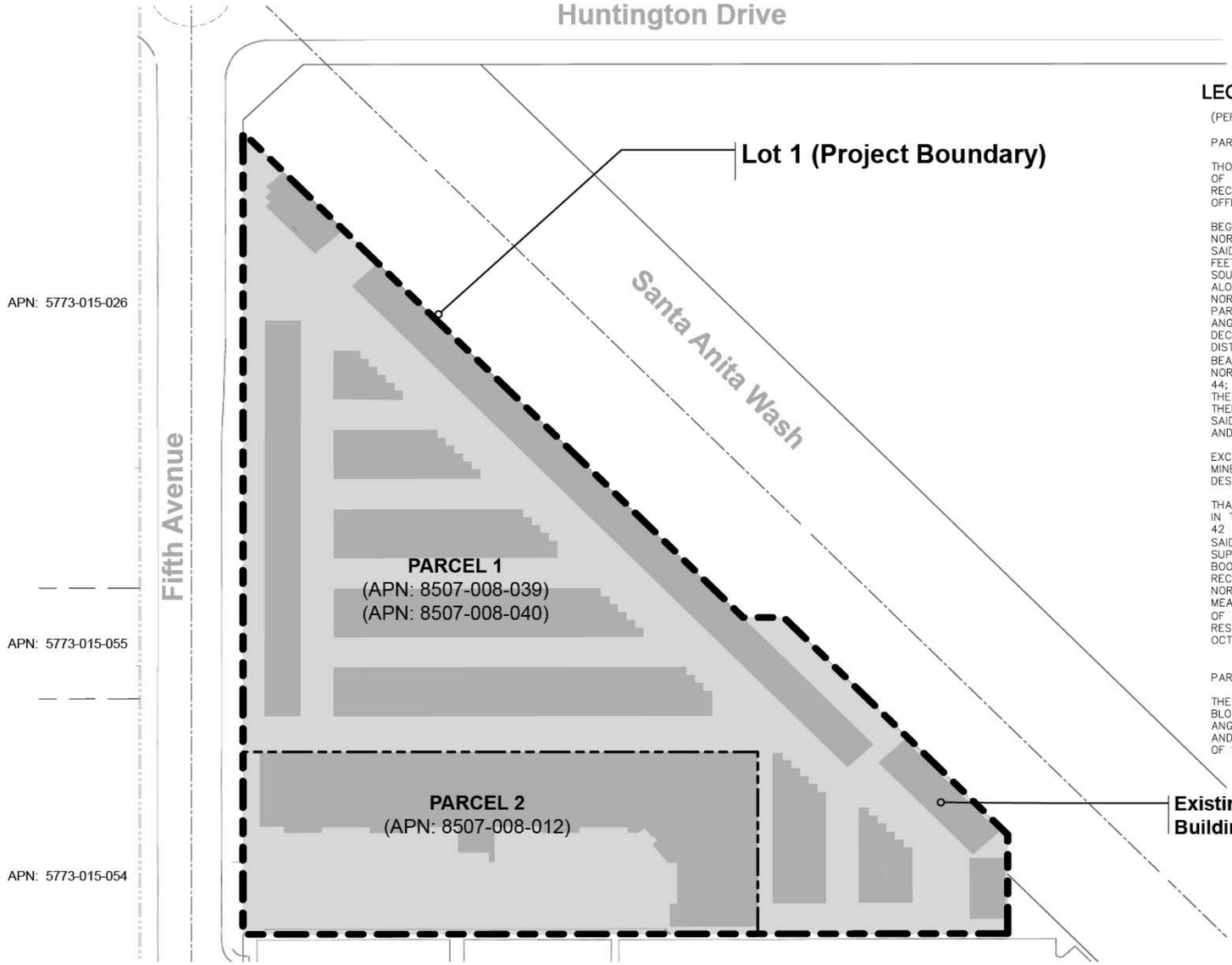
The assessor parcels within the Specific Plan area are privately owned.

1.9 Baseline Conditions

1.9.1 Site Conditions

As of 2012, the Specific Plan area is occupied by two uses: 1) a self-storage facility with 375 units totaling 39,000 square feet and an on-site facility manager residential unit, and 2) a 16,363-square-foot multi-tenant industrial use. The self-storage facility occupies the northern two-thirds of the site. A pedestrian bridge crosses the Santa Anita Wash and connects the Specific Plan area to properties located to the east along Huntington Drive. Separate from this project, the City plans to construct a second pedestrian bridge/wash cover to cross the Santa Anita Wash and provide additional connection with the adjacent properties.

Figure 1-4: Parcel Map



LEGAL DESCRIPTIONS :

(PER TITLE REPORT NOTED HEREON):

PARCEL 1: (APN: 8507–008–039 AND –040)

THOSE PORTIONS IN BLOCK 43 AND 44 IN THE SANTA ANITA TRACT, IN THE CITY OF MONROVIA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 34, PAGES 41 AND 42 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE WEST LINE OF SAID BLOCK 44, DISTANT NORTHERLY THEREON 115.00 FEET FROM THE SOUTH LINE OF THE NORTH HALF OF SAID BLOCK 44, THENCE EASTERLY, PARALLEL WITH SAID SOUTH LINE, 300.00 FEET, TO THE EAST LINE OF THE WEST 300.00 FEET OF SAID BLOCK 44; THENCE SOUTHERLY ALONG SAID EAST LINE TO SAID SOUTH LINE, THENCE EASTERLY ALONG SAID SOUTH LINE TO THE EAST LINE OF SAID BLOCK 44; THENCE NORTHERLY ALONG SAID LAST MENTIONED EAST LINE TO A LINE THAT IS PARALLEL WITH AND DISTANT SOUTHWESTERLY, 47.80 FEET, MEASURED AT RIGHT ANGLES, FROM THAT CERTAIN LINE DESCRIBED IN PARCEL 52 OF THE FINAL DECREE OF CONDEMNATION TO THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT, RECORDED IN BOOK 19161 PAGE 110, OFFICIAL RECORDS, AS HAVING A BEARING AND DISTANCE OF SOUTH 44°30'24" EAST, 1338.95 FEET; THENCE NORTHWESTERLY ALONG SAID PARALLEL LINE TO THE NORTH LINE OF SAID BLOCK 44; THENCE WESTERLY ALONG SAID NORTH LINE TO THE SOUTHWESTERLY LINE OF THE FLOOD CONTROL RIGHT OF WAY AS CONDEMNED IN SAID FINAL DECREE; THENCE NORTHWESTERLY ALONG SAID SOUTHWESTERLY LINE TO THE WEST LINE OF SAID BLOCK 43; THENCE SOUTHERLY ALONG SAID LAST MENTIONED WEST LINE AND ITS SOUTHERLY PROLONGATION, TO THE POINT OF BEGINNING.

EXCEPT ALL OIL, GAS, PETROLEUM, AND OTHER HYDROCARBON SUBSTANCES AND MINERALS BUT WITHOUT RIGHT OF ENTRY TO THE SURFACE OF SAID LAND, DESCRIBED AS FOLLOWS:

THAT PORTION OF THAT PART OF BLOCK 44, OF A PART OF SANTA ANITA TRACT, IN THE CITY OF MONROVIA, AS PER MAP RECORDED IN BOOK 34 PAGES 41 AND 42 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS "PARCEL 52" IN A FINAL JUDGMENT HAD IN SUPERIOR COURT CASE NO. 452538, A CERTIFIED COPY OF WHICH IS RECORDED IN BOOK 19161 PAGE 110, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, WITHIN A STRIP OF LAND 17.2 WIDE, THE NORTHEASTERLY SAID LINE OF SAID STRIP BEING 47.8 FEET SOUTHWESTERLY, MEASURED AT RIGHT ANGLES FROM THAT LINE DESCRIBED AS HAVING A BEARING OF SOUTH 44°30'24" EAST AND LENGTH OF 1338.95 FEET IN SAID PARCEL 52, AS RESERVED BY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT IN DEED RECORDED OCTOBER 19, 1965 IN BOOK D–3086 PAGE 591, OFFICIAL RECORDS.

PARCEL 2: (APN: 8507–008–012)

THE SOUTHERLY 115 FEET OF THE WESTERLY 300 FEET OF THE NORTH HALF OF BLOCK 44 OF SANTA ANITA TRACT, IN THE CITY OF MONROVIA, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 34, PAGES 41 AND 42 OF MISCELLANEOUS RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

LEGEND

- City Boundary
- Lot 1 (Project Boundary)
- Parcel Line
- Existing Buildings

1.9.2 Surrounding Area Uses

Adjacent to the Specific Plan area and along its eastern edge is a long driveway used for employee and/or valet parking. Further east, beyond the valet parking area is the Santa Anita Wash, a multi-story Double Tree Hotel, and a Red Lobster restaurant. Both the hotel and restaurant are located on Huntington Drive and have surface parking.

On Fifth Avenue and immediately south of the Specific Plan area is a two-story office building currently occupied by Southern California Edison (SCE). Across Fifth Avenue are a two-story office building, a three-story Wells Fargo Bank building, a multi-story parking structure, and accessory surface parking. Signage indicates the office use is occupied by medical service providers. Both the Wells Fargo and medical service providers' parking lots tend to be well used; customers and patients also use Fifth Avenue's on-street parking.

As indicated above, Fifth Avenue terminates in a cul-de-sac south of the project site. Immediately south of the cul-de-sac, the METRO railroad tracks pass by on an elevated berm. A pedestrian underpass allows access under the berm into a single-family residential neighborhood south of the tracks. Between the elevated berm and the residential neighborhood is a tall sound barrier wall.

1.10 Applicable Policies and Regulations

1.10.1 General Plan

Development in the City of Monrovia, including the 5th & Huntington Specific Plan site, is governed by the City's General Plan. The Land Use Element, one of the seven mandatory components of the General Plan, indicates that the project site lies within the West Huntington Drive Corridor, as shown in Figure 1-5. The land use designation is Retail Corridor Mixed Use (Figure 1-6), and the site also has an overlay of Planned Development (PD) Area 8 – West Huntington Drive/South Side area (Figure 1-7). PD Area 8 was established to address the site's unique challenges.

Figure 1-5: West Huntington Drive Corridor

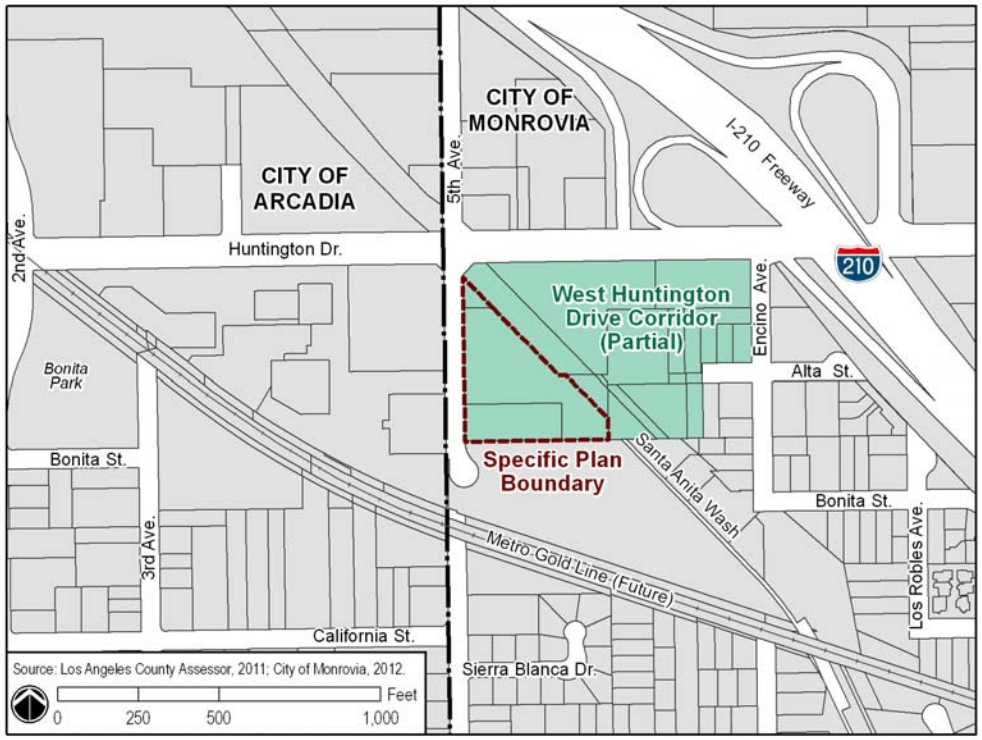


Figure 1-6: General Plan Land Use Designations

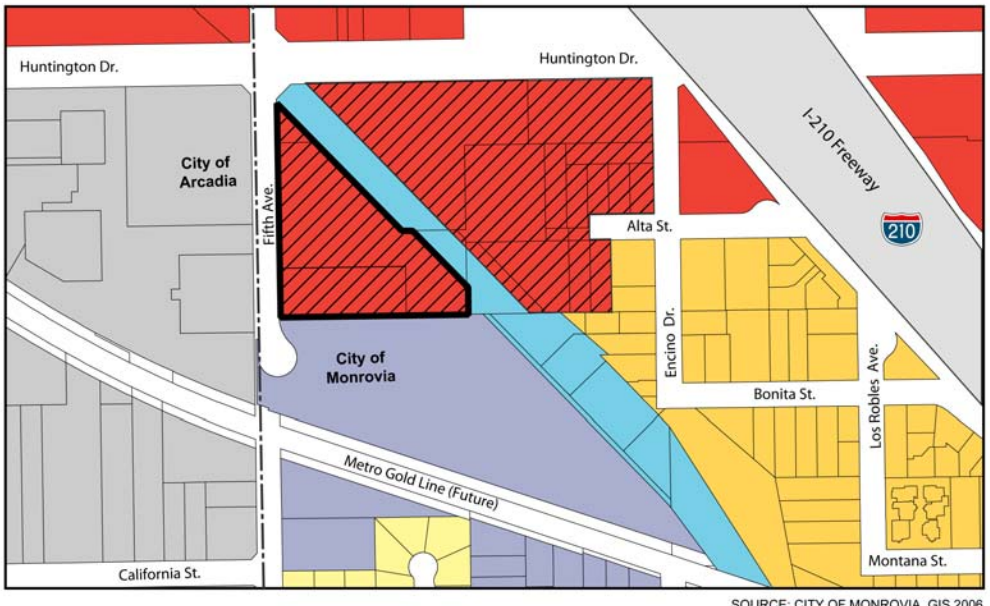
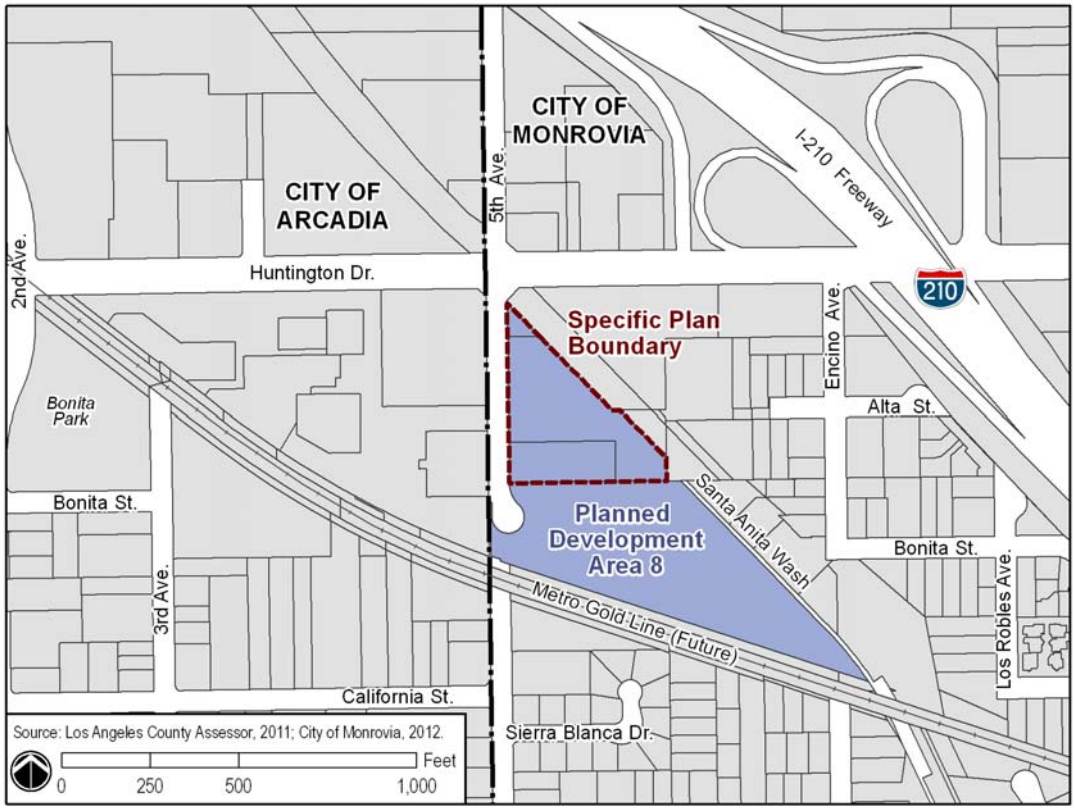


Figure 1-7: Planned Development Area 8 – West Huntington Drive/South Side



This Specific Plan has been prepared in conformance with the goals and policies of the City of Monrovia General Plan.

General Plan objectives for the West Huntington Drive/South Side corridor, Planned Development Area 8, and Retail Corridor Mixed Use designation encourage the construction of residential and retail mixed use developments that:

- Help create a "small village" quality to the West Huntington Drive activity node;
- Support the West Huntington Drive commercial uses and further the corridor's economic revitalization and enhancement;
- Advance the transformation of the area from warehouse/storage uses and underutilized properties to a vital, unique area;
- Help to provide a mix of housing types and densities to Monrovia, including housing over retail uses;
- Promote pedestrian activity on West Huntington Drive and in the nearby commercial areas; and

- Apply high quality site design and architectural standards that highlight pedestrian activity and are organized around courtyards and open space with abundant landscaping and pedestrian linkages.

The 5th & Huntington Specific Plan development provides for high-quality rental units in a building format not commonly found in Monrovia. The residents will have easy access to the small on-site eatery, delicatessen, or other retail use and the premium on-site recreation and social amenities. The residents will be able to walk to the Arcadia Gold Line Transit station, as well as the many stores and restaurants along West Huntington Drive. The building and site will be attractively designed, well landscaped, and provide pedestrian activity that will contribute to the area's continued economic revitalization. The 5th & Huntington Specific Plan is consistent with the General Plan objectives for the area.

1.10.2 Zoning

Development and use of land within the City of Monrovia is regulated by the City's Zoning Code. The Zoning Code is comprised of a set of regulations and standards that define how properties may be utilized; the zoning map identifies the zones applicable to each parcel. The Zoning Code designates the Specific Plan parcels as Retail Corridor Mixed Use. As implied in the zone designation title, uses that are generally consistent and compatible with retail uses and higher density multi-family uses are allowed.

1.11 Environmental Compliance

In compliance with the requirements of the California Environmental Quality Act (CEQA) and the City's environmental clearance procedures, an environmental document has been prepared for this Specific Plan. The Initial Study determines the potential for environmental impacts associated with the level of development allowed under the Specific Plan. Based on the Initial Study evaluation, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project proponent has agreed to project revisions. Thus, a Mitigated Negative Declaration and a Mitigation Monitoring and Reporting Program were prepared; the two documents were adopted on May 21, 2013 by the City of Monrovia City Council.

2

Land Use Plan and Architectural Style

5th & Huntington Specific Plan

CITY OF MONROVIA

2. Land Use Plan and Architectural Style

2.1 Introduction

The 5th & Huntington Specific Plan allows for the development of:

- 154 rental residential units;
- 1,340 square feet (approximately) of retail space with approximately 200 square feet of outdoor space;
- residential ancillary uses (leasing office, mail room, bicycle storage, maintenance areas);
- indoor and outdoor recreational facilities;
- open space; and
- a 283-space parking garage.

The Specific Plan provides recreation, limited shopping/dining, and housing opportunities to residents living on the site. The intent of the project is to create an upscale living opportunity for residents who would like to live within walking distance of restaurants and shops on Huntington Drive, within 0.6 miles of the planned Arcadia Gold Line Transit station, and within a short bus ride to Old Town Monrovia and the Monrovia Gold Line Transit station. Pedestrian pathways, landscaping, and street trees provide a unifying element and work in concert with existing and planned pedestrian bridges across the Santa Anita Wash.

2.2 Development Scenario and Types

The existing multi-tenant industrial use and self-storage use on the site will be demolished. The new structure will be a four-floor mixed-use building that wraps a six-level parking structure. The maximum building height will be 50 feet above finished grade, with corner landmark (tower) element height of 60 feet.

Permitted land uses are retail and residential with supporting open space, recreation, and parking uses. These uses are illustrated in the conceptual Land Use Plan, Figure 2-1. A detailed description of each use is provided below.

2.2.1 Residential and Residential Ancillary Uses

The 5th & Huntington Specific Plan allows for up to 154 rental residential units located on four floors at a density of 54 units per acre. The residential unit mix includes studio, one-bedroom, and two-bedroom apartments, as shown in Table 2-1.

Table 2-1: Residential Unit Mix and Unit Size

Unit Type	Number of Units	Minimum Unit Size, in square feet
Studio	7	576
One Bedroom	91	650
Two Bedroom	56	1,000

Ancillary uses to the residential component include the leasing office, a two-story public lobby and resident business center, residents' mail room, property maintenance office and facility, and corridors/storage areas. Ancillary recreation uses include a clubroom (1,239 square feet) and fitness center (844 square feet), both located within the residential building, as well as pool/spa facilities, sun deck, cabanas, fire pit, barbeque and dining areas located outdoors on the ground level. Atop the parking garage roof is a 4,250-square-foot "outdoor roof-top living room" with seating areas (see Figure 2-2), views to the San Gabriel Mountains, outdoor fireplace, and shade trellis.

Pedestrian resident and guest access is from Fifth Avenue through the public lobby or through secure gates located throughout the project area. Vehicular access for residents, residential guests, and retail customers is through a single parking garage entrance located on Fifth Avenue.

2.2.2 Retail

An approximately 1,340-square-foot double volume retail space is located on the ground level of the residential building and oriented towards Fifth Avenue. The retail space also has a 200-square-foot north-facing patio. The retail space will be plumbed and ventilated for a possible small eatery use. Customers will access the retail space through the ground-level courtyard/patio. Four customer parking spaces are provided in the parking garage.

2.2.3 Open Space

The publically accessible open space components include a public plaza/courtyard. The public plaza/courtyard fronts Fifth Avenue, provides views of the San Gabriel Mountains, and links to the proposed Santa Anita Wash pedestrian bridge. The public plaza/courtyard will be constructed with decorative concrete, as shown in Figure 2-3. The dual-use passive open space area is a 100,000-square-foot landscaped linear feature adjacent to the residents' pool/spa court, overlooking the Santa Anita Wash. This dual-use passive open space area will include a pedestrian path that can provide connectivity for residents to the Santa Anita Wash bridge and possible access to a future horse trail. The passive open space area also provides emergency vehicle access to the residential units. The passive open space will be constructed with decorative concrete, "grasspave", and turf.

Figure 2-1: Land Use Plan

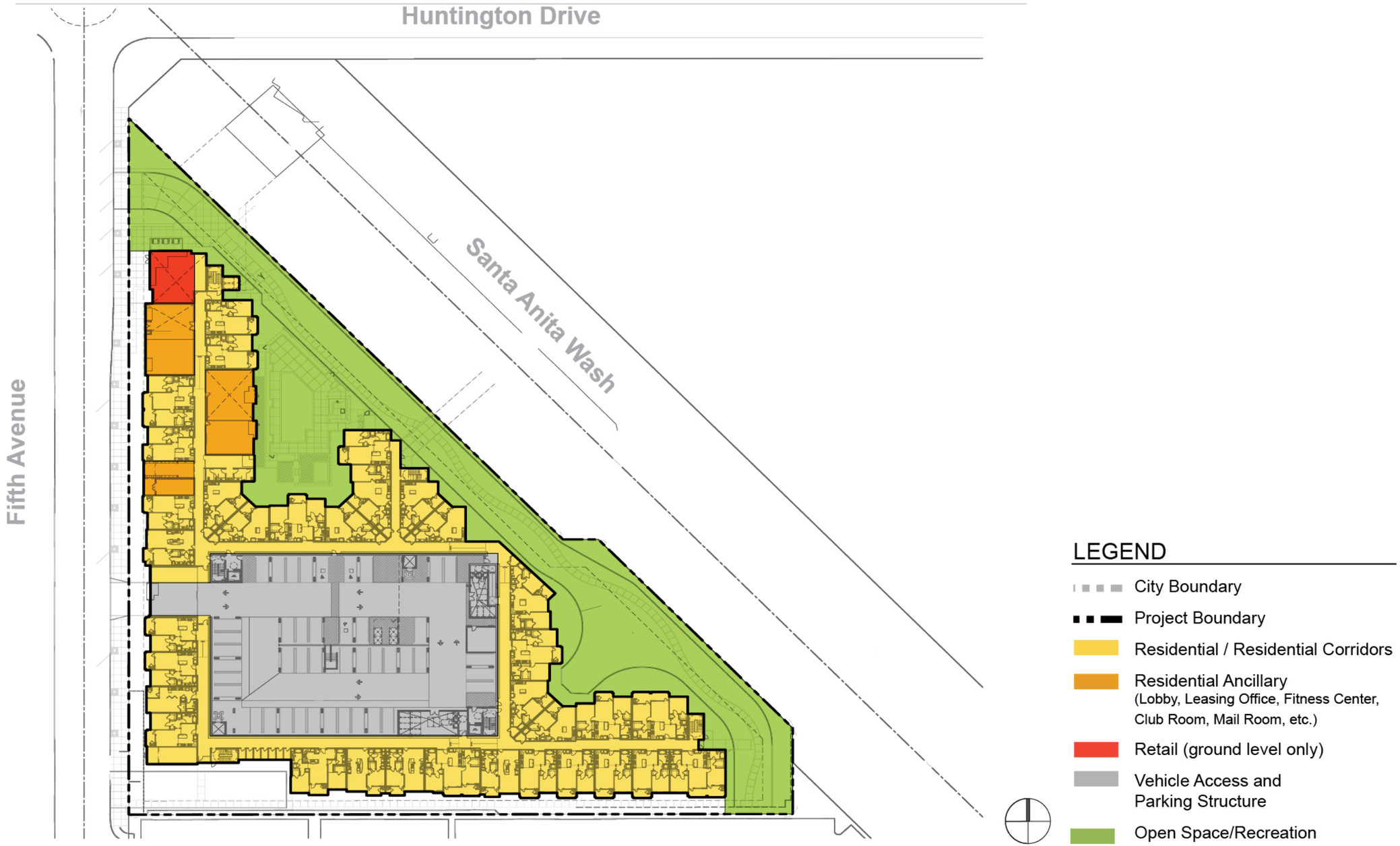
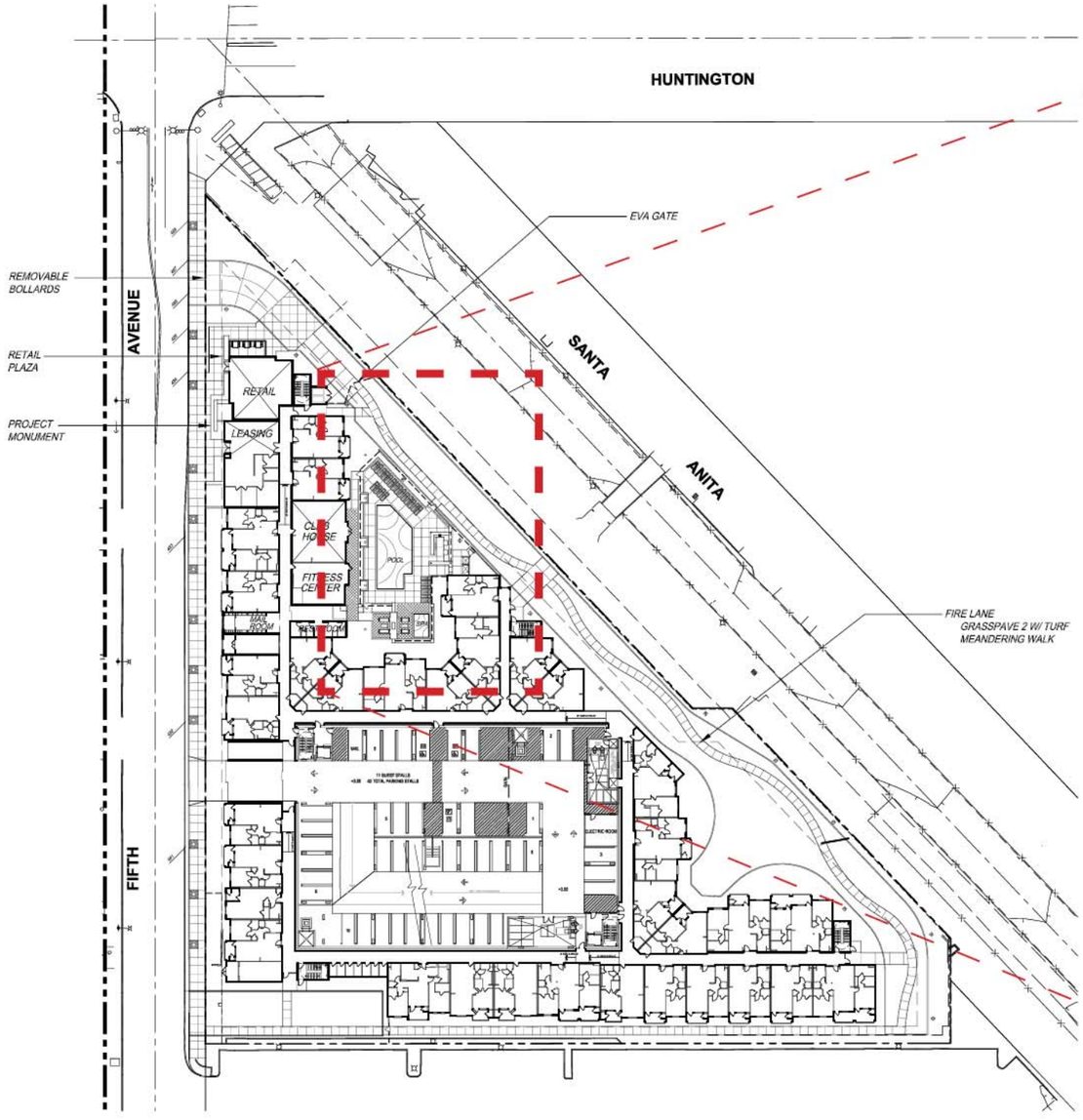
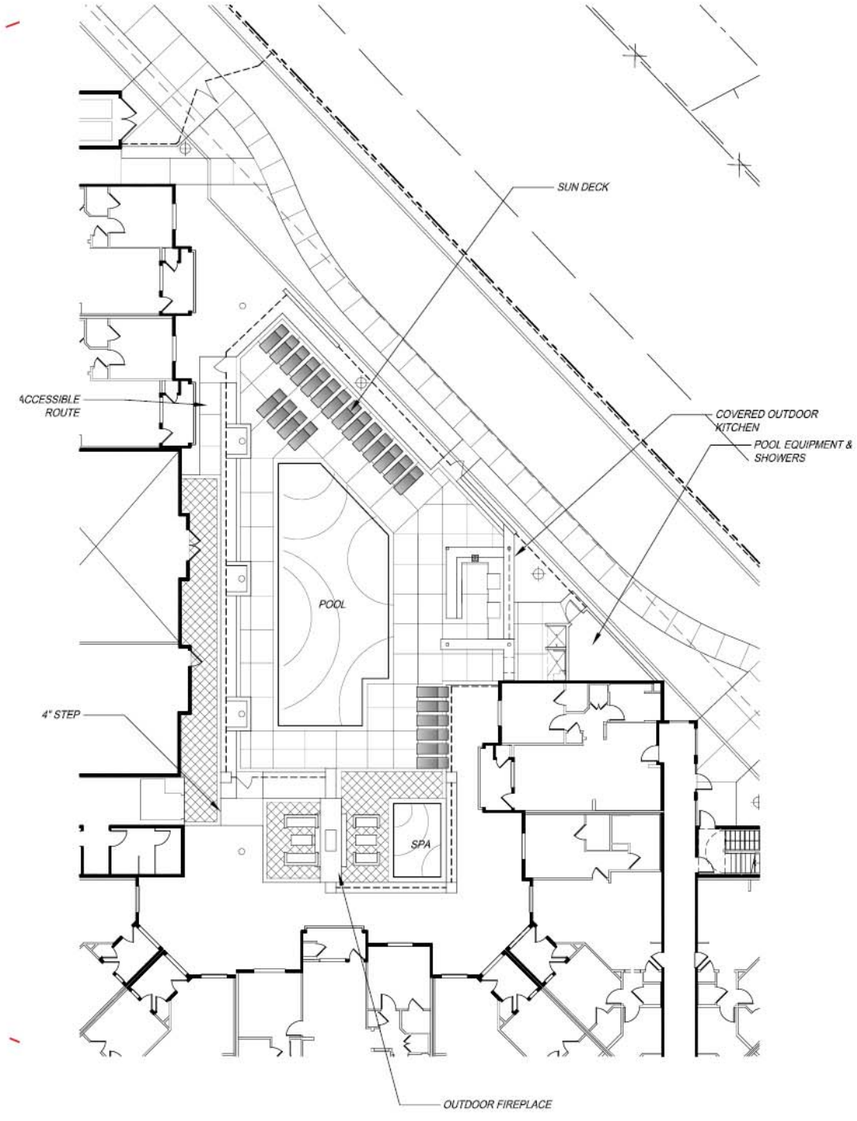


Figure 2-2: Outdoor Living Room

Figure 2-3: Open Space Plan



Overall Site Plan



Recreational Area Enlargement

2.2.4 Parking

Parking spaces for 283 vehicles will be located within a six-level parking garage. The anticipated parking demand for all uses will be accommodated in the garage. The parking spaces are allocated as follows:

Table 2-2: Parking Space Allocation and Location

Baseline Land Use	Number of Parking Spaces		
	Residential Units	Residential Guest	Retail
Basement Level	0	14	0
First Level (Ground)	33	7	4
Second, Third, and Fourth Levels	62 on each level	0	0
Roof Level	39	0	0
Subtotal	**258**	**21**	**4**
Total	**283 (1.8 space/du)**		

Vehicles and pedestrians will access the parking garage from a single entry on Fifth Avenue. Residential guest and retail parking spaces are separated from resident parking by an electronic gate located on the first parking level. Since the residential building wraps around the parking garage (see Figure 2-4), residents will have multiple pedestrian access points from each parking level to each residential floor.

No tandem spaces will be provided. Each parking stall will be individually accessible.

2.3 Architectural Style

2.3.1 Building Exterior and Façade

The building is four floors (50 feet maximum height) with a landmark corner/tower element (60 feet maximum height). The building's design reflects a contemporary style of architecture that is well articulated to provide architectural interest and reduce large massing elements. Articulation of horizontal and vertical surfaces—together with fenestration and openings, color, texture and the use of varied materials—are used to reduce the appearance of undifferentiated massing. Large smooth, unarticulated surfaces have been avoided. The building's exterior is enhanced with a mix of materials such as, stucco, metal, and glass, as shown in Figure 2-5. The materials exhibit permanence and high quality, and the colors promote visual harmony. The building's exterior is well articulated on all sides since all elevations will be visible from public streets or rights-of-way, as shown in Figure 2-6.

The Fifth Avenue façade uses of glass and building entries to create a storefront appearance for the retail component, public lobby, and leasing office area. The significant use of glass provides transparency and openness to the street to help create an active streetscape. The use of reflective, opaque, or darkly tinted glass is prohibited.

2.3.2 Balconies and Patios

The inclusion of residential ground-level patios and upper-floor balconies is for both aesthetic and practical purposes. These features break up the wall planes, create visual interest, and add human scale to the building. Patios and balconies also provide outdoor living areas and elevated open space. The building's patios and balconies may project slightly past the building. They have been integrally designed as part of the building's details and architectural style. The patios and balconies range in size from 52 to 158 square feet with minimum dimension of 6 feet along one side. The patios and balconies are enclosed to with 42" high tubular steel railing.

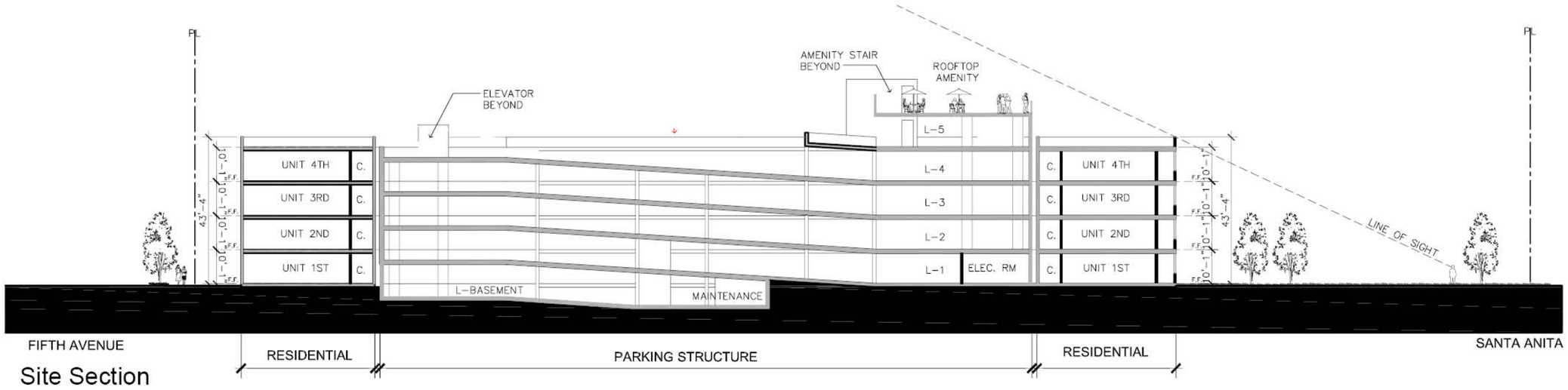
2.3.3 Storefront Design

The retail storefront provides generous, ample display windows and entry points into retail space, the public lobby, and the leasing office, also shown in Figure 2-7. Storefront glazing is clear glass; reflective or metallic glazing will not be used.

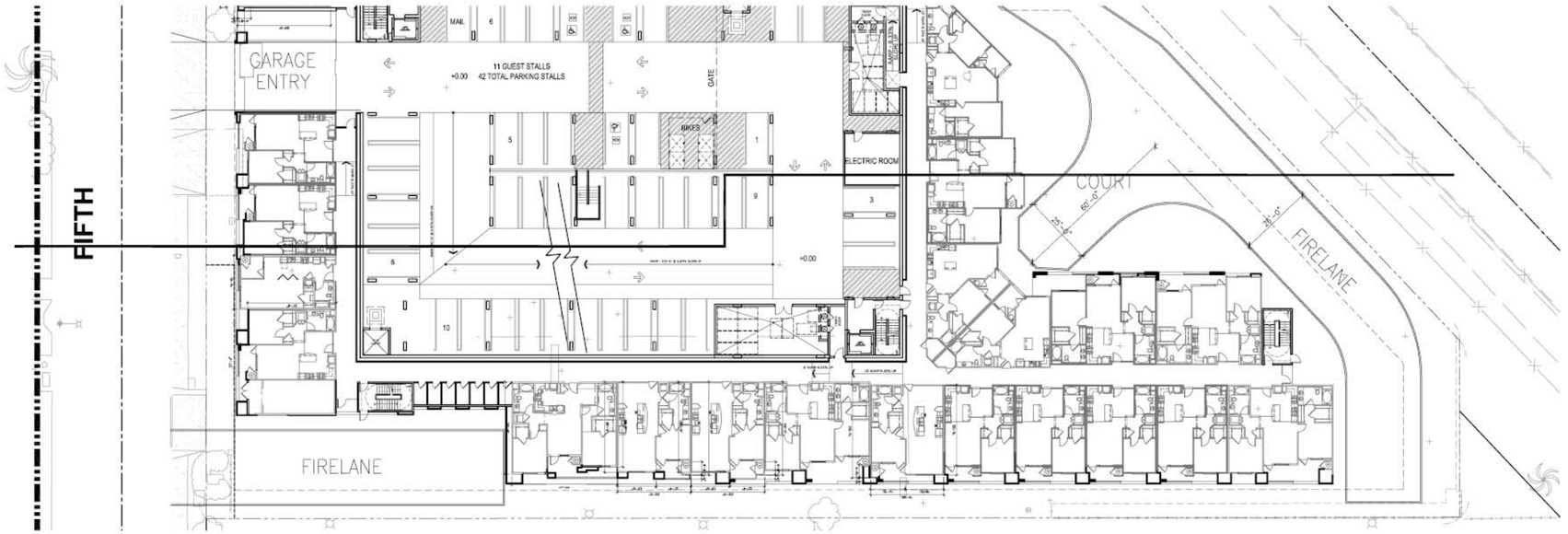
2.3.4 Outdoor Plaza/Courtyard

The retail component is located on the ground-level in the building's northernmost corner. Immediately north of the retail space is an outdoor 200-square-foot patio dedicated to the retail use. The patio edge will be delineated with landscaped planter boxes or 36" high tublar steel fence. Entry to the retail space will be through the outdoor patio. Just outside the retail patio, is a 2,000 square foot public plaza/courtyard that provides urban open space and pedestrian connectivity from the public sidewalk to the Santa Anita Wash's proposed pedestrian bridge. The outdoor patio and plaza/courtyard's location adjacent to the public sidewalk also supports an active streetscape.

Figure 2-4: Wrapped Parking Garage



Site Section



Section Location

Figure 2-5: Exterior Facade

West Elevation - Fifth Avenue

COLOR LEGEND

1. Stucco Color 1 -Westhighland White (SW7566)
2. Cement Board Siding - Favorite Tan (SW 6157)
3. Concrete Block Base - Adaptive Shade (SW 7053)
4. Stucco Color 2 - Jersey Cream (SW 6379)
5. Wood Siding - Brevity Brown (SW 6065)
6. Stucco color 3 - Majolica Green (SW 0013)
7. Metal Railing w/Perforated Metal Panel Infill

Figure 2-6: Elevations

North Elevation - Huntington Drive

South Elevation

Figure 2-7: Storefront Design

3

Circulation Plan

5th & Huntington Specific Plan

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Chapter 3
Circulation Plan

3. Circulation Plan

3.1 Introduction

The Circulation Plan enhances connectivity for the movement of pedestrians, bicyclists, and vehicles. The 5th & Huntington Circulation Plan consists of sidewalks and pathways, a dual-use fire lane/landscaped open space area, and bicycle facilities.

3.2 Existing and Future Offsite Vehicular Circulation

Located south of the I-210, local streets providing access to the Plan Area are Huntington Drive to the north and Fifth Avenue to the west. These streets are fully improved.

The 5th Avenue/Huntington Drive Mixed-Use Project Traffic Impact Analysis, dated December 27, 2012 and the Responses to City Consultant's Comments to the Traffic Impact Study, dated December 26, 2012,[1] evaluated potential impacts of the 5th & Huntington Specific Plan on five local intersections as determined by the City Of Monrovia. The Analysis concludes that the proposed project will have incremental but less than significant traffic impacts (using intersection impact criteria established in the City of Monrovia General Plan) at any of the study intersections. Therefore, no roadway or signalization improvements are required nor recommended for the study intersections. In addition, the Analysis determined the 5th & Huntington Specific Plan development will not result in significant impacts at any of the Congestion Management Program (CMP) intersections or freeway monitoring locations.

3.3 Onsite Vehicular and Non-Vehicular Access

Vehicular access into the site will be from Fifth Avenue via into a 24-feet-wide, two-lane parking garage entry as shown on the Circulation Plan, Figure 3-1.

Emergency vehicle access, also from Fifth Avenue, is provided by two fire lanes. The northernmost fire lane begins north of the pedestrian plaza/courtyard and travels approximately 3,900 feet in a southeast direction, paralleling the Santa Anita Wash. This fire lane terminates at the southern project property line and includes a fire apparatus turnaround. The northern fire lane is a dual use facility, to be constructed with grasspavers (Grass Pave II) or equivalent with concrete bands defining the edges, and turf to provide the passive open space amenity.

[1] The Traffic Study and the Responses to City Consultant's Comments to the Traffic Impact Study, both prepared by Linscott, Law & Greenspan, Engineers are included as Appendix A.

The southern fire lane is approximately 120 feet long and is located between the residential building and the southern property line, as shown in Figure 3-2. It will be constructed of Grass Pave II or equivalent.

The non-vehicular circulation - pedestrians and bicyclists - access the site from Fifth Avenue, the existing Santa Anita Wash pedestrian bridge, and the planned pedestrian bridge. Pedestrian pathways provide connectivity to the plaza/courtyard, the Santa Anita Wash bridges, and possible access to a future horse trail. Pedestrians access the retail space from the plaza/courtyard. Pedestrians access the residential units from the Fifth Avenue facing lobby and pedestrian gates located at various points. In addition, Bicyclists are able to access up to 40 bicycle storage lockers and racks through the Fifth Avenue parking structure.

Figure 3-1: Conceptual Circulation Plan

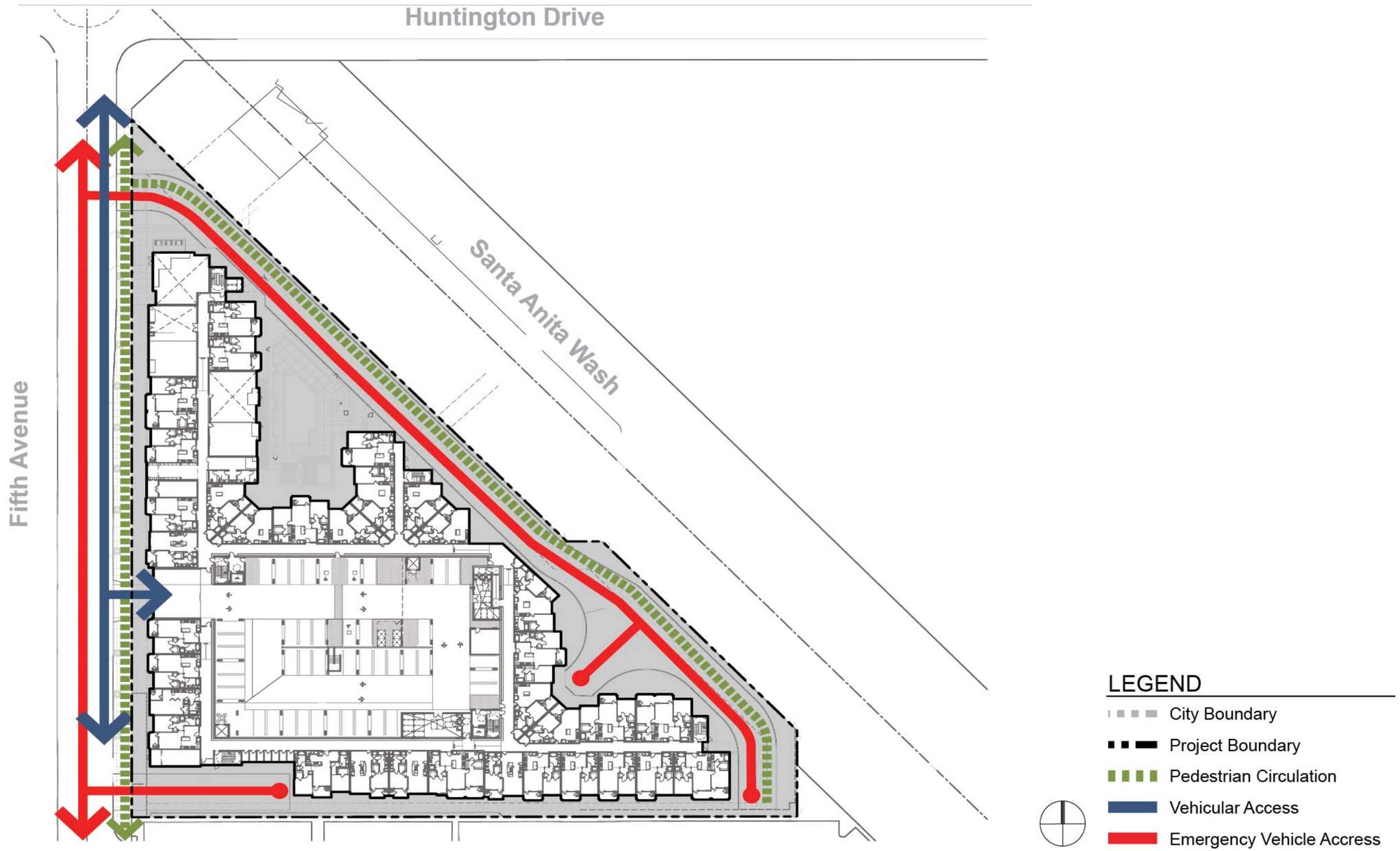
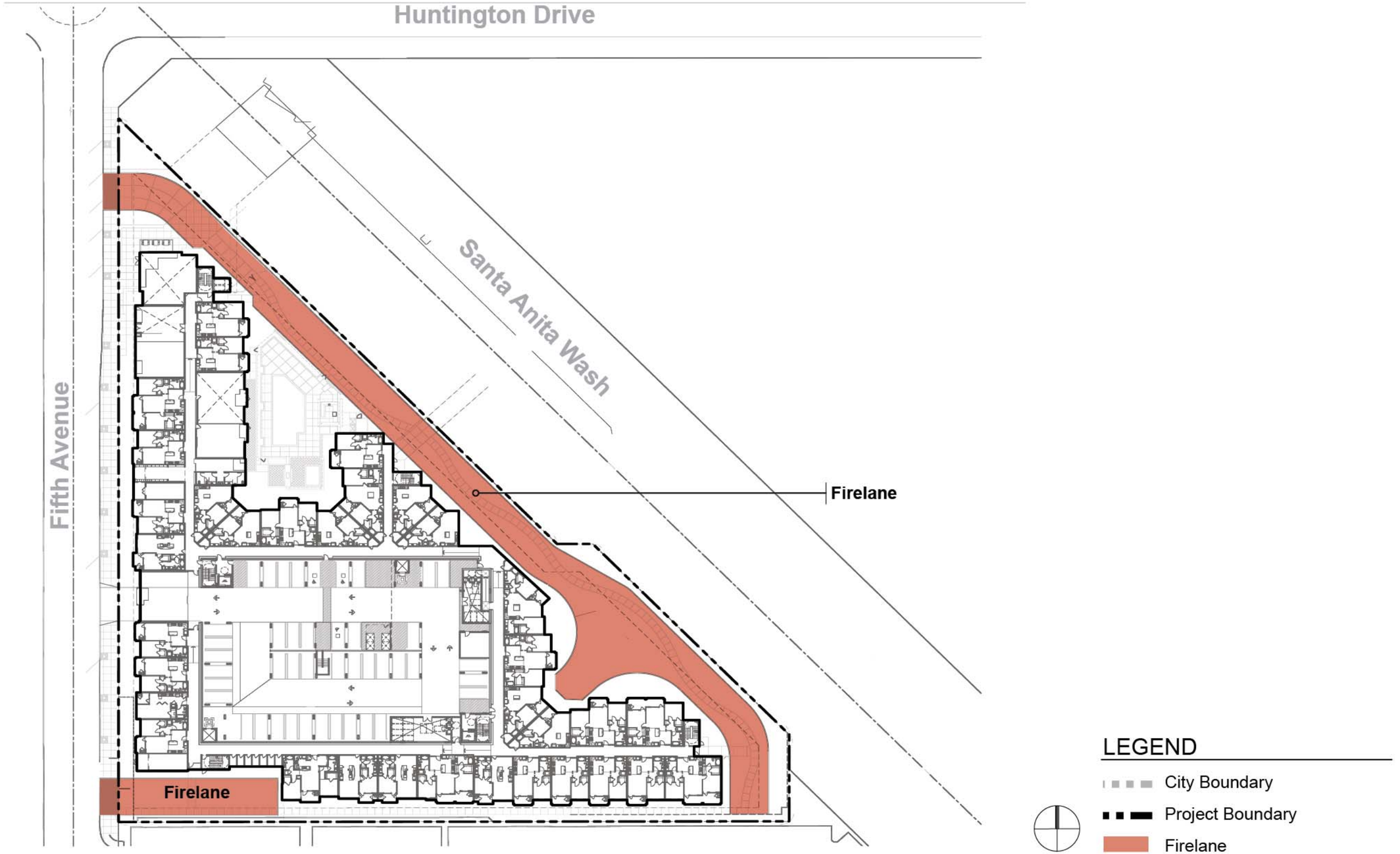


Figure 3-2: Fire Lanes



4

Infrastructure Plan

5th & Huntington Specific Plan

CITY OF MONROVIA

Chapter 4
Infrastructure Plan

4. Infrastructure Plan

4.1 Introduction

This chapter defines the infrastructure and utilities that will be provided to the 5th & Huntington Specific Plan site. Infrastructure includes water, sewer, storm water drainage, solid waste disposal, energy, and other facilities located within or adjacent to the Specific Plan area.

4.2 Water

Potable water is provided by the City of Monrovia via the Public Works Department's Utilities Division. The main source of water is through five active wells that pump water from the Main San Gabriel Groundwater Basin. The City is also a member of the Metropolitan Water District of Southern California, thus ensuring the availability of imported water, if necessary, via standby connections. Monrovia's water distribution system consists of five individual but interconnected zones throughout the City. Water is pumped in stages from reservoirs in the lower zones into the higher zones. There is an existing eight-inch (cast iron) water main line that crosses Huntington Drive and runs parallel along Fifth Avenue, as shown in Figure 4-1. The existing water system will be evaluated by the City to determine adequate availability of water for the project. The City of Monrovia Fire Department will determine the fire flow requirement during the processing of the Specific Plan and subdivision application process.

4.3 Sanitary Sewers

Sewage collection and treatment services are provided by Los Angeles County Sanitation Districts 15 and 22, which utilize both San Jose Creek and the Whittier Narrows Water Reclamation Plants. There is a public sewer main (owned by the City of Arcadia) along Fifth Avenue. Sufficient capacity exists within the conveyance system and the two plants to accommodate build out of the proposed project. Existing sewer lines are shown in Figure 4-1. A detailed study shall be prepared by Lincoln Property Company' engineer (Land Design Consultant "LDC") to show the development's impacts to the existing conveyance system, including existing capacity analysis.

4.4 Solid Waste

The City of Monrovia contracts its solid waste collection service to the private sector through a comprehensive franchising agreement with Athens Services. The existing contract services will be extended to provide solid waste collection and disposal services for the Specific Plan area. The project is required to comply with applicable State and local regulations.

4.5 Storm Water Drainage

The Santa Anita Wash, an open concrete-line storm drainage channel, is located directly adjacent to the 5th & Huntington Specific Plan site. This storm drainage channel, operated and maintained by the Los Angeles County Flood Control District, serves to control and conserve the floodwaters of the Santa Anita Canyon watershed. The channel's water flows downstream in a southeastern direction toward the Rio Hondo channel, which runs southwest into Whittier Narrows and continues southwest to join the Los Angeles River in the City of Downey. The channel's width ranges from approximately 30 feet to 32 feet adjacent to the project site. Two existing catch basins are located at the southeast portion of the site. Both are planned to remain with modifications to provide connections to the existing channel to the satisfaction of Los Angeles County Department of Public Works.

The development plan shall comply with the City's Stormwater Management Ordinance and implement Low Impact Development (LID) standards. A detailed study will be prepared by the developer to address and mitigate the project's stormwater requirements during construction and over the long term. The proposed project is designed to incorporate drains on the top of structures to collect and direct water toward landscaped areas and the project infiltration basin and vegetated bio-swale.

4.6 Electricity

Southern California Edison (Edison) provides electricity to the Specific Plan area. Edison has a local office in the City of Monrovia. Edison maintains aboveground power lines along the west side of Fifth Avenue, across the street from the Specific Plan site. In conjunction with the implementation of the Specific Plan, electrical lines will be placed underground for the project only. Figure 4-2 shows the conceptual location of electrical lines.

4.7 Natural Gas

The Southern California Gas Company provides natural gas to the Specific Plan site; it has indicated that sufficient capacity exists within the existing infrastructure to accommodate the project. Existing gas lines are located along Fifth Avenue. Additional points of connection will be established when necessary. Figure 4-2 shows the approximate location of gas lines.

Figure 4-1: Infrastructure

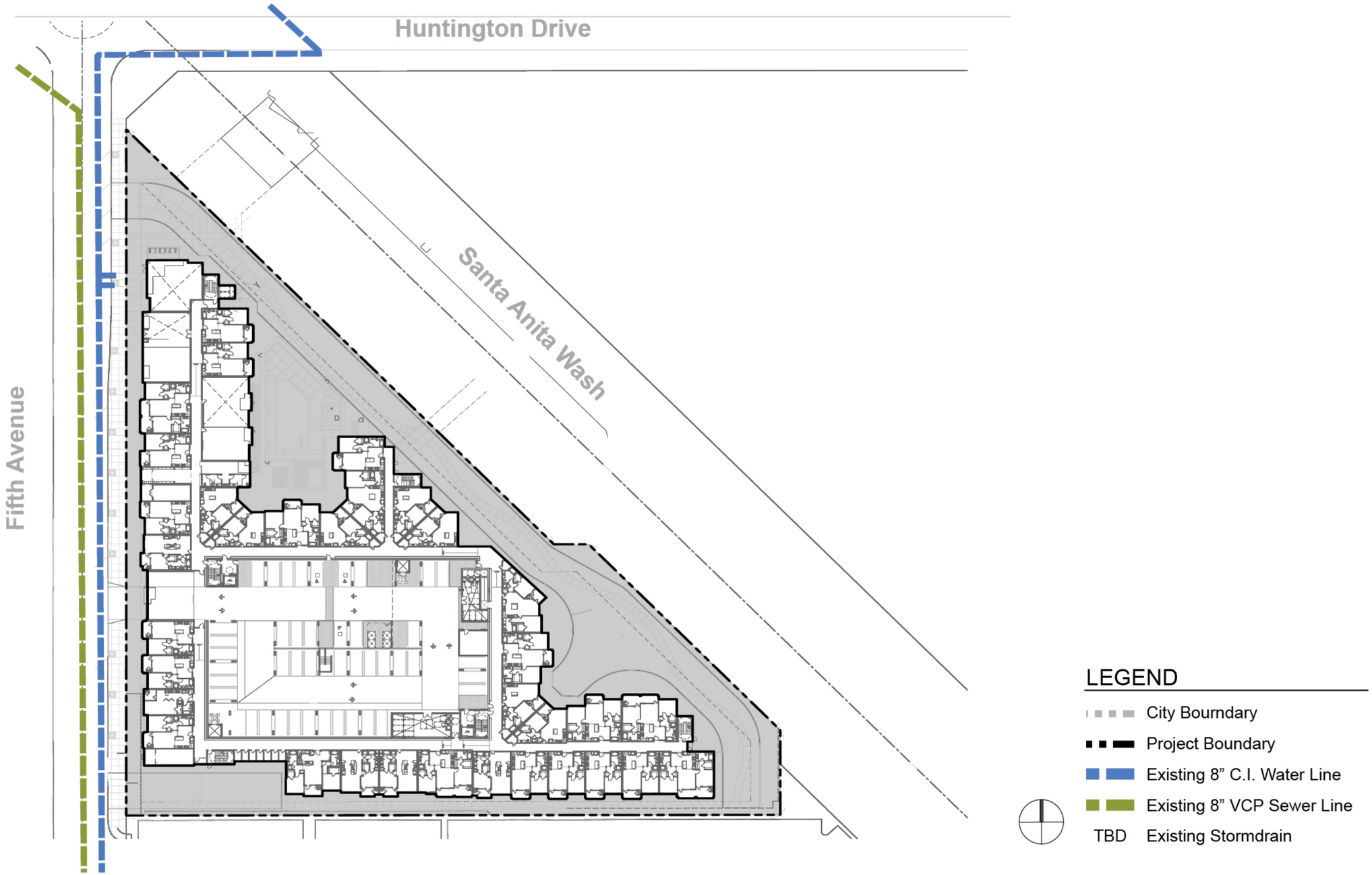
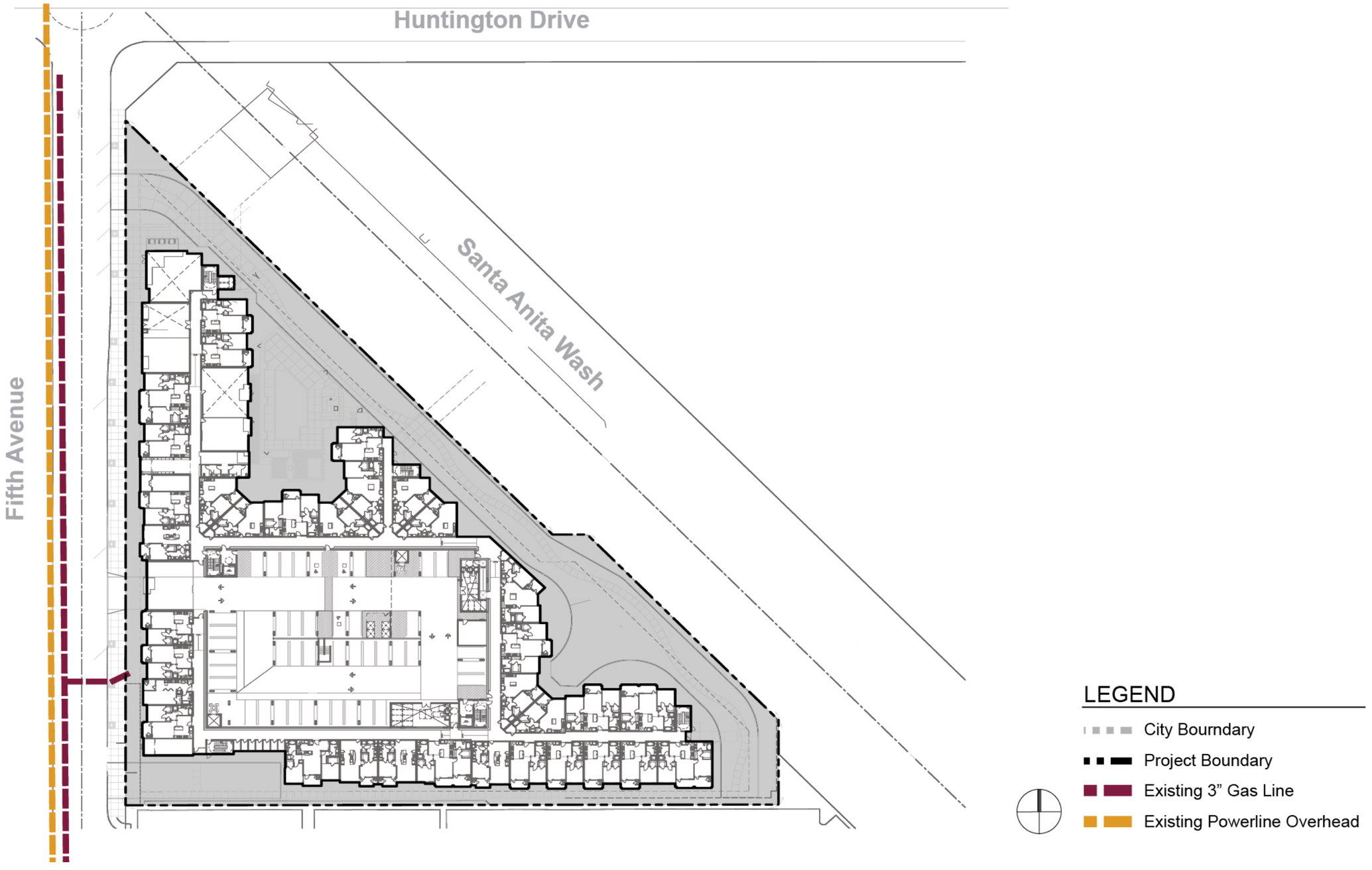


Figure 4-2: Utilities



4.8 Telecommunications Services

Land-based telephone service is offered by AT&T, Verizon, and Time Warner Cable. Existing telephone lines run along the west side of Fifth Avenue, carried along the same aboveground utility poles provided for electric power lines. Champion Cable provides cable service and Time Warner Cable provides franchised cable television and internet services to the project area. Any and all extension of and improvements to available telecommunications facilities shall be paid for by the project developer.

4.9 Police Protection

The Monrovia Police Department provides law enforcement and police protection services within the City of Monrovia. The Monrovia Police Department provides a full range of programs, including Community Activist Policing, Neighborhood Partnerships, Drug Abuse Resistance Education (DARE), Parenting Workshops, and Safe City, Safe Campus. The Police Department operates from its headquarters at 140 E. Lime Avenue.

4.10 Fire Protection & Paramedics

The City of Monrovia provides full-service fire protection and emergency medical services to all properties in the City. The department is responsible for 13.7 square miles of residential, commercial, and industrial uses, as well as open space-brush area. There are currently two fire stations (Fire Stations 101 and 102) that each house an engine company, paramedics, and one station with a Battalion Chief. These facilities are equipped to serve a resident population of over 40,000. For the Specific Plan project site, emergency first response is expected to come from Fire Station 102 (2055 South Myrtle Avenue) located 1.9 miles from the project site. Emergency response times to the proposed development are acceptable given the proximity of the fire station to the site.

4.11 Public Transportation

Foothill Transit Route 187 provides bus service to the project site on Huntington Drive to Montclair and Pasadena. Route 187 also connects with METRO Bus Route 79, approximately one-half mile away, providing access to downtown Los Angeles.

Monrovia Transit provides door-to-door shuttle service through its Dial-A-Ride program on a “call in” basis. Monrovia Transit provides services to all passengers regardless of age and ability. Access provides door-to-door service shuttle service for people with cognitive and/or physical limitations.

The METRO Monrovia Gold Line extension is currently under construction. When completed, two Gold Line stations will be reasonably close to the project site. The Arcadia Station, located at First Street and Santa Clara Avenue, will be approximately one-half mile away from the 5th

& Huntington site. The station can be considered to be within walking distance for residents. The Monrovia Station, located at Duarte Road and Myrtle Avenue, will be a little over one mile from the site. It is anticipated that a 5th & Huntington resident would bike, use transit, or drive to the Monrovia Station.

4.12 Schools

The Monrovia Unified School District will provide educational services and facilities for students from kindergarten through twelfth grade. The District includes five elementary schools, two middle schools, a comprehensive high school, and a continuation high school. The project site is assigned to Plymouth Elementary School, Santa Fe Middle School, and Monrovia High School. The proposed project is not expected to generate a significant number of new students, as the proposed product type generally appeals to young working professionals and empty nesters. The 5th & Huntington Specific Plan development is subject to the payment of school fees at the time of building permit issuance as authorized under applicable laws, except as otherwise provided for in a separate agreement between the developer and the School District.

4.13 Library Services

The City of Monrovia's one public library was constructed in 2009 and is located at the corner of Myrtle Avenue and Lime Avenue. The Monrovia Library offers access to over 120,000 volumes of literature and technology. The facility also provides the City with a cultural center and responds to the informational, educational, cultural, and recreational needs of all residents and community members.

5

Development Standards and Landscape Guidelines

5th & Huntington Specific Plan

CITY OF MONROVIA

Chapter 5
Development Standards and Landscape Standards

5. Development Standards and Landscape Guidelines

5.1 Introduction

It is the intent that the 5th & Huntington Specific Plan be comprehensively developed as a single mixed-use project. The underlying zone Retail Corridor Mixed Use will remain and provide development standards where this Specific Plan is silent.

This section defines the uses permitted within the Specific Plan area and establishes standards regulating the sizes and locations of buildings. The landscape guidelines provide recommendations and guidance to the landscape design, construction, and maintenance.

5.2 References

Any references to development standards shall mean the "5th & Huntington Specific Plan Development Standards." Any reference to Municipal Code shall mean the Monrovia Municipal Code.

5.3 Resolution of Issues

Whenever Specific Plan development standards differ from or conflict with the regulations and standards contained in the Monrovia Zoning Code or any other applicable City regulation, rule or policy, the 5th & Huntington Specific Plan Development Standards shall prevail unless otherwise indicated herein. The Director of Community Development shall resolve any issues that may arise with interpretation of the Specific Plan Development Standards consistent with the purpose of this Specific Plan.

5.4 Permitted Uses

Permitted uses are listed in Table 5-1. Each use is designated as "Permitted" (P), requiring a "Conditional Use Permit" (C) or a "Minor Conditional Use Permit" (CM), or permitted as an Accessory Use (A) to a permitted use on the site. Where a use is not listed, it shall be prohibited unless the Development Review Committee determines the use to be similar to a permitted use pursuant to the provisions of Section 2.56.030 of the Zoning Code.

- A Permitted Use (P) is one that can be established as the primary use of a building or property without need of a discretionary approval (e.g. Planning Commission review), provided the use complies with this Specific Plan and all applicable Zoning, Building, Safety, and related State and local ordinances and policies.

- A Conditional Use Permit (C) or Minor Conditional Use Permit (CM), per Chapter 17.52.130–17.52.190 of the Monrovia Zoning Code, is required because certain uses, due to the nature of the use, intensity, or size, require special review to determine if the use proposed, or the location of that use is compatible with surrounding uses, or through the imposition of development and use, conditions

can be made compatible with surrounding uses. The Conditional Use Permit and the Minor Conditional Use Permit are provided for this purpose. Minor Conditional Use Permits may be granted by the Development Review Committee, and Conditional Use Permits may be granted by the Planning Commission.

- An Accessory Use (A) refers to a use customarily incidental to a principal use established on the same lot or parcel of land, whereby the accessory use does not alter the principal use or serve property other than the lot or parcel of land on which the principal use is located.

- Any development of the property shall require a CUP.

- The following chart provides the permitting requirements for uses in the commercial space. The Development Review Committee (DRC) shall be responsible for interpreting uses not outlined in Table 5-1.

Table 5-1: Use Regulations

Use		Notes
Commercial		
Administrative/Professional Services	P	
Alcoholic Beverage Sales, On-Premises	C	
Business Support Services	P	
Financial Institutions	P	
Food & Beverage Sales	P	
Instructional Services	CM	
Restaurant	CM	
Retail (indoors)	P	
Service Commercial	P	
Institutional		
Cultural Exhibits	CM	
Governmental Services	P	

5.5 Outdoor Temporary Uses, Activities, and Events

The plaza/courtyard provides limited opportunities for temporary uses, some that are associated with the adjoining business. Permitted temporary uses may include civic ceremonies, live performances, and seasonal events and activities. Temporary uses shall require a formal application to be reviewed by the Director of Community Development, and conditions may be placed on the use by the Director of Community Development to ensure that surrounding areas are not impacted by the use.

5.6 Limitation on Conversion of Land Uses

This Specific Plan has been established expressly to permit the development and operation of a mixed-use residential/commercial building. Conversion of such established building to accommodate any use other than these intended uses shall not be permitted unless this Specific Plan is amended or another entitlement process occurs.

5.7 Standards

Table 5-2 establishes the development standards applicable to all structures and related improvements within the 5th & Huntington Specific Plan area.

Table 5-2: Development Standards

Development Standard	
Maximum Residential Density	54 du/ac
Maximum Building Height	
Residential Structure	4 stories/50 feet to roofline
Parking Garage	6 levels/55 feet to roofline
Landmark Element/Architectural Projections	60 feet to roofline
Building Setbacks	
Front (West) Minimum[1]	10 feet
Front (West) Maximum	15 feet
Side (North, South) Minimum	10 feet
Rear (East) Minimum	20 feet

1. Balconies, stairs, awnings, cornices, eaves, roof overhangs, towers stoops may encroach up to 15 percent of the setback to the street.

5.8 Defensible Space Guidelines

Project elements that address "Defensible Space" or "Crime Prevention through Environmental Design" include:

- Landscape design that focuses on creating usable spaces within the landscaped passive open space and plaza/courtyard areas to encourage outdoor activity
- Residential units orientated toward the street, plaza/courtyard, and/or open space areas for maximum visibility
- Locking pedestrian entrance gates that are well lighted
- Rooftop outdoor passive space atop the parking garage that provides views of ground-level pathways

5.9 Parking Standards

The 5th & Huntington Specific Plan provides parking for building residents in a manner apart and secured from the retail and residential guest use spaces, and at the ratio indicated in Table 5-3. The parking garage integrates the retail and residential guest spaces in recognition

of varying parking requirements, peak hour demands, and vehicle loading needs. Table 5-3 sets forth the specific number of spaces required, as defined in the parking analysis contained in Appendix B.

Table 5-3: Parking Requirements

Use	Required Number of Spaces
Residential	279 Spaces based on a minimum of 1.8 spaces per dwelling unit
Retail (provides guest parking during nonretail hours)	4 Spaces based on a minimum 1.0 space per 250 square feet of leasable space

5.10 Parking Space and Access Standards

The following standards shall apply to all land uses, buildings, and structures and replaces Section 17.24, "Parking" of the City of Monrovia Zoning Code. For any standard not specified here, the Director of Community Development shall have the authority to determine the appropriate parking requirements.

- Parking space dimensions - The minimum dimensions of a standard parking space shall be at 9 feet wide and 19 feet long. The minimum dimension of a handicapped parking space shall be as directed by Title 24 of the California Code of Regulations.
- Parking access - The minimum width of required fire access parking lot drive aisles shall be 24 feet.
- All parking spaces and associated driveways shall be entirely paved with concrete per City standards and requirements.
- Pavement graphics, directional signs, and arrows shall be provided on parking lot drive aisles.
- Parking space delineation – Parking spaces shall be clearly marked with paint or another easily distinguishable material, and all spaces shall be delineated with lines.

5.11 Bicycle Parking Standards:

- Designated bicycle parking/storage spaces shall be located on the site at a location convenient and safe for building residents.
- Bicycle racks or other secure bicycle parking shall be provided to accommodate a minimum of 35 bicycles.

5.12 Lighting

Light shall be an integral part of the design theme. Proper lighting design shall be used to have a positive effect on the appearance of the building and the perception of users, and to promote a safe and enjoyable nighttime pedestrian environment.

The following lighting, at a minimum, shall be provided:

- Residential Lighting – All exterior residential lighting shall be designed to be decorative and unobtrusive. Lighting shall be designed to avoid glare into neighboring homes, public spaces, or into the night sky.
- Area Lighting – for pedestrian walkways and plazas. Area lighting shall be set in a manner that assures maximum lighting benefit without allowing stray light to intrude into windows of nearby residents or to create glare problems for nearby automobile traffic.
- "Hidden Source" Lighting – For certain prominent architectural features, hidden source lighting can be used to create dramatic effects, illuminating towers or other unique architectural features. Such lighting can be concealed in soffits, behind ledges or parapets, or set into landscape areas with the light directed at the element to be highlighted. Use of low, bollard-type lighting and/or landscape accent lighting is encouraged, especially in pedestrian areas.

A lighting plan shall be submitted for the Planning Division's review and approval, and shall demonstrate that:

- Lighting levels are sufficient for the safety and security of vehicular and pedestrian traffic, but do not spill onto adjacent properties.
- Lighting is provided in all parking, vehicular, and pedestrian circulation, loading, and storage areas.
- Lighting is located to assure adequate light levels and create an even level of illumination.
- Exterior lighting is architecturally integrated with the building style, materials, finishes, and colors.

5.13 Mechanical Equipment

- All ground level mechanical equipment including but not limited to aboveground utility boxes, telephone boxes, water lines, back-flow preventers, and cable boxes shall be completely screened behind a permanent structure or appropriate landscape screen, and shall not be located within the street facing setback.
- Air conditioners, heating, cooling and ventilating equipment, and all other mechanical, lighting, or electrical devices shall be screened, shielded, and/or sound buffered from adjacent properties.
- Roof-mounted equipment shall be screened by a parapet wall or similar architectural feature, and shall not be visible from the adjacent public right-of-way.

5.14 Trash Enclosures

- Enclosures shall be required for refuse and recycling bins, and shall be screened from view from public rights-of way.
- Enclosures shall be a minimum six feet in height and shall be architecturally compatible with main building. A self-closing gate shall be provided, and such gate shall be architecturally compatible with the balance of the enclosure.

- Areas for trash enclosures shall be adequate in capacity, number, and distribution to serve the development project. Location of trash enclosures shall be shown on building plans at the time of submittal.

5.15 Outdoor Storage

All outdoor storage is prohibited with the exception of a pool equipment storage room or other enclosed storage area planned for and articulated as part of the building's design. Storage on residential unit patios and balconies and the retail use's patio is prohibited.

5.16 Walls and Fences

- Perimeter walls must be constructed of materials complementary in style, color, and form to the structure. Through design review or similar project review process, conditions may be placed on the permit approval requiring additional wall treatment, including but not limited to landscaping, wall placement, and wall height.
- The types of fencing not permitted are chain link, barbed wire/razor wire.
- New constructed masonry walls, including retaining walls, along public streets or rights-of-way greater than 50 feet in total length must be designed with architectural elements such as articulated columns, tree well insets, planters, staggered wall fences, dimensional trellises, or other similar elements as may be approved by the Director of Community Development. Such features shall be provided at interval lengths of between 15 to 20 feet to break up the linear appearance of the wall and create a visually interesting pedestrian environment.
- New constructed interior walls that are not adjacent to a public street or right-of-way, but which are otherwise substantially visible from the street level, shall be either architecturally treated or screened by landscaping to break up and camouflage the appearance of the wall along those segments visible from the public street.
- Walls and fences shall not exceed 8 feet in height unless allowed via the minor exception process defined in the Zoning Code.
- Walls and fences shall not interfere with Fire Department operations.

5.17 Noise and Vibration

Project-specific noise and vibration studies shall be submitted to the City at the time of project submittal. The studies shall quantify vibration and noise levels based on measurements of existing rail activity, vibration propagation tests of the soil at project sites, and proposed Gold Line travel speed. If necessary, the studies shall include mitigation to reduce vibration and noise levels at proposed residential land uses to below the City and State CNEL 45 dB interior living areas threshold and below the Federal Transit Administration 72 VdB threshold.

5.18 Sign Standards

Prior to the establishment of any signs, a comprehensive sign plan shall be submitted for approval by the Development Review Committee. All signs shall comply with the requirements of Chapter 17.28 of the Zoning Code.

5.19 Underground Utilities

All utility connections for new construction shall be underground, but utility connections to structures that lawfully pre-exist the adoption of this Specific Plan may be maintained when it can be demonstrated that the undergrounding of such utilities is not reasonably feasible, as determined by the Director of Public Works.

5.20 Landscape Requirements

Landscape development will be guided by the design standards and guidelines set forth in this section. The intent is to provide landscaping that enhances the quality of the development, creates shade for pedestrians, utilizes plant materials that are sustainable and beneficial, and contributes positively to the appearance of Huntington Drive and Fifth Avenue. Landscaping concepts consistent with this intent are shown in Figure 5-1.

A landscape documentation package pursuant to the requirements of AB1881 and the Model Water Efficiency Landscape Ordinance shall be submitted to the Planning Division for approval prior to landscape construction. A Landscape Certificate of Completion shall be submitted to the Planning Division at the completion of the installation, prior to request for a final inspection and Certificate of Occupancy.

5.20.1 Landscaping Principles and Goals

In developing the master landscape plan, consideration shall be given to the following goals and objectives:

- Create “green areas” and enhance important public spots easily accessible to all in the community.
- Landscape design shall integrate the aesthetic and functional requirements of urban life.
- Make sidewalks, walkways, and all pedestrian areas convenient, attractive, comfortable, and safe.

5.20.1.A Application of Sustainable Design Practices

To the extent consistent with other design considerations, landscape design shall minimize resource consumption. Materials considered should protect the natural environment from long-term harm. Materials shall be used which are long lived and use minimal energy in their manufacture and/or transport to the site, have high recycled content, and have minimal non-renewable material content.

To the extent possible, trees shall be sited to shade south facing elevations of buildings to help reduce cooling requirements.

5.20.1.B Edge Treatments

Landscape edge treatments shall be employed to provide a transition between adjacent uses. These edge treatments shall provide a buffer between adjacent uses and incorporate a system of pedestrian paths. For example, edge treatment between residential uses and public streets may emphasize landscaping that screens, reduces noise, or limits access for privacy.

5.20.1.C Drought-tolerant Landscaping

Drought-tolerant landscaping is encouraged. Plant selection should be based on site characteristics such as exposure, light intensity, soil analysis, site drainage, and irrigation. Proper plant selection based on site characteristics should enhance the plants' likelihood of becoming established in the site and reduce potential incidences of low vigor, excessive maintenance, disease, or death.

California Native and Mediterranean species are preferred for natural landscapes, but plant selection should again take into consideration the microclimate and topography of the site. To ensure water efficiency, appropriate landscaping should be irrigated through a drip, bubbler, or high efficiency sprinkler system.

5.20.1.D Screening and Buffering

- In addition to architectural treatments, landscaping material should be used additional method to obscure the view of any, refuse collection, equipment, or loading area visible from the public street or pedestrian area.
- Development should include appropriate landscaping to maximize privacy between residences, and should include appropriate planting to screen or soften any undesirable light pollution or views from off-site.
- Design should take into consideration the future impact the new plantings may have in obscuring views.

Figure 5-1: Proposed Landscaping Plan

PLANT LIST

SYMBOLS	BOTANICAL NAME	COMMON NAME	WUCOLS (Zone 4)
	TREES		
	Cupaniopsis anacardioides	Carrotwood	M
	Chitalpa tashkentensis	Chitalpa	L
	Tabebuia ipe	Pink Trumpet Tree	M
	Fraxinus velutina 'Modesto'	Modesto Ash	M
	Platanus racemosa	California Sycamore	M
	Ginkgo Biloba 'Autumn Gold'	Ginkgo Tree	M
	Pyrus calleryana 'Chanticleer'	Chanticleer Pear	M
	Tristania conferta	Brisbane Box	M
	Phoenix dactylifera	Date Palm	L
	Bambusa multiplex 'Alphonse Karr'	Alphonse Karr Bamboo	M
	SHRUBS		
	Aeonium 'Zwartkop'	Large Purple Aeonium	M
	Aeonium arboreum	Tree Aeonium	M
	Agave 'Blue Flame'	Blue Flame Agave	L
	Agave attenuata 'Nova'	Blue Foxtail Agave	L
	Aloe plicatilis	Aloe	L
	Anigozanthos cv.	Kangargoo Paw	M
	Bamboo multiplex 'Golden Goddess'	Golden Goddess Bamboo	M
	Bergenia cordifolia	Heartleafed Bergenia	M
	Callistemon viminalis 'Little John'	Dwarf Bottlebrush	L
	Carex spp.	Sedge	M
	Chionathus retusus	Chinsese Fringe Tree	L
	Chondropetalum tectorum	Cape Rush	M
	Cotinus coggygrea	Smoke Tree	M
	Cuphea hyssopifolia	False Heather	M
	Equisetum hyemale	Horsetail	H
	Festuca glauca 'Elijah Blue'	Blue Fescue	M
	Hemerocallis 'Dwarf Red'	Day Lily	M
	Kalanchoe spp.	Kalanchoe	M
	Liriope muscari	Lily Turf	M
	Lomandra longifolia 'LM300'	Breeze Dwarf Mat Rush	M
	Muhlenbergia rigens	Deer Grass	M
	Nephrolepis cordifolia	Southern Sword Fern	M
	Panicum virgatum 'Heavy Metal'	Blue Switch Grass	M
	Philodendron x 'Xanadu'	Dwarf Philodendron	M
	Phyllostachys nigra	Black Bamboo	M
	Phormium 'Maori Chief'	New Zealand Flax	M
	Podocarpus elongates 'Monmal'	Icee Blue Yellow Wood	M
	Rhaphiolepis x. 'Montic'	Majestic Beauty Indian Hawthorne	M
	Rosa x 'Noare'	Flower Carpet Red Groudcover Rose	M
	Sedum spp.	Stonecrop	M
	Sporobolus heterolepis	Prarie Dropseed	L
	GROUND COVER		
	Senecio mandraliscae	N.C.N.	L

IRRIGATION NOTE:
ALL PLANTING AREAS SHALL BE IRRIGATED BY AN IRRIGATION SYSTEM THAT IS DESIGNED USING A WATER EFFICIENT, WEATHER BASED CONTROLLER AND IT SHALL MEET OR EXCEED THE MOST CURRENT STATE WATER ORDINANCE (AB 1881) OR CITY OF MONROVIA EQUIVALENT.

5.20.1.E Irrigation Systems

The landscape palette should allow for a high degree of water conservation. Irrigation practices shall include the use of state-of-the-art equipment that treats water as a precious resource. The irrigation system shall be designed to meet the following criteria:

- The system shall conform to the regulations for the construction of irrigation water systems within the City of Monrovia.
- Within the landscaped areas, an approved weather-based irrigation system is encouraged.
- Design, installation, and equipment shall conform to the highest industry standards. All constant pressure reclaimed and/or potable water mainline piping installed shall be identified in accordance with the City of Monrovia regulations.
- All irrigation systems shall be controlled with automatic irrigation controllers, and be installed to maximize ease of operation and maintenance.
- Systems should be installed in a manner that minimizes opportunities for vandalism. All controllers, pumps and associated equipment must be screened from view with planting and/or landscape walls.
- All landscape planting areas are to be adequately irrigated.
- Irrigation systems shall be programmed to operate between the hours of 9:00 P.M. and 6:00 A.M. unless otherwise directed by the City Engineer.
- Sprinkler heads are to be located to avoid over spray on to sidewalks, roadways, buildings, etc.

6

Sustainability Practices

5th & Huntington Specific Plan

CITY OF MONROVIA

6. Sustainability Practices

The 5th & Huntington Specific Plan site is an infill location that does not require significant infrastructure extension. The site is within easy walking distance of Huntington Drive restaurants, shops, and bus routes. The site is also within walking distance of the Arcadia Gold Line transit station and within a short bus ride of the Monrovia Gold Line transit station.

The City of Monrovia has been proactive with regard to sustainability issues. The City Council has adopted the Monrovia Environmental Accords (MEA), establishing goals and policies to make Monrovia more environmentally friendly and sustainable. The MEA covers 21 long-term goals and objectives, from waste diversion to new transportation systems. In keeping with the MEA, the 5th & Huntington Specific Plan promotes sustainable design and construction practices.

The Build It Green organization has also developed "GreenPoint" strategies to measure development's sustainability. The 5th & Huntington project will implement a number of the strategies. Table 6-1 identifies the MEA Guidelines and the GreenPoint strategies that have been or will be implemented as part of 5th & Huntington's planning, design, construction, and operation.

Table 6-1: Sustainable Practices Implemented or to Be Implemented

Implemented as Part of Initial Project Design	To Be Implemented as Part of Ongoing Project Design and/or Construction	
MEA Guidelines	**MEA Guidelines**	**"GreenPoint" Strategies**
Provide a mix of land uses within the community	Using salvaged materials such as beams and posts, flooring, paneling, doors and frames, brick and decorative items.	Diverting 50% (by weight) of all construction and demolition waste (recycling or reuse)
Provide shopping and recreational opportunities within a five minute walk to reduce dependence on the automobile.	Using rapidly renewable materials such as bamboo, wool, cotton insulation, agrifiber, wheatboard, strawboard and cork.	Diverting 100% of asphalt and concrete and 65% (by weight) of remaining materials
Design buildings to provide a connection between indoor spaces and the outdoors. Strategies include building orientation, shallow floor plates, and high performance glazing	Using innovative efficiency products, including but not limited to, efficient lighting, energy monitoring systems, insulation, and/or smart cooling systems.	Grouping of plants by water needs (hydrozoning)
Use of permeable pavement, porous driveway and sidewalk pavers to reduce the amount of stormwater runoff	Installing energy efficient air conditioning, heating and ventilation systems, lighting systems, and/or other green building practices	Not using invasive plant species
	Installing high-efficiency irrigations systems, such as	Using of drought tolerant, California Natives,

Table 6-1: Sustainable Practices Implemented or to Be Implemented

Implemented as Part of Initial Project Design	To Be Implemented as Part of Ongoing Project Design and/or Construction	
	low-flow Drip, Bubblers, or Sprinklers	Mediterranean or Other appropriate plant species (75%)
	Using of "smart" (weather based) irrigation controllers	Use paving with an SRI of 29 or greater to reduce heat island effect
	Installing high-efficiency toilets and/or urinals, showerheads, and faucet flow limiters or flow control valves in residences and non-residential areas	Using Engineered Lumber Oriented Strand Boards for subfloor, wall and roof sheathing
	Using Energy Star fixtures and appliances	Installing operable windows or skylights to induce cross ventilation in at least one room (in 80% or more of the residential units)
		Using Low-VOC interior wall/ceiling paint in residential units and nonresidential areas
		Using low emitting carpeting and resilient flooring (50%)
		Installing bio-retention and filtration stormwater control features
		Using erosion controls during construction

7

Implementation Plan

5th & Huntington Specific Plan

CITY OF MONROVIA

Chapter 7
Implementation Plan

7. Implementation Plan

7.1 Phasing

The 5th & Huntington Specific Plan will be developed in one phase. Development will meet the following objectives:

- The orderly buildout of the mixed-use project
- The provision of adequate infrastructure and public facilities concurrent with development of each phase
- The protection of public health, safety, and welfare

7.2 Financing and Fees

Development of the 5th & Huntington Specific Plan site, including the fair-share costs for related off-site improvements and service connections to accommodate the proposed development, shall be privately financed by the developer.

7.3 General Provisions

7.3.1 Applicability

The development standards contained in this Specific Plan provide standards for land use development and use within the Specific Plan area. The Specific Plan supercedes the otherwise applicable City of Monrovia development standards and regulations unless stated otherwise in this document. Whenever the provisions and development standards contained in this Specific Plan conflict with those contained in the City of Monrovia Municipal Code, the provisions of the Specific Plan shall take precedence. Where the Specific Plan is silent, the City of Monrovia Municipal Code shall apply.

7.3.2 Interpretation

All interpretation of the provisions of this Specific Plan shall be made by the Director of Community Development unless stated otherwise in this document.

7.3.3 Required Actions and Entitlements

7.3.3.A Development Review Committee

The Development Review Committee (DRC), which is composed of City staff, shall be responsible for providing technical review of development proposals for consistency with City policies and regulations, and making advisory recommendations to the Planning Commission and City Council.

The DRC shall also have the authority to:

- Approve, approve with conditions, or deny Minor Conditional Use Permit applications for any use within the Specific Plan project area, and
- Approve or deny Minor Exceptions pursuant to Section 17.52.110 in the Monrovia Municipal Code.

7.3.3.B Planning Commission

The Planning Commission conducted a thorough and detailed review of the Specific Plan at an April 10, 2013 public hearing. The Planning Commission recommended approval of the 5th & Huntington Specific Plan to the City Council.

The role of the Planning Commission is to advise the City Council and administer the City's Municipal Code. The Planning Commission is authorized to make recommendations to the City Council whether to approve, approve in modified form, or disapprove a plan or development application. The Planning Commission shall act in a similar manner for any proposed Specific Plan amendment.

The Planning Commission is also authorized to approve, approve with conditions, or deny Conditional Use Permit applications for any use within the Specific Plan project area.

7.3.3.C City Council

The City Council is empowered by the Monrovia Municipal Code to approve, approve with conditions, or deny the Specific Plan and any Specific Plan amendment. Upon receipt of the Planning Commission's recommendation, the City Council may approve, approve with modifications, or disapprove the Specific Plan based upon the following findings:

- The proposed specific plan is consistent with the objectives, policies, general land uses, and programs of the general plan and other adopted goals and policies of the City.
- The proposed specific plan would not be detrimental to the public interest, health, safety, convenience or welfare of the City.
- The subject property is physically suitable for the requested land use designations and the anticipated land use developments.
- The proposed specific plan shall ensure development of desirable character, which will be compatible with existing and proposed development in the surrounding neighborhood.

The City Council held a public hearing on May 21, 2013 to review and deliberate the 5th & Huntington Specific Plan. On May 21, 2013, the City of Monrovia City Council approved Resolution 2013-21 adopting the 5th & Huntington Specific Plan.

7.3.3.D Monrovia Endowment for the Arts

Lincoln Property Company will determine if it will pay the in lieu fee or provide public art onsite at a later time.

7.3.4 Appeals

All appeals pertaining to this Specific Plan shall be made to the Planning Commission. The applicant or any other entity shall have the right to appeal the decision of the Planning Commission to the City Council on any determination by filing an application on forms provided by the City of Monrovia within ten business days following the final date of action for which an appeal is made. Appeals shall be processed consistent with the provisions of the City of Monrovia Municipal Code.

7.3.5 Development Permits

All development within the project site is subject to the Site Plan Review process as established in the City of Monrovia Municipal Code. Adoption of the Specific Plan includes adoption of the design guidelines contained herein, which provide direction for the design of the development projects within the project site.

7.3.6 Subdivision Maps

Approval of subdivision maps pursuant to the State Subdivision Map Act (Government Code Sections 66410-66499.58, and as may be amended) and Title 16 of the Monrovia Municipal Code may occur with or subsequent to the adoption of the Specific Plan. The project may include parcel map(s), lot line adjustments, and/or other subdivision actions.

7.4 Administration

The 5th & Huntington Specific Plan serves as the implementation tool for the General Plan.

If any provision or portions of any provisions of this Specific Plan or its application to any person or circumstance are held to be invalid, the remainder of this Specific Plan and the application of those provisions to other persons or circumstances shall not be affected.

If an issue, condition, or situation occurs that is not sufficiently covered or provided for in this Specific Plan, those that are applicable for the most similar issue, condition or situation shall be used. Unless otherwise provided, any ambiguity concerning the content or application of the Specific Plan is resolved by the Director of Community Development in a manner consistent with the goals, policies, objectives, and intent established in the 5th & Huntington Specific Plan.

7.4.1 Specific Plan Revisions

Revisions to the Specific Plan may be requested by the applicant or by the City at any time pursuant to Section 65453(a) of the California Government Code. Revisions are processed pursuant to the provisions of the Government Code for Specific Plan and the City of Monrovia Municipal Code. In the event the proposed revisions require supplemental environmental analysis, pursuant to the California Environmental Quality Act (CEQA), the applicant is responsible for preparing the necessary CEQA documentation.

7.4.2 Specific Plan Amendments

Approval of this Specific Plan by the City Council is considered acceptance of the general framework and specific development standards contained within the 5th & Huntington Specific Plan. As the project will be developed in one phase, Specific Plan amendments are not anticipated. However, the following section describes a process for changes, in the event a Specific Plan amendment request is made.

As determined by the Director of Community Development, any substantive changes will require a Specific Plan Amendment. Substantive changes include:

- Any increase in the density;
- Any increase in the amount of square feet devoted to non-commercial use on the ground floor;
- Any uses that would increase traffic beyond the amount considered by the environmental review associated with the Specific Plan;
- Any proposed expansions of the geographic area included in the Specific Plan; and/ or
- Any departures from the design guidelines that significantly change the overall character or appearance of the project.

A proposed Specific Plan amendment shall reflect the comprehensive analysis that has been undertaken in the 5th & Huntington Specific Plan's adoption and shall require additional environmental review. As a condition of consideration for any Specific Plan amendment, it shall be the applicant's responsibility to:

- Demonstrate the proposed amendments will meet the goals and objectives of the 5th & Huntington Specific Plan and the General Plan;
- Update any technical studies and/ or provide additional environmental studies as determined by the Director of Community Development and incorporate all mitigation measures into the project design; and
- Provide revised Specific Plan text and maps (where relevant) that reflects the amendment requested.

A

Appendix A
Traffic Study

5th & Huntington Specific Plan

CITY OF MONROVIA

Appendix A

General Plan and Zoning Consistency Detail

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC IMPACT ANALYSIS
5TH AVENUE/HUNTINGTON DRIVE
MIXED-USE PROJECT

City of Monrovia, California
December 27, 2012

Prepared for:

Lincoln Property Company
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LLG Ref. 1-12-3990-1

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TRAFFIC IMPACT ANALYSIS

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

City of Monrovia, California
December 27, 2012

1.0 INTRODUCTION

This traffic analysis has been conducted to identify and evaluate the potential traffic impacts of the proposed 5th Avenue/Huntington Drive Mixed-Use project. The project site is located in the City of Monrovia, California. The project site location and general vicinity are shown in ***Figure 1–1***.

The traffic analysis follows the City of Monrovia traffic study procedures and is consistent with traffic impact assessment guidelines set forth in the *2010 Congestion Management Program*[1]. This traffic analysis evaluates potential project-related traffic impacts at five key intersections in the vicinity of the project site. The study intersections were determined based on consultation with City of Monrovia Department of Public Works staff. The Intersection Capacity Utilization method was used to determine volume-to-capacity ratios and corresponding Levels of Service for the study intersections. In addition, a review was conducted of Los Angeles County Metropolitan Transportation Authority intersection and freeway monitoring stations to determine if a Congestion Management Program (CMP) transportation impact assessment analysis is required for the proposed project.

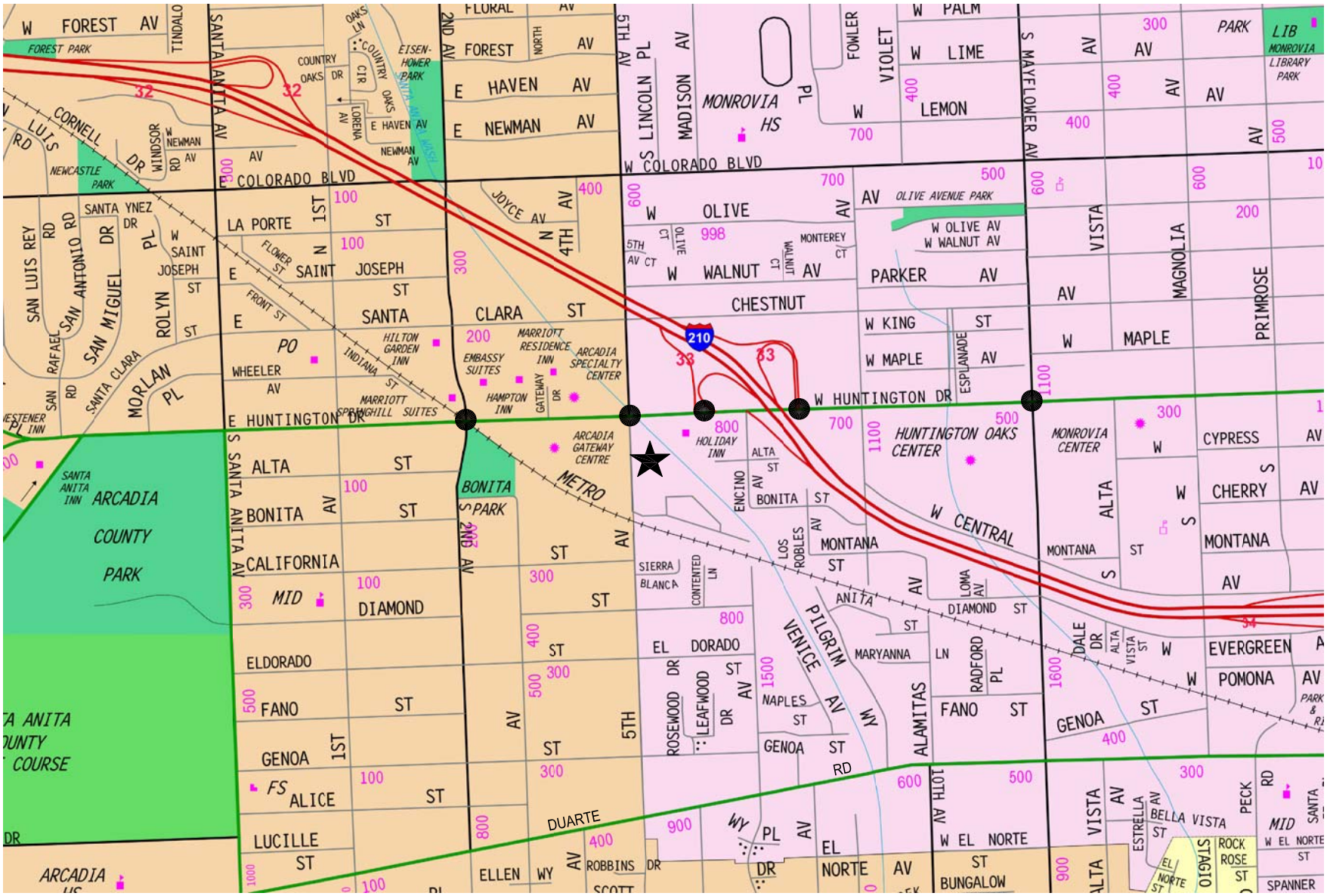
This study (i) presents existing traffic volumes, (ii) forecasts existing with project traffic volumes, (iii) forecasts future traffic volumes without the project, (iv) forecasts future traffic volumes with the proposed project, (v) determines proposed project-related impacts, and (vi) identifies mitigation measures, where necessary.

1.1 Study Area

The general location of the project in relation to the study locations and surrounding street system is presented in *Figure 1–1*. The traffic analysis study area is comprised of those locations which have the greatest potential to experience significant traffic impacts due to the proposed project as defined by the Lead Agency. In the traffic engineering practice, the study area generally includes those intersections that are:

a. Immediately adjacent or in close proximity to the project site;

[1] *2010 Congestion Management Program*, Los Angeles County Metropolitan Transportation Authority, October 2010.



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NOT TO SCALE

MAP SOURCE: RAND MCNALLY & COMPANY

★ PROJECT SITE

● STUDY INTERSECTION

FIGURE 1-1
VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

b. In the vicinity of the project site that are documented to have current or projected future adverse operational issues; and

c. In the vicinity of the project site that are forecast to experience a relatively greater percentage of project-related vehicular turning movements.

The locations selected for analysis were based on the above criteria, forecast net new project peak hour vehicle trip generation, anticipated distribution of project vehicle trips, existing intersection/corridor operations, and consultation with City of Monrovia Department of Public Works staff. A total of five intersections were selected for analysis as they provide local access to the area, meet the above criteria, and define the extent of the boundaries for this traffic impact investigation. Further discussion of the existing street system and study area is provided in Section 4.0 herein. The following intersections have been included for detailed study in this traffic analysis:

1. Second Avenue/Huntington Drive
2. Fifth Avenue/Huntington Drive
3. I-210 Freeway Eastbound Ramps/Huntington Drive
4. I-210 Freeway Westbound Ramps/Huntington Drive
5. Mayflower Avenue/Huntington Drive

It should be noted that the Second Avenue/Huntington Drive intersection is located in the adjacent City of Arcadia's jurisdiction. The intersection volume-to-capacity ratios and Level of Service calculations for the study intersections were used to evaluate the potential traffic-related impacts associated with area growth, cumulative projects and the proposed project. It should be noted that additional intersections in the project vicinity were not selected for analysis because they do not satisfy the aforementioned criteria, and as such, they are not anticipated to experience significant impacts due to project generated traffic volumes.

2.0 PROJECT DESCRIPTION

2.1 Existing Project Site

The project site is located on the east side of Fifth Avenue, south of Huntington Drive in the City of Monrovia, California. The existing triangular site is generally bounded by a surface parking lot to the northeast, Fifth Avenue to the west, and the existing Southern California Edison building to the south. The project site and general vicinity is illustrated in *Figure 1–1*.

The southern portion of the project site is currently developed and occupied by a 16,363 square-foot business park while the remainder of the site is occupied by approximately 39,000 square feet of warehouse use. The existing buildings on the project site will be razed to accommodate construction of the proposed project.

2.2 Proposed Project Description

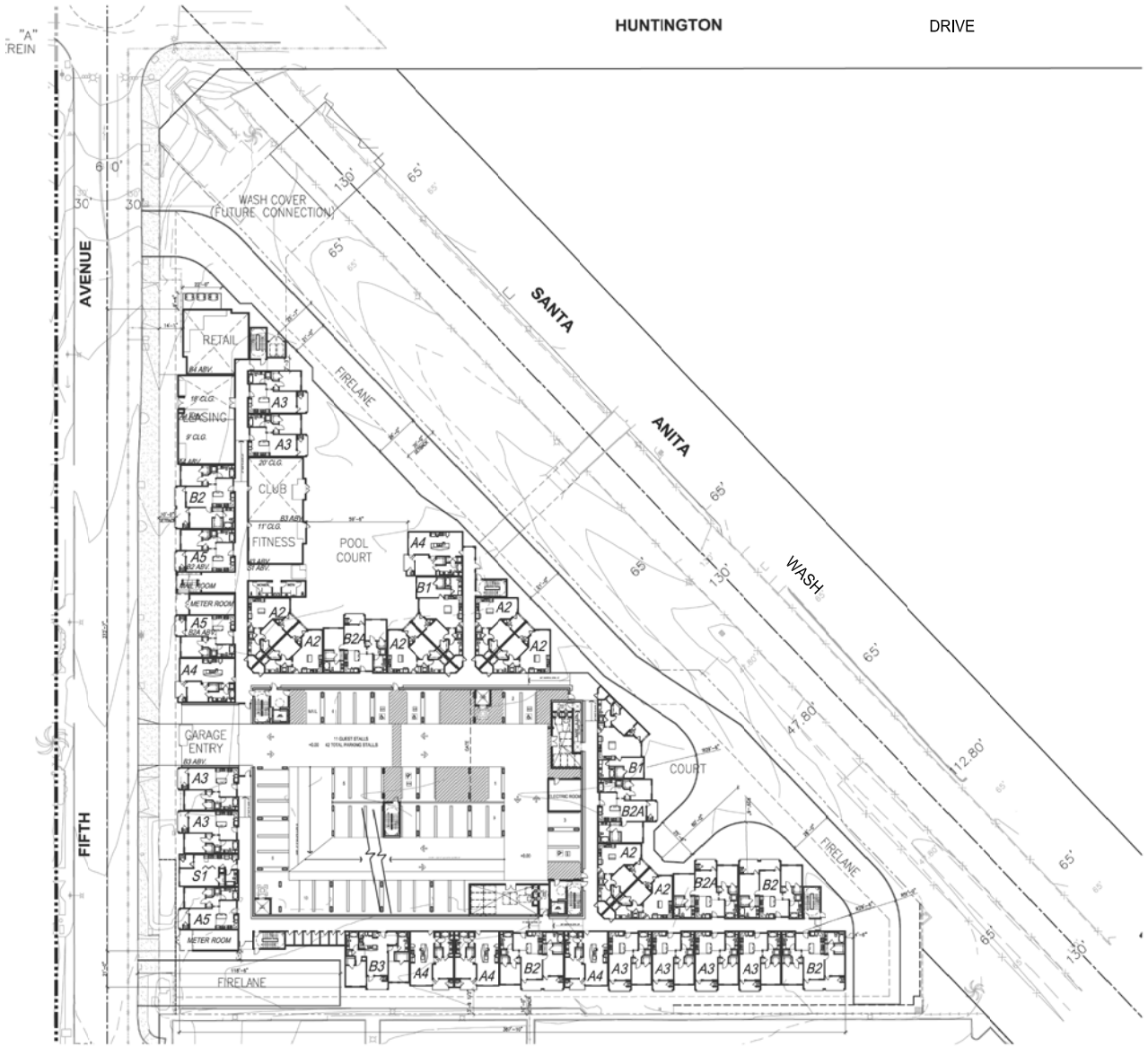
The proposed project is a mixed-use development consisting of 154 residential apartment dwelling units and approximately 1,341 square feet of retail floor area near the north end of the site. A total of seven studio units, 91 one-bedroom units, and 56 two-bedroom units are proposed. Other ancillary uses to the site include a leasing office, a club house, a fitness center, and other recreational facilities. In addition, a new parking structure is planned to be constructed on-site to accommodate both the proposed residential and retail project components. Construction of the proposed project is planned to commence in late 2013 with completion by Spring of 2015. The proposed project site layout is shown in ***Figure 2–1***.

Vehicular access to the parking structure will be provided near the midway point along the westerly property frontage. In addition, two emergency/fire lane access will be provided, one near the north end of the site and one near the south end. Further discussion of the project's access and circulation scheme is provided in Section 3.0.

2.3 Roadway Improvements and Dedications

Provisions in the Municipal Code require the City to consider half-street improvements and dedications for roadways adjacent to development sites in accordance with adopted standards in the Circulation Element of the General Plan. The project site is adjacent to Fifth Avenue. Fifth Avenue is identified as a collector street in the Circulation Element of the Monrovia General Plan (adopted January 15, 2008). The standard cross-section for a collector street is a 40 to 64-foot roadway on a 60 to 84-foot right-of-way (or a 20 to 32-foot half roadway on a 30 to 42-foot half right-of-way as measured from the centerline).

Review of the Vesting Tentative Parcel Map indicates that Fifth Avenue, immediately south of Huntington Drive, meets the City standard for Collector streets as the existing half-roadway width is 20 feet and the existing half right-of-way is 30 feet. However, south of the project frontage curb transition (i.e., which occurs approximately mid-way between Huntington Drive and the cul-de-sac), the existing half roadway width is 18 feet and the half right-of-way width



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SOURCE: ARCHITECTS ORANGE

FIGURE 2-1
SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

remains 30 feet. As a result, the City could request up to a two-foot roadway widening adjacent to the project site in this area in order to comply with the Collector street half-roadway cross-section standards (i.e., 20-foot half roadway). No additional dedication would be required as the roadway already meets the City standard. It is important to note that as Fifth Avenue adjacent to the project site provides one lane in each direction, the two-foot roadway widening would not afford additional travel lanes/roadway carrying capacity.

3.0 SITE ACCESS AND CIRCULATION

The site access scheme for the proposed project is displayed in *Figure 2–1*. Descriptions of the existing site access and proposed project site access and circulation schemes are provided in the following subsections.

3.1 Existing Site Access

Vehicular access to the existing project site is presently provided via three driveways on the east side of Fifth Avenue. An existing driveway located near the southerly property frontage provides access to the business park component of the site. The other two remaining driveways, one located near the northern portion of the site and the other located just north of the business park buildings, provide access to the warehousing units on-site. All existing driveways currently accommodate full access (i.e., left-turn and right-turn ingress and egress movements); however the middle driveway is periodically gated and closed. The three existing driveways will be closed pursuant to City standards with concrete curb, gutter and sidewalk for the proposed project development.

3.2 Proposed Project Site Access

The proposed project site access scheme is displayed in *Figure 2–1*. Vehicular access to the project site will be provided via a new driveway on Fifth Avenue which will serve as the primary vehicular access point for the project. In addition, two emergency/fire lane access points will also be provided on Fifth Avenue. Descriptions of the planned project site access points are provided in the following paragraphs.

- *Proposed Fifth Avenue Project Driveway:*

  The proposed Fifth Avenue project driveway will be located on the east side of Fifth Avenue just north of the existing middle driveway. This main project driveway will provide direct vehicular access to the proposed parking structure and will accommodate full access (i.e., right-turn and left-turn ingress and egress turning movements). The proposed Fifth Avenue project driveway will be constructed to City of Monrovia design standards.

- *Fifth Avenue Emergency/Fire Lane Access:*

  Two emergency/fire lane access points will also be provided on Fifth Avenue. One emergency/fire lane access will be located near the northerly site boundary while the other access will be located near the southerly site boundary. Both emergency/fire lane access points will be constructed to City of Monrovia design standards.

4.0 EXISTING STREET SYSTEM

4.1 Study Intersections

Immediate vehicular access to the project site is provided via Fifth Avenue. The following five study intersections were selected for analysis in consultation with City of Monrovia Department of Public Works staff in order to determine potential traffic impacts related to the proposed project:

1. Second Avenue/Huntington Drive
2. Fifth Avenue/Huntington Drive
3. I-210 Freeway Eastbound Ramps/Huntington Drive
4. I-210 Freeway Westbound Ramps/Huntington Drive
5. Mayflower Avenue/Huntington Drive

It should be noted that the Second Avenue/Huntington Drive intersection is located in the adjacent City of Arcadia's jurisdiction. All five study intersections are presently controlled by traffic signals. The existing lane configurations and regulatory controls at the five study intersections are displayed in ***Figure 4–1***.

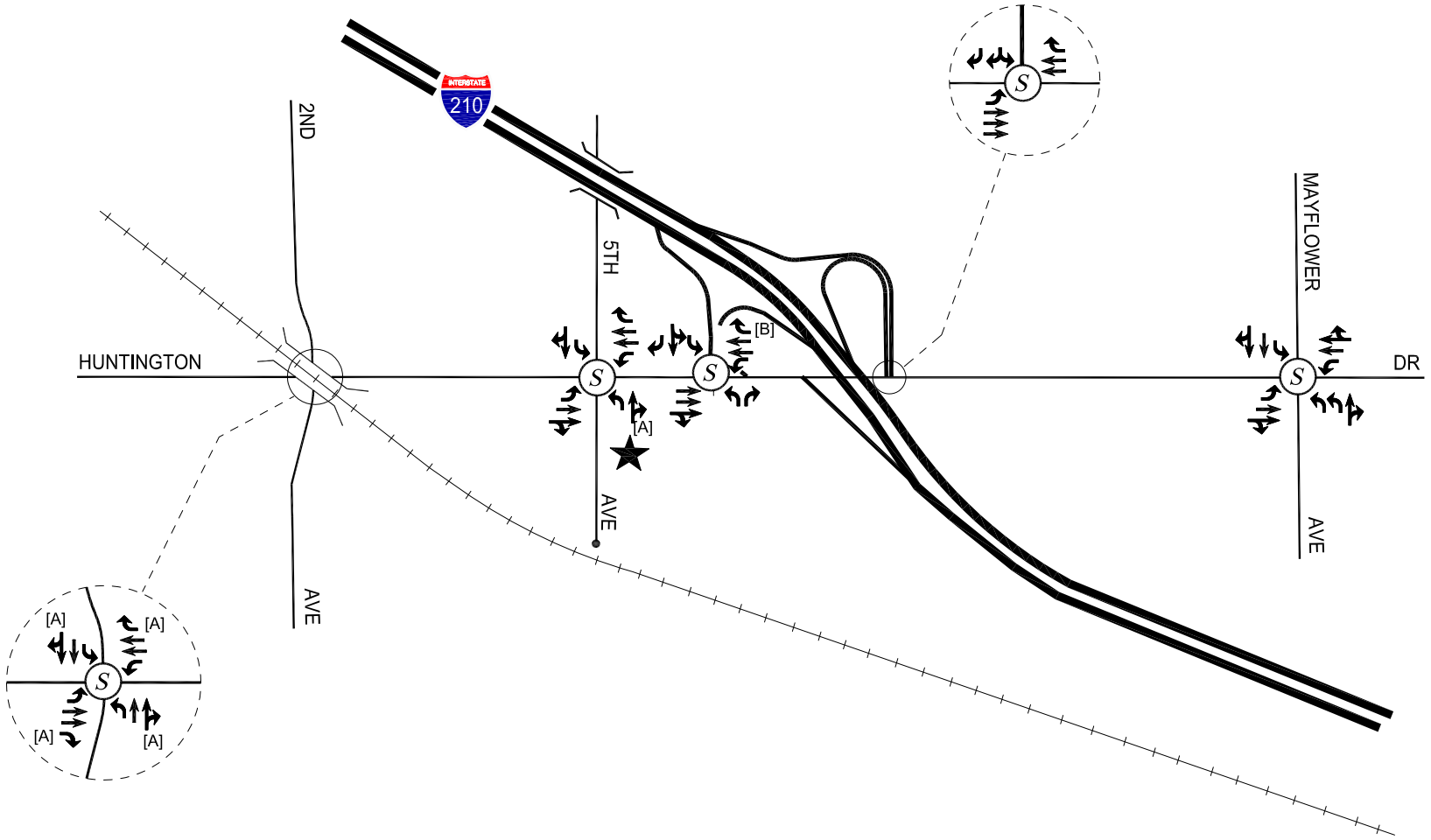
4.2 Roadway Classifications

The City of Monrovia utilizes similar roadway categories recognized by regional, state and federal transportation agencies. There are four general categories in the roadway hierarchy, ranging from freeways with the highest capacity to two-lane undivided roadways with the lowest capacity. The roadway categories are summarized as follows:

- *Freeways* are limited-access and high-speed travel ways included in the state and federal highway systems. Their purpose is to carry regional through-traffic. Access is provided by interchanges with typical spacing of one mile or greater. No local access is provided to adjacent land uses.

- *Arterial* roadways are major streets that primarily serve through-traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with two to six travel lanes and their major intersections are signalized. This roadway type is divided into two categories: major and minor arterials. Major arterials are typically four-or-more lane roadways and serve both local and regional through-traffic. Minor arterials are typically two-to-four lane streets that service local and commuter traffic.

- *Collector* roadways are streets that provide access and traffic circulation within residential and non-residential (e.g., commercial and industrial) areas. Collector roadways connect local streets to arterials and are typically designed with two through



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★ PROJECT SITE
(S) SIGNALIZED INTERSECTION
[A] NO RIGHT-TURN ON RED
[B] FREE-FLOW MOVEMENT

FIGURE 4-1
EXISTING LANE CONFIGURATIONS

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

travel lanes (i.e., one through travel lane in each direction) that may accommodate on-street parking. They may also provide access to abutting properties.

- *Local* roadways distribute traffic within a neighborhood, or similar adjacent neighborhoods, and are not intended for use as a through-street or a link between higher capacity facilities such as collector or arterial roadways. Local streets are fronted by residential uses and do not typically serve commercial uses.

4.3 Regional Highway System

Regional vehicular access to the project site is provided by the Foothill Freeway (I-210) which is located less than one-quarter mile east of the project site. A brief description of the I-210 Freeway is provided in the following paragraph.

Foothill Freeway (I-210) is a major east-west oriented freeway connecting the Golden State Freeway (I-5) in the San Fernando area to the Orange Freeway (SR-57) near San Dimas. The I-210 Freeway generally contains four mainline freeway lanes and one high occupancy vehicle lane in each direction near the study area. Full freeway connections (i.e., eastbound and westbound ramp connections) are provided at Huntington Drive, less than one-quarter mile east of the project site.

4.4 Roadway Descriptions

Brief descriptions of the important roadways in the project site vicinity are provided in the following paragraphs.

Huntington Drive is an east-west oriented roadway located immediately north of the project site. In the City of Monrovia General Plan Circulation Element, Huntington Drive is classified as a primary arterial. Two through travel lanes are provided in each direction with raised median islands. Time-restricted on-street parking is provided on both sides of Huntington Drive west of Fifth Avenue (in the adjacent City of Arcadia) while No Stopping Anytime signs are posted on Huntington Drive east of Fifth Avenue (in the City of Monrovia). Separate left-turn pockets are provided at major roadway intersections. A full interchange at the I-210 Freeway is provided on Huntington Drive just east of the project site. Huntington Drive is signalized at its intersections with Second Avenue, Gateway Drive, Fifth Avenue, I-210 Ramps, Monterey Avenue and Mayflower Avenue in the project vicinity. The posted speed limit on Huntington Drive is 35 miles per hour.

Second Avenue is a north-south oriented roadway located west of the project site. In the City of Arcadia General Plan Circulation and Infrastructure Element, Second Avenue is classified as a collector street between Foothill Boulevard and Huntington Drive and an enhanced collector street south of Huntington Drive. One through travel lane is generally provided in each direction on Second Avenue, with the exception of the segment between Colorado Boulevard and Huntington Drive, where two through travel lanes are provided in each direction. Separate left-

turn pockets are provided at major roadway intersections, including at Huntington Drive. The posted speed limit on Second Avenue, south of Huntington Drive, is 35 miles per hour.

Fifth Avenue is a north-south oriented roadway that borders the project site to the west and provides immediate vehicular access to the project. In the City of Monrovia General Plan Circulation Element, Fifth Avenue is classified as a collector street between Colorado Boulevard and Duarte Road. In the project vicinity, one through travel lane is provided in each direction with on-street parking along both sides of Fifth Avenue. Fifth Avenue terminates just south of the site at the Southern California Edison building. North of Foothill Boulevard, Fifth Avenue turns into Hillcrest Boulevard. The posted speed limit on Fifth Avenue is 25 miles per hour south of Huntington Drive and 35 miles per hour north of Huntington Drive. While Fifth Avenue is designated as a Collector street per the City's General Plan Circulation Element, it is important to note that approximately 100 feet south of the project site, Fifth Avenue is constructed with a non-standard cul-de-sac and thus does not provide connectivity with points further south. An existing rail line also exists just south of the cul-de-sac and this location is not proposed to provide an at-grade rail crossing in the future. In addition, while the cul-de-sac is not constructed to public street standards, Southern California Edison is currently using the area as part of their private driveway and parking area. For these reasons, Fifth Avenue in this vicinity functions more as a local commercial street than a Collector roadway and should be treated as such.

Mayflower Avenue is a north-south oriented roadway that is located east of the project site. Mayflower Avenue extends southerly from the Scenic Drive in the City of Monrovia to Jeffries Avenue in the adjacent City of Arcadia. In the City of Monrovia General Plan Circulation Element, Mayflower Avenue is classified as a collector street between Hillcrest Boulevard to Duarte Road. In the Arcadia General Plan Circulation and Infrastructure Element, Mayflower Avenue is also classified as a collector street. Two through travel lanes are provided in each direction on Mayflower Avenue in the project vicinity. Separate left-turn pockets are provided at major roadway intersections, including at Huntington Drive where one left-turn lane is provided in the southbound direction and dual left-turn lanes are provided in the northbound direction. The posted speed limit on Mayflower Avenue is 30 and 35 miles per hour north and south of Huntington Drive, respectively.

4.5 Existing Public Transit Services

Public bus transit service in the project vicinity is currently provided by the Foothill Transit. A summary of the existing transit route for Foothill Transit, including the transit route, destinations and number of buses during the AM and PM peak hours is presented in ***Table 4–1***. The existing public transit routes in the project vicinity are illustrated in ***Figure 4–2***.

Table 4-1
EXISTING TRANSIT ROUTES [1]

ROUTE	DESTINATIONS	ROADWAY(S) NEAR SITE	NO. OF BUSES/TRAINS DURING PEAK HOUR		
			DIR	AM	PM
Foothill Transit Route 187	Montclair Transit Center to Pasadena via Claremont, La Verne, Glendora, Azusa, Duarte, Monrovia, Arcadia	Huntington Drive, 2nd Avenue, 5th Avenue, Mayflower Avenue	EB	3	3
			WB	3	3
			Total	6	6

[1] Source: Foothill Transit website, 2012.

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MAP SOURCE: FOOTHILL TRANSIT

★ PROJECT SITE

FIGURE 4-2
EXISTING PUBLIC TRANSIT ROUTES

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

4.5.1 *Foothill Transit Services*

Foothill Transit provides bus transit service along major roadways within the traffic analysis study area, including Huntington Drive. Foothill Transit currently operates one transit route in the vicinity of the project site. This bus line (i.e., Foothill Transit Line 187) provides headways of three buses in each direction during the morning peak hour and three buses during the afternoon peak hour.

5.0 TRAFFIC COUNTS

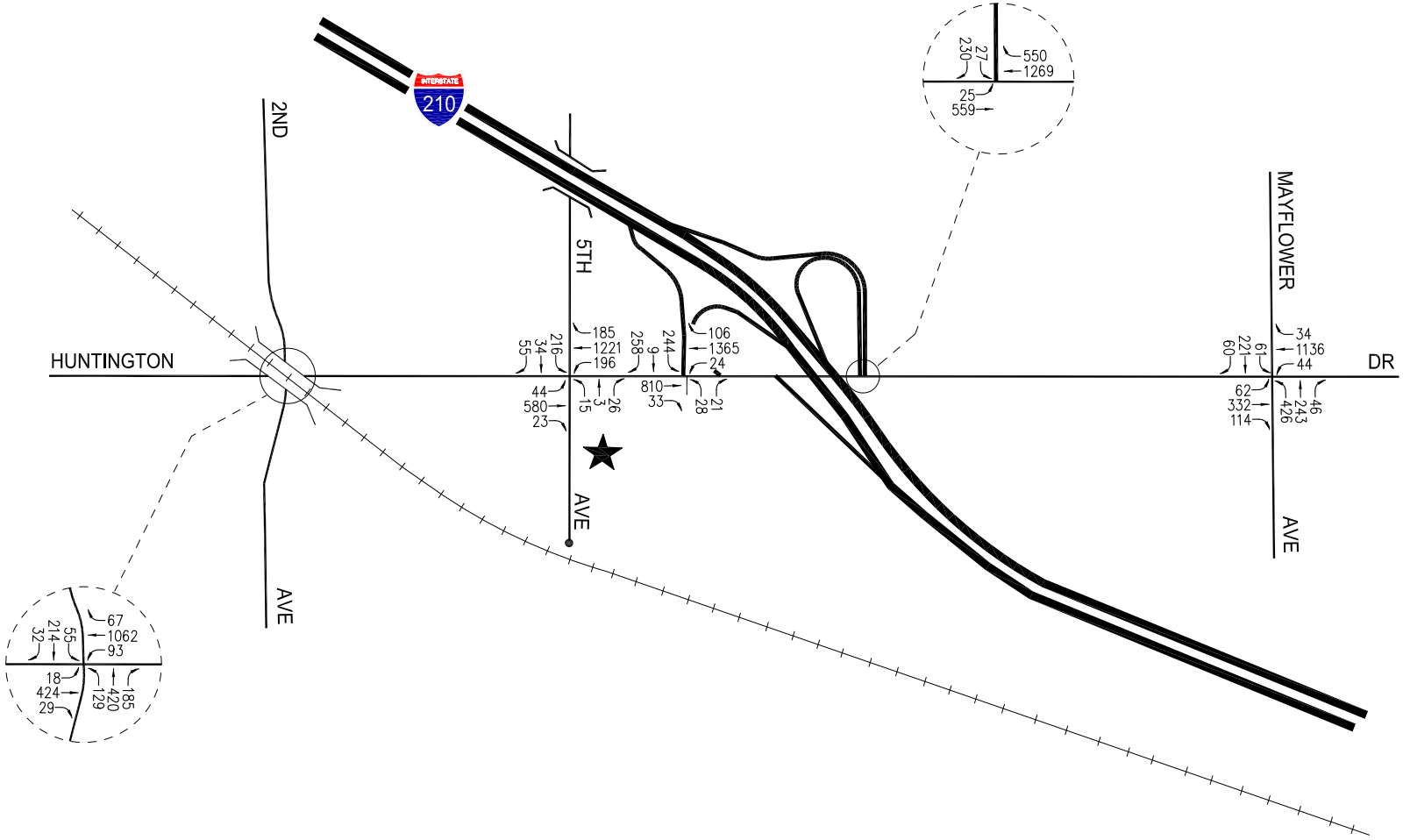
Manual counts of vehicular turning movements were conducted in September 2012 at each of the five study intersections during the weekday morning (AM) and afternoon (PM) commuter periods to determine the peak-hour traffic volumes. The manual counts were conducted at the study intersections from 7:00 to 9:00 AM to determine the weekday AM peak commuter hour, and from 4:00 to 6:00 PM to determine the weekday PM peak commuter hour. These periods are typically associated with peak hours in the metropolitan area. It should also be noted all traffic counts were conducted when local schools in the area were in session (i.e., after the summer break/holiday).

The existing weekday AM and PM peak hour intersection traffic volumes by approach are summarized in ***Table 5–1***. The existing vehicular turning movements at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 5–1*** and ***5–2***, respectively. For each study intersection, the highest one-hour total traffic volumes (i.e., four consecutive 15-minute time intervals) traversing through the intersection during the 7:00 to 9:00 AM and 4:00 to 6:00 PM time periods were selected so as to determine the respective AM and PM peak hour traffic volumes for each study intersection. For purposes of the traffic impact analysis, this common traffic engineering practice ensures that a more conservative (i.e., worst case) assessment of existing operating conditions be attained for each study intersection. Therefore, the traffic volumes shown in *Figures 5–1* and *5–2* for the study intersections do not necessarily reflect the same exact one hour time period during the morning and/or afternoon peak commuter conditions (i.e., one intersection's peak hour may have occurred between 7:30 and 8:30 AM, while another intersection's peak hour may have occurred between 7:45 and 8:45 AM). Summary data worksheets of the manual traffic counts of the study intersections are contained in ***Appendix A***.

Table 5-1
EXISTING TRAFFIC VOLUMES [1]

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	2nd Avenue/ Huntington Drive	09/05/2012	NB	7:30	734	5:00	425
			SB		301		338
			EB		471		1,178
			WB		1,222		965
2	5th Avenue/ Huntington Drive	09/05/2012	NB	7:45	44	5:00	318
			SB		305		297
			EB		647		1,200
			WB		1,602		943
3	I-210 Fwy Eastbound Ramps/ Huntington Drive	09/05/2012	NB	7:30	49	5:00	73
			SB		511		374
			EB		843		1,517
			WB		1,495		1,028
4	I-210 Fwy Westbound Ramps/ Huntington Drive	09/05/2012	NB	7:45	0	4:45	0
			SB		257		534
			EB		584		1,449
			WB		1,819		1,092
5	Mayflower Avenue/ Huntington Drive	09/05/2012	NB	7:30	715	5:00	466
			SB		342		377
			EB		508		1,248
			WB		1,214		708

[1] Counts conducted by City Traffic Counters



★ PROJECT SITE

N

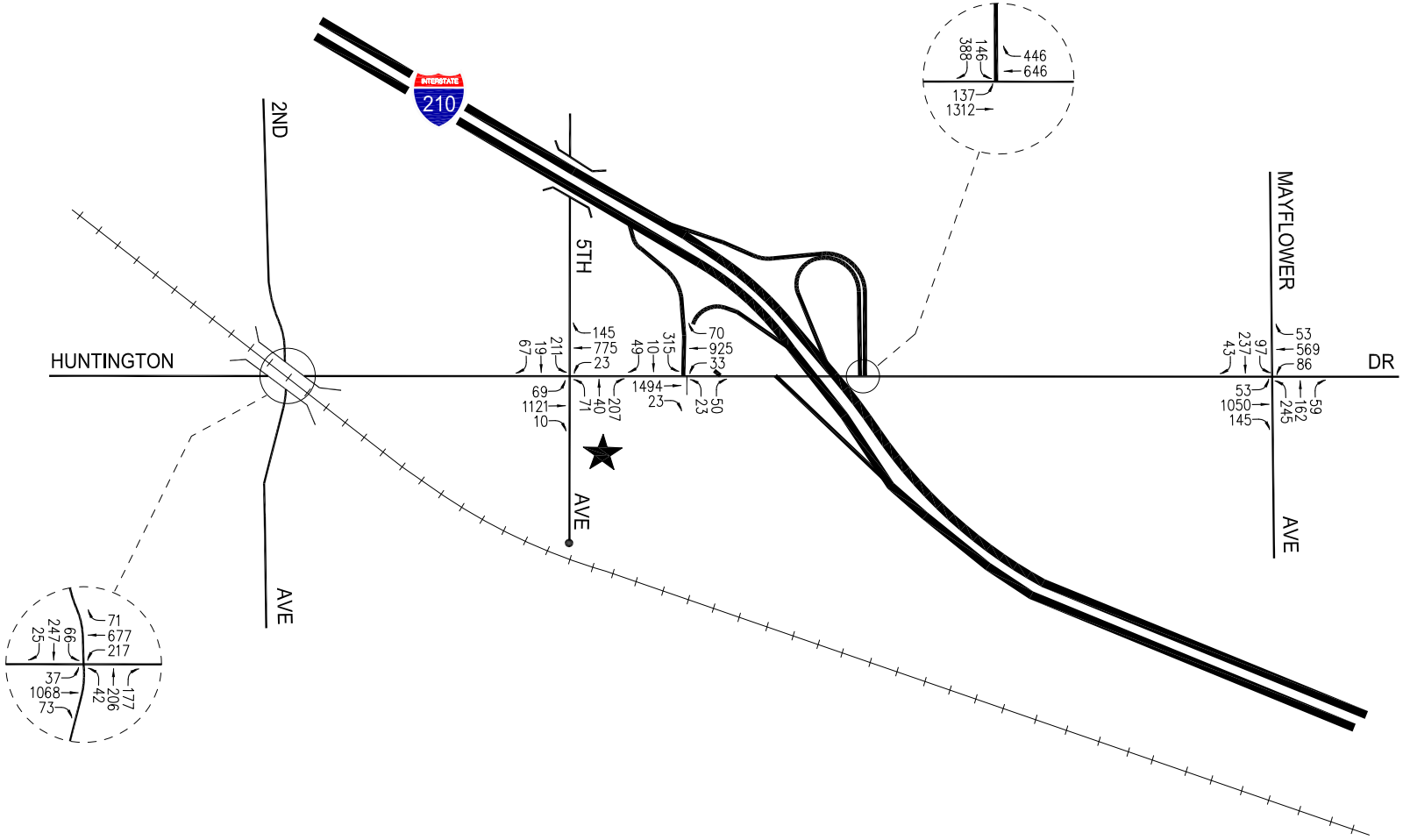
NOT TO SCALE

FIGURE 5-1
EXISTING TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



PROJECT SITE

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FIGURE 5-2
EXISTING TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

6.0 TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of the proposed project, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic volumes on a peak-hour and daily basis. For projects, the traffic generation potential is typically forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersections throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the proposed project is isolated by comparing operational (i.e., Level of Service [LOS]) conditions at selected key intersections using existing and expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

6.1 Project Trip Generation

Traffic volumes expected to be generated by the proposed project were estimated for the weekday commuter AM and PM peak hours, as well as over a 24-hour daily period, using trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation* manual[2]. Traffic volumes expected to be generated by the proposed residential and retail components of the project were based upon rates per dwelling unit and thousand square feet of building floor area, respectively. ITE Land Use Code 220 (Apartment) trip generation average rates were used to forecast the traffic volumes expected to be generated by the proposed residential component of the project. ITE Land Use Code 820 (Shopping Center) trip generation average rates were used to forecast the traffic volumes expected to be generated by the proposed project retail component. It should be noted that the other on-site amenities and recreational facilities are ancillary in nature and will primarily serve the residents and guests of the proposed residential use.

[2] Institute of Transportation Engineers *Trip Generation* manual, 8th Edition, 2008.

Traffic volumes to be generated by the existing site uses were also forecast for the weekday AM and PM peak hours, and over a 24-hour period, using trip generation rates in the ITE *Trip Generation* publication. Specifically, the daily as well as the AM and PM peak hour traffic volumes expected to be generated by the existing uses were forecast based on ITE Land Use Code 770 (Business Park) and ITE Land Use Code 150 (Warehouse) trip generation average rates.

The trip generation forecast for the proposed project is summarized in ***Table 6–1***. As presented in *Table 6–1*, the proposed project is expected to generate 45 net new vehicle trips (11 fewer inbound trips and 56 more outbound trips) during the AM peak hour. During the PM peak hour, the proposed project is expected to generate 67 net new vehicle trips (56 more inbound trips and 11 more outbound trips). Over a 24-hour period, the proposed project is forecast to generate a net increase of 736 daily trip ends (approximately 368 inbound trips and 368 outbound trips) during a typical weekday.

6.2 Project Trip Distribution

The traffic distribution pattern for the proposed project was determined based on the proximity of the project access points to the major arterials serving the study area. Project traffic volumes both entering and exiting the site have been distributed and assigned to the adjacent street system based on the following considerations:

- The nature of the proposed project land use components (i.e., residential and retail);
- The site's proximity to major traffic corridors (i.e., Huntington Drive, etc.);
- Expected localized traffic flow patterns based on adjacent roadway channelization and presence of traffic signals;
- Existing intersection traffic volumes;
- Ingress/egress availability at the project site; and
- Nearby population and employment centers.

The traffic distribution pattern for the proposed project is presented in ***Figure 6–1.*** The forecast net new weekday AM and PM peak hour project traffic volumes at the study intersections are displayed in ***Figures 6–2*** and ***6–3***, respectively. The traffic volume assignments presented reflect the traffic distribution characteristics shown in *Figure 6–1* and the project traffic generation forecast presented in *Table 6–1*.

Table 6-1
PROJECT TRIP GENERATION [1]

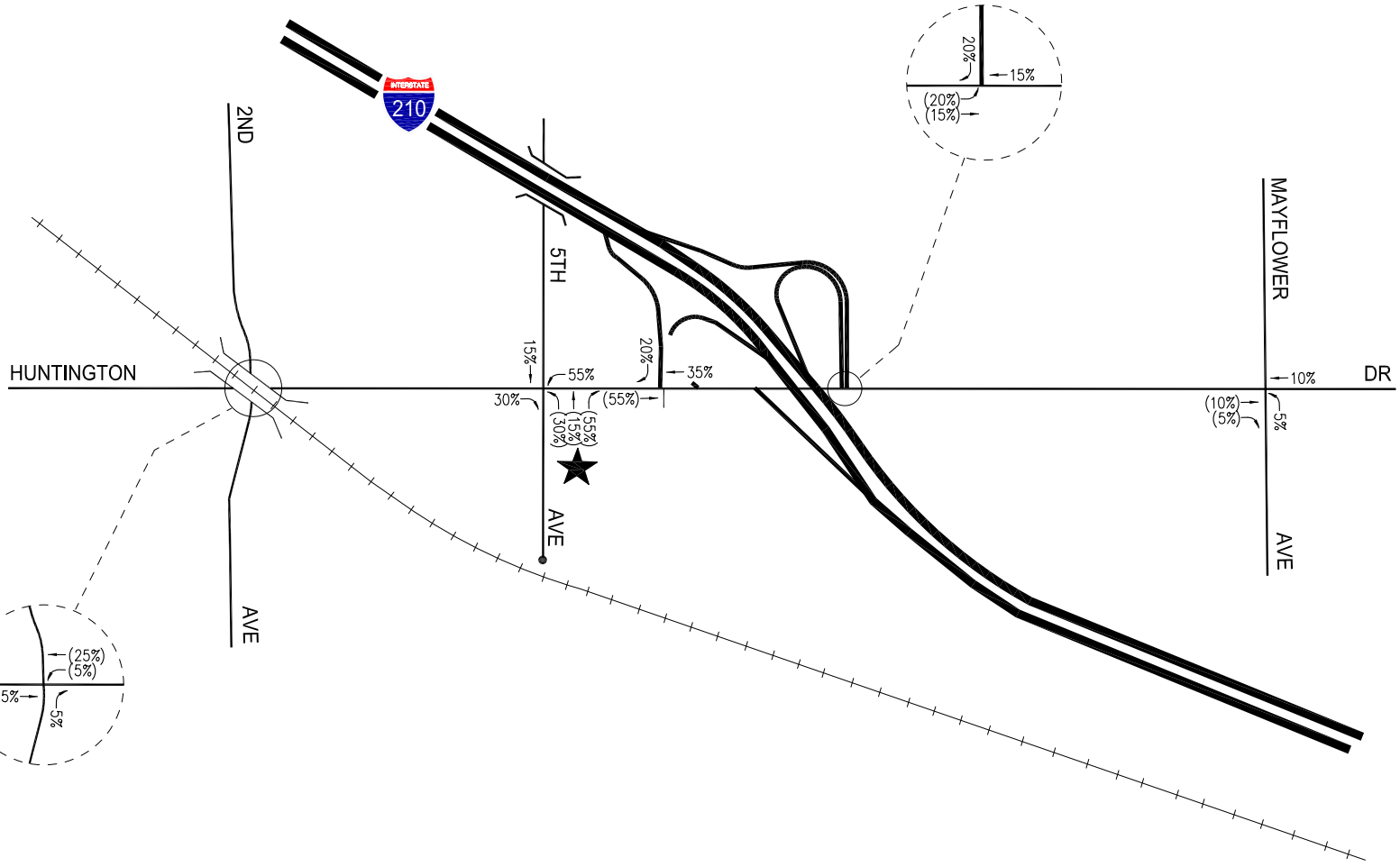
LAND USE	SIZE	DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project								
Apartment [3]	154 DU	1,024	16	63	79	62	33	95
Retail [4]	1,341 GLSF	58	1	0	1	2	3	5
Subtotal Proposed Project		1,082	17	63	80	64	36	100
Existing Uses To Be Removed								
Business Park [5]	(16,363) GSF	(208)	(19)	(4)	(23)	(5)	(16)	(21)
Warehouse [6]	(39,000) GSF	(138)	(9)	(3)	(12)	(3)	(9)	(12)
Subtotal Existing		(346)	(28)	(7)	(35)	(8)	(25)	(33)
NET INCREASE		**736**	**(11)**	**56**	**45**	**56**	**11**	**67**

[1] Source: ITE "Trip Generation", 8th Edition, 2008.
[2] Trips are one-way traffic movements, entering or leaving.
[3] ITE Land Use Code 220 (Apartment) trip generation average rates.
- Daily Trip Rate: 6.65 trips/dwelling unit; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.51 trips/dwelling unit; 20% inbound/80% outbound
- PM Peak Hour Trip Rate: 0.62 trips/dwelling unit; 65% inbound/35% outbound

[4] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
- Daily Trip Rate: 42.94 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 1.0 trips/1,000 SF of floor area; 61% inbound/39% outbound
- PM Peak Hour Trip Rate: 3.73 trips/1,000 SF of floor area; 49% inbound/51% outbound

[5] ITE Land Use Code 770 (Business Park) trip generation average rates.
- Daily Trip Rate: 12.76 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 1.43 trips/1,000 SF of floor area; 84% inbound/16% outbound
- PM Peak Hour Trip Rate: 1.29 trips/1,000 SF of floor area; 23% inbound/77% outbound

[6] ITE Land Use Code 150 (Warehouse) trip generation average rates.
- Daily Trip Rate: 3.56 trips/1,000 SF of floor area; 50% inbound/50% outbound
- AM Peak Hour Trip Rate: 0.30 trips/1,000 SF of floor area; 79% inbound/21% outbound
- PM Peak Hour Trip Rate: 0.32 trips/1,000 SF of floor area; 25% inbound/75% outbound



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NOT TO SCALE

★ PROJECT SITE

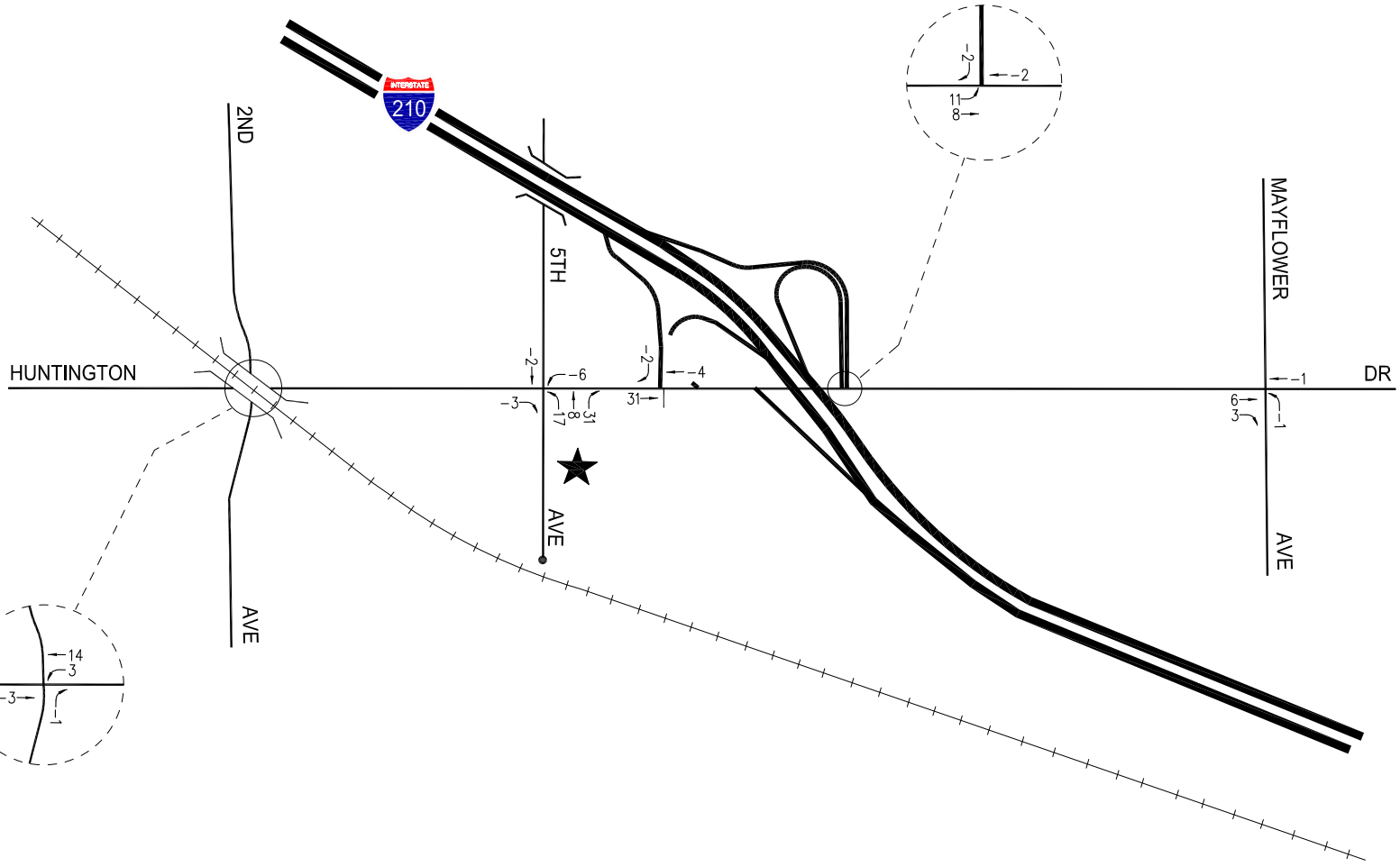
XX = INBOUND PERCENTAGE

(XX) = OUTBOUND PERCENTAGE

FIGURE 6-1
PROJECT TRIP DISTRIBUTION

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT



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★ PROJECT SITE

FIGURE 6-2
NET PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

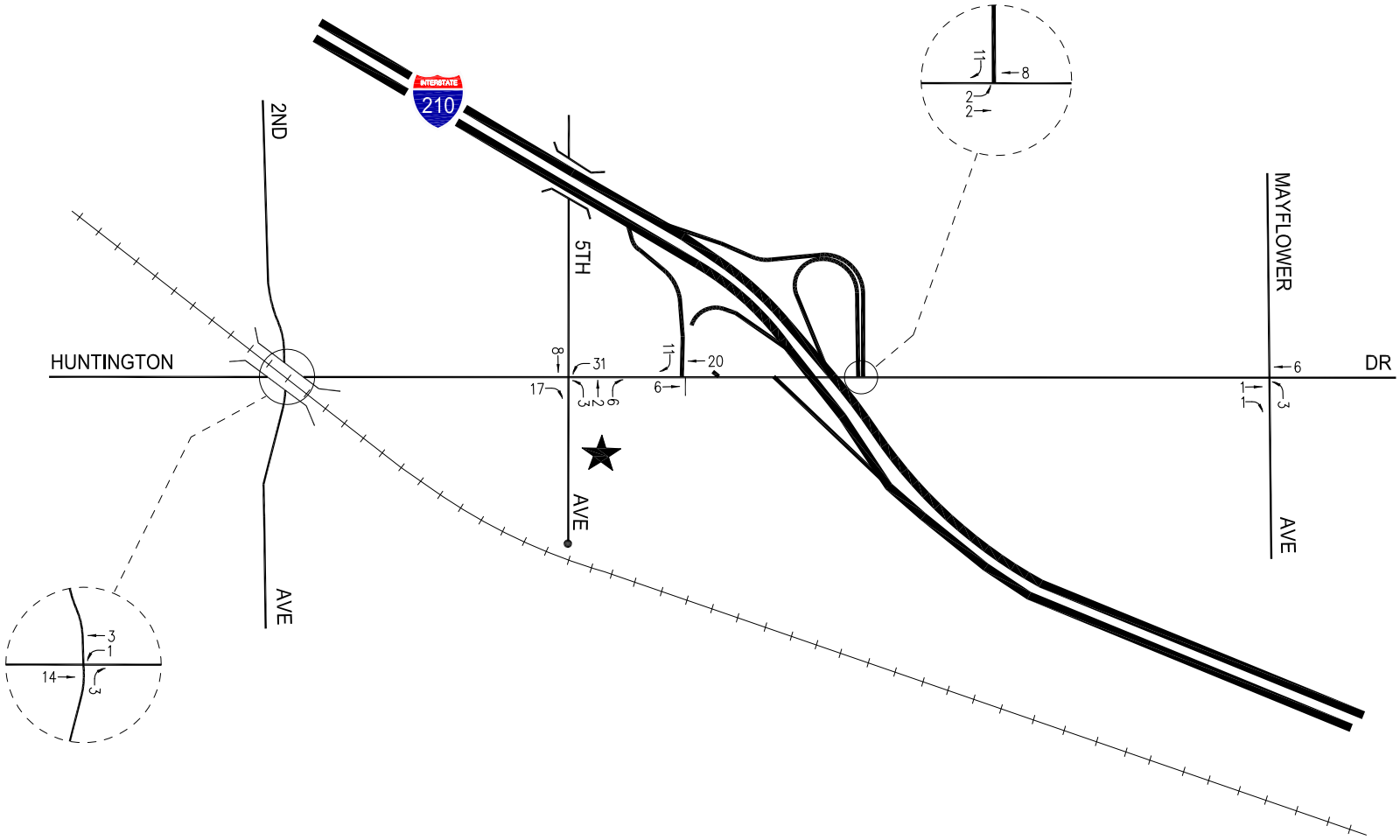

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FIGURE 6-3
NET PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

7.0 FUTURE PRE-PROJECT DEVELOPMENT

The forecast of future pre-project conditions was prepared in accordance to procedures outlined in Section 15130 of the CEQA Guidelines. Specifically, the CEQA Guidelines provides two options for developing the future traffic volume forecast:

> "(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or
>
> (B) A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency."

Accordingly, the traffic analysis provides a highly conservative estimate of future pre-project traffic volumes as it incorporates both the "A" and "B" options outlined in CEQA Guidelines for purposes of developing the forecast.

7.1 Related Projects

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 related projects research was based on information on file with the City of Monrovia, the City of Arcadia, and the City of Duarte Planning Divisions. The list of related projects in the project study area is presented in ***Table 7–1***. The location of the related projects is shown in ***Figure 7–1***.

Traffic volumes expected to be generated by the related projects were calculated using rates provided in the ITE *Trip Generation* manual. The related projects respective traffic generation for the weekday AM and PM peak hours, as well as on a daily basis for a typical weekday, is summarized in *Table 7–1*.

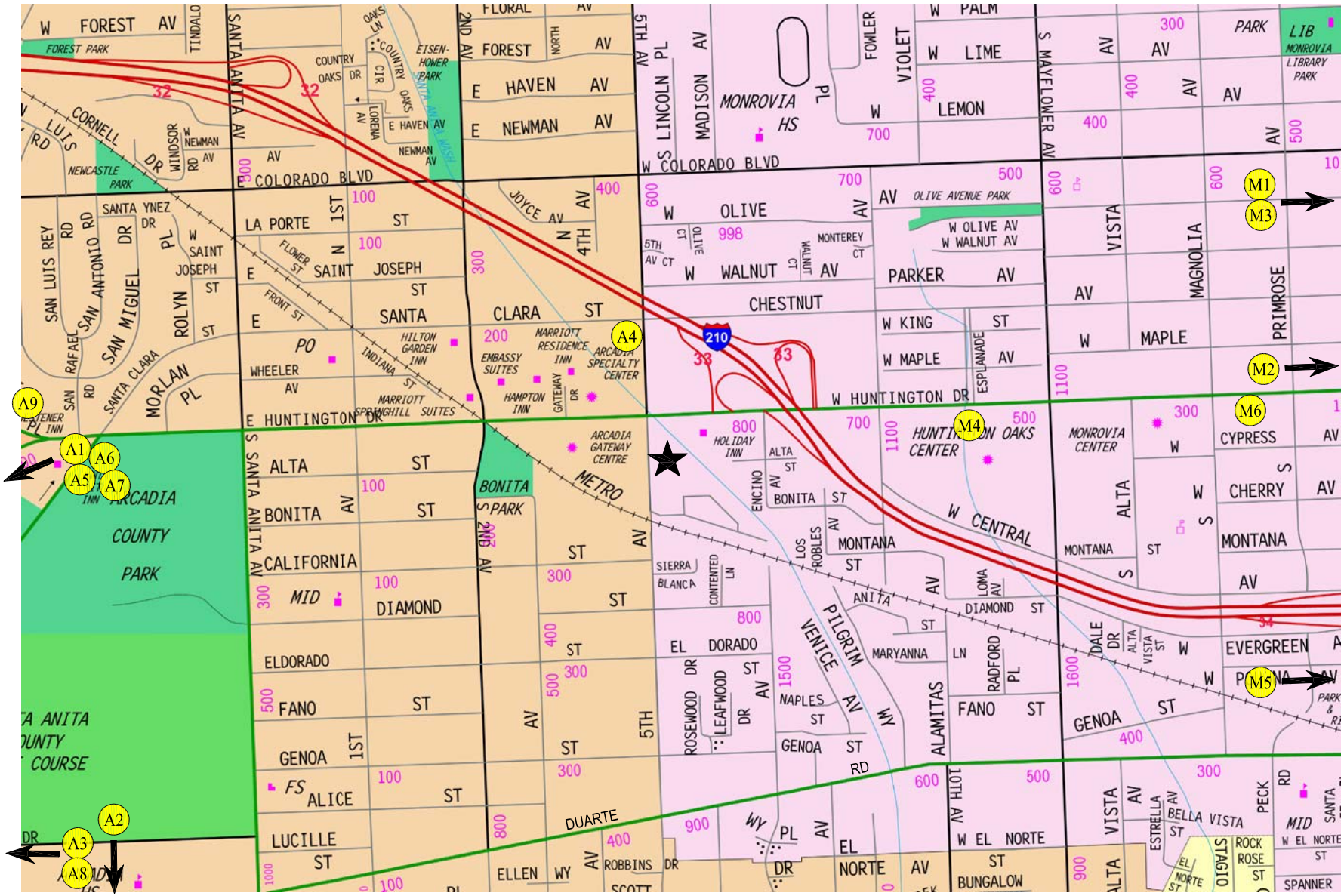
7.2 Ambient Traffic Growth

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 one percent (1.0%) to the year 2015 (i.e., the anticipated year of project build-out). The ambient growth factor was based on review

Table 7-1
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE DATA		PROJECT DATA SOURCE [2]	DAILY TRIP ENDS [3] VOLUMES	AM PEAK HOUR VOLUMES [3]			PM PEAK HOUR VOLUMES [3]		
			LAND-USE	SIZE			IN	OUT	TOTAL	IN	OUT	TOTAL
City of Monrovia												
M1	Proposed	Phases 1, 2 and 3 of the Santa Teresita Master Plan Southeast corner Royal Oaks & Sierra Terrace	Assisted Living Skilled Nursing Facility Town Center	120 beds 120 beds 7,200 GSF	[4]	99	(2)	(3)	(5)	8	1	9
M2	Proposed	935 East Huntington Drive	Automated Car Wash	3,600 GSF	[5]	None	Nom.	Nom.	Nom.	26	25	51
M3	Proposed	138 East Olive Avenue	Apartment	18 DU	[6]	120	2	7	9	7	4	11
M4	Proposed	Huntington Oaks Shopping Center 600 West Huntington Drive	Fast Food Restaurants	10,000 GSF	[7]	4,961	252	242	494	176	162	338
M5	Proposed	1600 South California Avenue	Maintenance/Operations Yard/ Parking Structure	600 Spaces	[8]	1,506	514	128	642	432	312	744
M6	Under Construction	Jack in the Box 248 West Huntington Drive	Fast Food Restaurant	2,588 GSF	[7]	1,284	65	63	128	46	42	88
City of Arcadia												
A1	Built	728 West Huntington Drive	Condominium	5 DU	[9]	29	0	2	2	2	1	3
A2	Under Construction	168 West Las Tunas Drive	Retail	9,148 GLSF	[10]	393	5	4	9	17	17	34
A3	Proposed	15-19 Lucille Drive	Apartment	9 DU	[6]	60	1	4	5	4	2	6
A4	Built	468 East Santa Clara Street	Medical Office Building	9,500 GSF	[11]	343	17	5	22	9	24	33
A5	Proposed	650 West Huntington Drive	Condominium	50 DU	[9]	291	4	18	22	17	9	26
A6	Under Construction	743-753 West Huntington Drive	Condominium	10 DU	[9]	58	1	3	4	3	2	5
A7	Under Construction	713 South Old Ranch Road	Condominium	11 DU	[9]	64	1	4	5	4	2	6
A8	Under Construction	180 Campus Drive	Performing Arts Complex	1,200 Seats	[12]	None	Nom.	Nom.	Nom.	12	12	24
A9	Proposed	125 West Huntington Drive, 161 Colorado Place	Medical Office Building General Office Restaurant	36,436 GSF 22,819 GSF 5,000 GSF	[13]	1,888	113	36	149	56	131	187
TOTAL						**11,096**	**973**	**513**	**1,486**	**819**	**746**	**1,565**

[1] Sources: Cities of Monrovia, Arcadia, and Duarte Planning Departments, December 2012.
[2] Source: ITE "Trip Generation", 8th Edition, 2008.
[3] Trips are one-way traffic movements, entering or leaving.
[4] Source: "Final Program Environmental Impact Report for The Rose Gardens at Santa Teresita Master Plan", SCH No. 2010091021, prepared by RBF Consulting, dated May 12, 2011. As the long-term build-out of Phase 4 (i.e., year 2020) extends beyond the project build-out year of 2015, Phase 4 was excluded. Phases 1-3 include the portion of the Master Plan that are located within the City of Monrovia and the City of Duarte.
[5] ITE Land Use Code 948 (Automated Car Wash) trip generation average rates.
[6] ITE Land Use Code 220 (Apartment) trip generation average rates.
[7] ITE Land Use Code 934 (Fast-Food Restaurant with Drive-Through) trip generation average rates.
[8] Source: "Metro Gold Line Foothill Extension - M&O Facility SEIR", dated December 2010. ITE Land Use Code 093 (Light Rail Transit Station with Parking) trip generation average rates.
[9] ITE Land Use Code 230 (Residential Condominium/Townhouse) trip generation average rates.
[10] ITE Land Use Code 820 (Shopping Center) trip generation average rates.
[11] ITE Land Use Code 720 (Medical Office Building) trip generation average rates.
[12] ITE Land Use Code 441 (Live Theater) trip generation average rates.
[13] Source: "Traffic Impact Analysis for 125 W. Huntington Drive and 161 Colorado Place Project", prepared by LLG Engineers, dated August 15, 2012.



MAP SOURCE: RAND MCNALLY & COMPANY

★ PROJECT SITE

M CITY OF MONROVIA RELATED PROJECTS

A CITY OF ARCADIA RELATED PROJECTS

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NOT TO SCALE

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 7-1
LOCATION OF RELATED PROJECTS

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

of the background traffic growth estimates for Monrovia (included as part of Regional Statistical Area No. 25) published in the *2010 Congestion Management Program*, which indicate that existing traffic volumes would be expected to increase at an annual rate of approximately 0.82% between years 2010 and 2015. Therefore, the use of one percent annual growth factor allows for a conservative forecast of future traffic volumes in the area. Further, it is noted that the CMP manual's traffic growth rate is intended to anticipate future traffic generated by development projects in the project vicinity. Thus, the inclusion in this traffic analysis of both a forecast of traffic generated by known related projects plus the use of an ambient traffic growth factor based on CMP traffic model data results in a conservative estimate of future traffic volumes at the study intersections.

8.0 TRAFFIC IMPACT ANALYSIS METHODOLOGY

The AM and PM peak hour operating conditions for the five study intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology for the study intersections. The ICU method of analysis 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). The ICU calculations incorporate a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through and right-turn lanes, and 2,880 vph for dual left-turn lanes. A clearance interval of 0.10 is also included in the ICU calculations. A description of the ICU method and corresponding Level of Service is provided in ***Appendix B***.

8.1 Impact Criteria and Thresholds

The relative impact of the added traffic volumes to be generated by the proposed project during the weekday AM and PM peak hours was evaluated based on analysis of existing and future operating conditions at the study intersections, without and with the proposed project. The previously discussed capacity analysis procedures were utilized to evaluate the future *v/c* relationships and service level characteristics at each study intersection.

The significance of the potential impacts of project generated traffic at each study intersection was identified using the intersection impact criteria set forth in the *Circulation Element of the Monrovia General Plan*, adopted January 15, 2008. According to the City of Monrovia's intersection impact criteria, the impact is considered significant if the project-related increase in the *v/c* ratio equals or exceeds the thresholds presented in ***Table 8–1***.

Table 8-1
CITY OF MONROVIA
INTERSECTION IMPACT THRESHOLD CRITERIA

Final *v/c*	**Level of Service**	**Project Related Increase in *v/c***
0.000 - 0.600	A	equal to or greater than 0.06
> 0.600 - 0.700	B	equal to or greater than 0.05
> 0.700 - 0.800	C	equal to or greater than 0.04
> 0.800 - 0.900	D	equal to or greater than 0.03
> 0.900 - 1.000	E	equal to or greater than 0.02
> 1.000	F	equal to or greater than 0.01

The City's method requires mitigation of project traffic impacts whenever traffic generated by the proposed development exceeds the criteria above.

8.2 Traffic Impact Analysis Scenarios

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

(a) Existing (2012) conditions.

(b) Condition (a) with completion and occupancy of the project.

(c) Condition (b) with implementation of project mitigation measures where necessary.

(d) Condition (a) plus one percent (1.0%) annual ambient traffic growth through year 2015 and with completion and occupancy of the related projects (i.e., future cumulative baseline)

(e) Condition (d) with completion and occupancy of the project.

(f) Condition (e) with implementation of project mitigation measures where 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.

9.0 TRAFFIC ANALYSIS

The traffic impact analysis prepared for the study intersections using the ICU methodology and application of the City of Monrovia significant traffic impact criteria is summarized in ***Table 9–1***. The ICU data worksheets for the analyzed intersections are contained in *Appendix B*.

9.1 Existing Conditions

As indicated in column [1] of *Table 9–1*, all five study intersections are presently operating at LOS C or better during the weekday AM and PM peak hours. As previously mentioned, the existing traffic volumes at the study intersections during the weekday AM and PM peak hours are displayed in *Figures 5–1* and *5–2*, respectively.

9.2 Existing With Project Conditions

In order to determine the operating conditions of the street system under existing with project conditions, traffic to be generated by the proposed project was added to the existing traffic conditions. As indicated in column [2] of *Table 9–1*, application of the City's threshold criteria to the "Existing With Project" scenario indicates that the proposed project is not expected to create any significant impacts at the five study intersections. Incremental, but less than significant impacts are noted at the study intersections, as presented in *Table 9–1*. Because there are no significant impacts, no traffic mitigation measures are required or recommended for the study intersections under the "Existing With Project" conditions. The existing with project traffic volumes (existing traffic volumes plus proposed project traffic volumes) at the study intersections during the weekday AM and PM peak hours are shown in ***Figures 9–1*** and ***9–2***, respectively.

9.3 Future Pre-Project Conditions

The future year 2015 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). The *v/c* ratios at the study intersections appropriately reflect the addition of traffic generated by the related projects listed in *Table 7–1* as well as the incremental growth in ambient traffic.

As presented in column [3] of *Table 9–1*, all five study intersections are expected to operate at LOS D or better during the weekday AM and PM peak hours. The future pre-project (existing, ambient growth and related projects) traffic volumes at the study intersections during the weekday AM and PM peak hours are presented in ***Figures 9–3*** and ***9–4***, respectively.

9.4 Future With Project Conditions

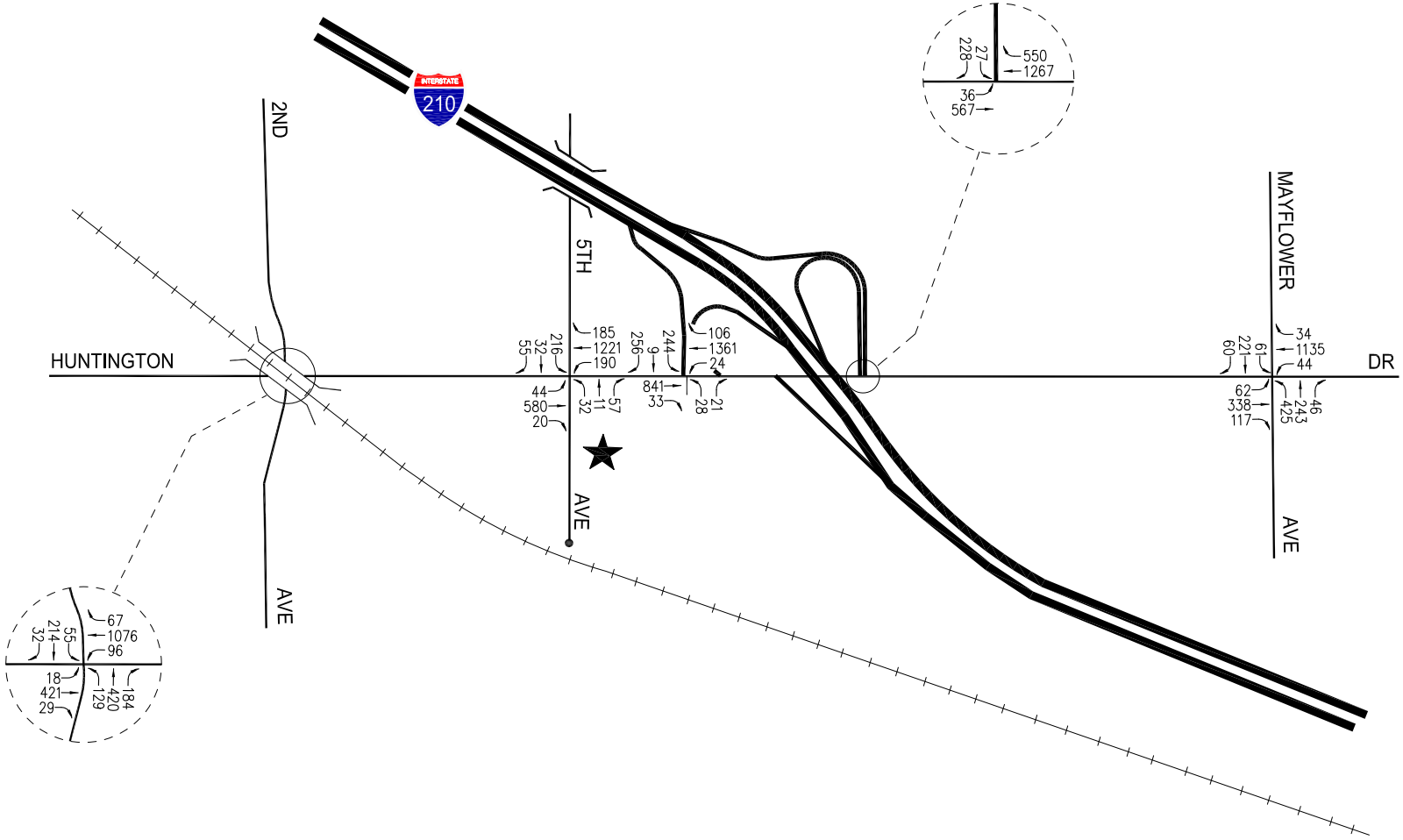
In order to determine the operating conditions of the street system under the year 2015 future with project conditions, traffic to be generated by the proposed project was added to the year

Table 9-1
SUMMARY OF VOLUME TO CAPACITY RATIOS
AND LEVELS OF SERVICE
AM AND PM PEAK HOURS

NO.	INTERSECTION	PEAK HOUR	[1] YEAR 2012 EXISTING V/C	LOS	[2] YEAR 2012 EXISTING W/ PROJECT V/C	LOS	CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT	[3] YEAR 2015 FUTURE PRE-PROJECT V/C	LOS	[4] YEAR 2015 FUTURE WITH PROJECT V/C	LOS	CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT
1	2nd Avenue/	AM	0.667	B	0.671	B	0.004	NO	0.732	C	0.736	C	0.004	NO
	Huntington Drive	PM	0.730	C	0.736	C	0.006	NO	0.797	C	0.803	D	0.006	NO
2	5th Avenue/	AM	0.662	B	0.687	B	0.025	NO	0.743	C	0.768	C	0.025	NO
	Huntington Drive	PM	0.753	C	0.784	C	0.031	NO	0.831	D	0.860	D	0.029	NO
3	I-210 Fwy Eastbound Ramps/	AM	0.705	C	0.703	C	-0.002	NO	0.782	C	0.779	C	-0.003	NO
	Huntington Drive	PM	0.569	A	0.571	A	0.002	NO	0.619	B	0.620	B	0.001	NO
4	I-210 Fwy Westbound Ramps/	AM	0.593	A	0.598	A	0.005	NO	0.672	B	0.678	B	0.006	NO
	Huntington Drive	PM	0.631	B	0.636	B	0.005	NO	0.660	B	0.664	B	0.004	NO
5	Mayflower Avenue/	AM	0.740	C	0.739	C	-0.001	NO	0.825	D	0.824	D	-0.001	NO
	Huntington Drive	PM	0.726	C	0.727	C	0.001	NO	0.794	C	0.794	C	0.000	NO

City of Monrovia intersection impact threshold criteria is as follows:

Final v/c	LOS	Project Related Increase in v/c
>=0.000 - 0.600	A	equal to or greater than 0.06
>=0.600 - 0.700	B	equal to or greater than 0.05
>=0.700 - 0.800	C	equal to or greater than 0.04
>=0.800 - 0.900	D	equal to or greater than 0.03
>=0.900 - 1.000	E	equal to or greater than 0.02
> 1.000	F	equal to or greater than 0.01



PROJECT SITE

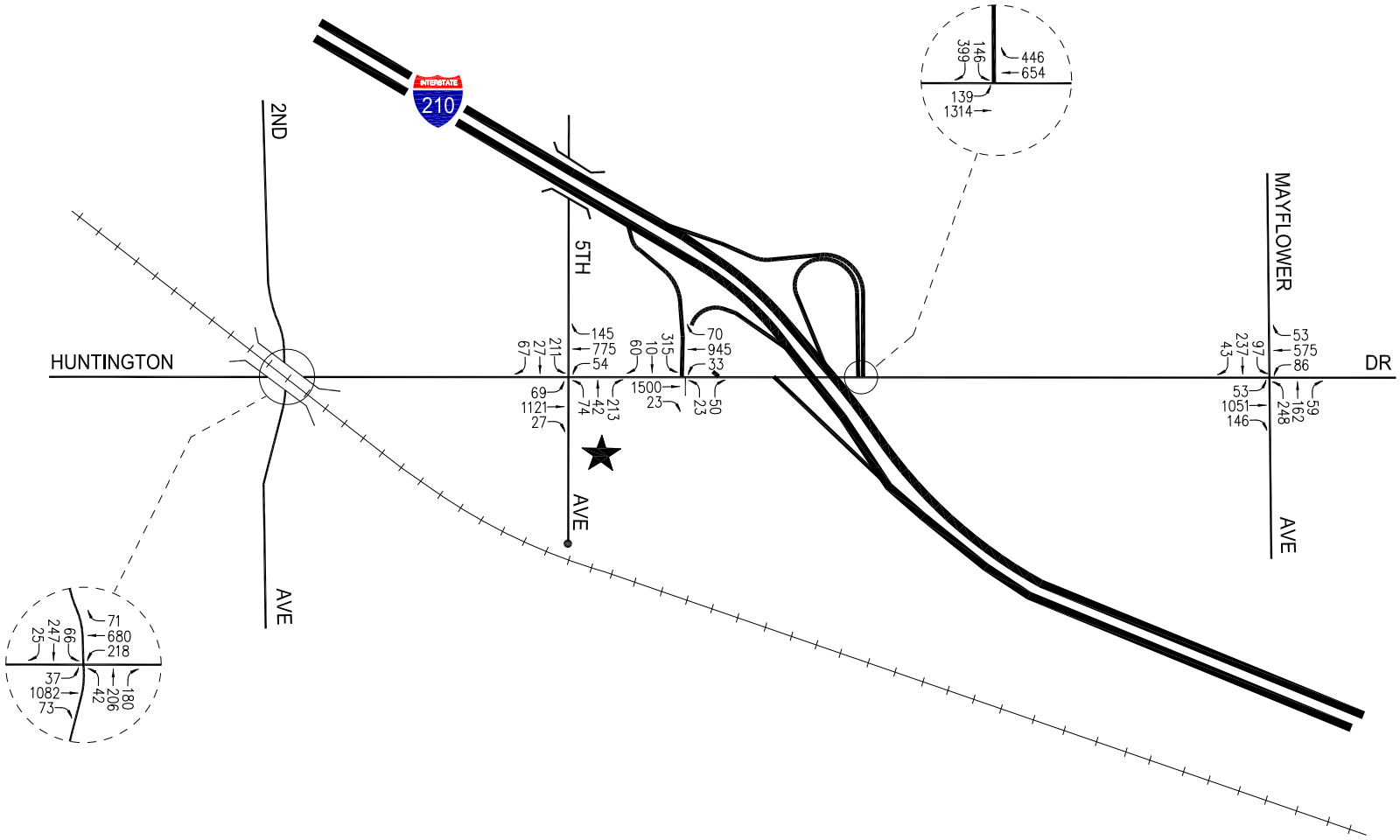
NOT TO SCALE

FIGURE 9-1
EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



PROJECT SITE

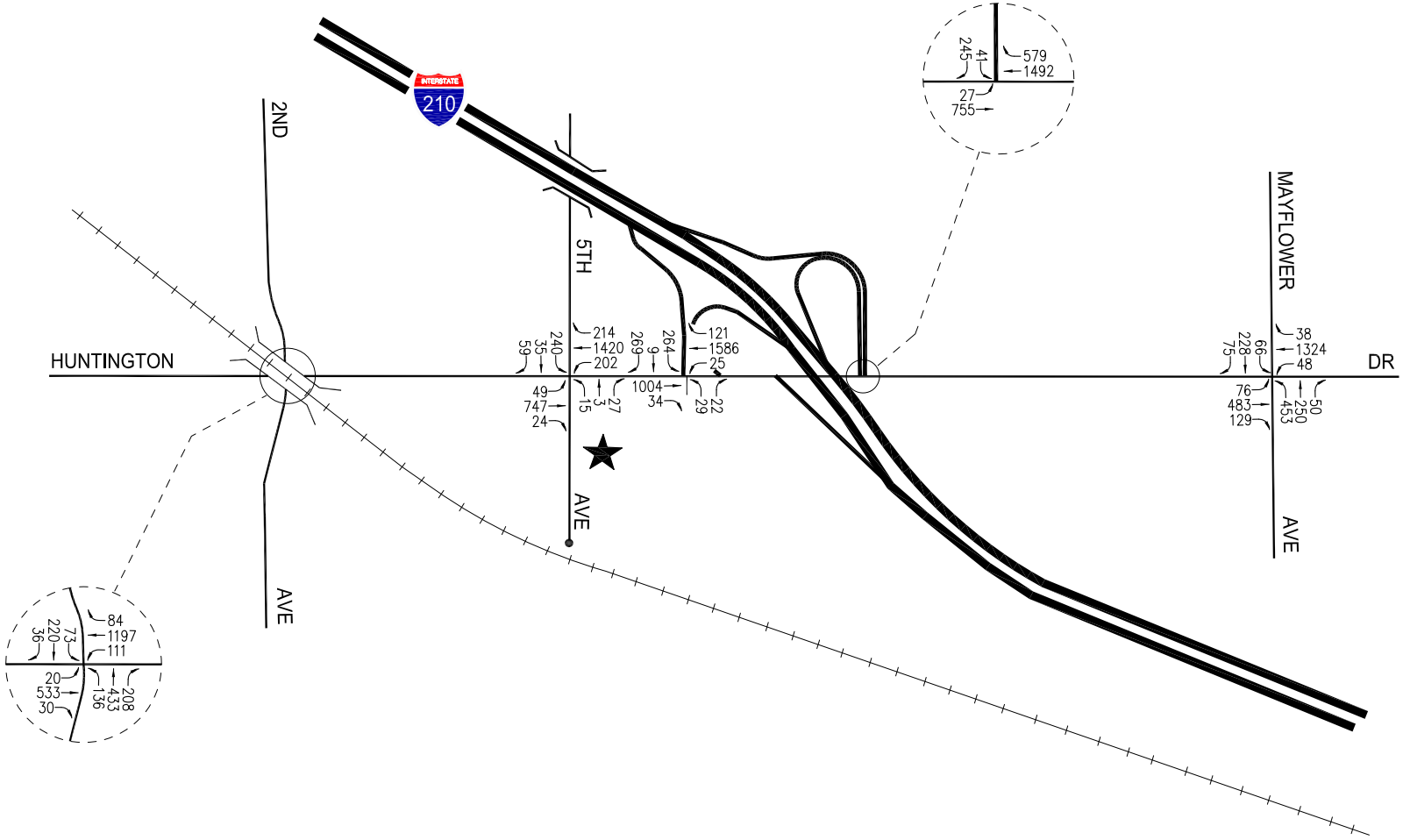
NOT TO SCALE

FIGURE 9-2
EXISTING WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



PROJECT SITE

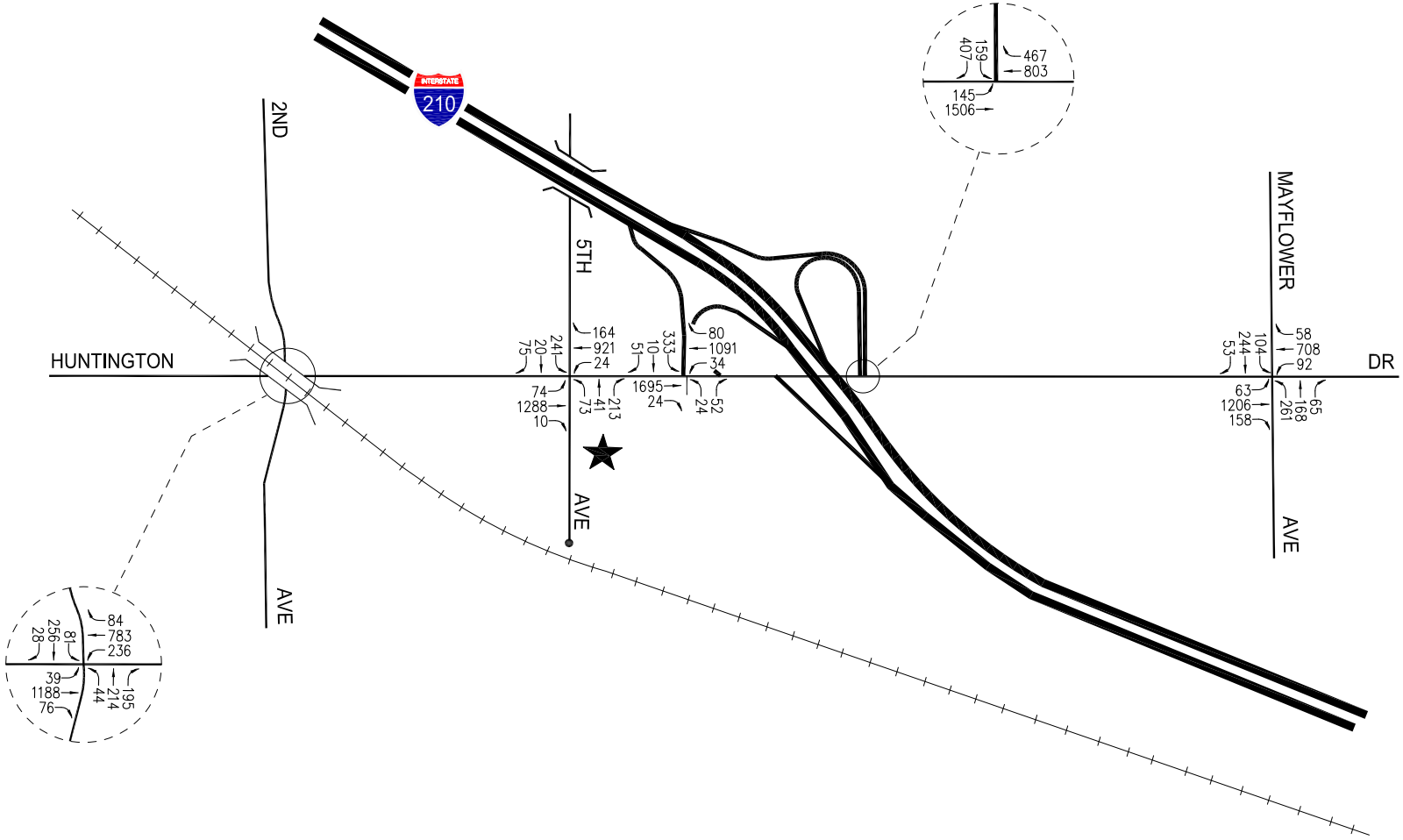
NOT TO SCALE

FIGURE 9-3
FUTURE PRE-PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



PROJECT SITE

NOT TO SCALE

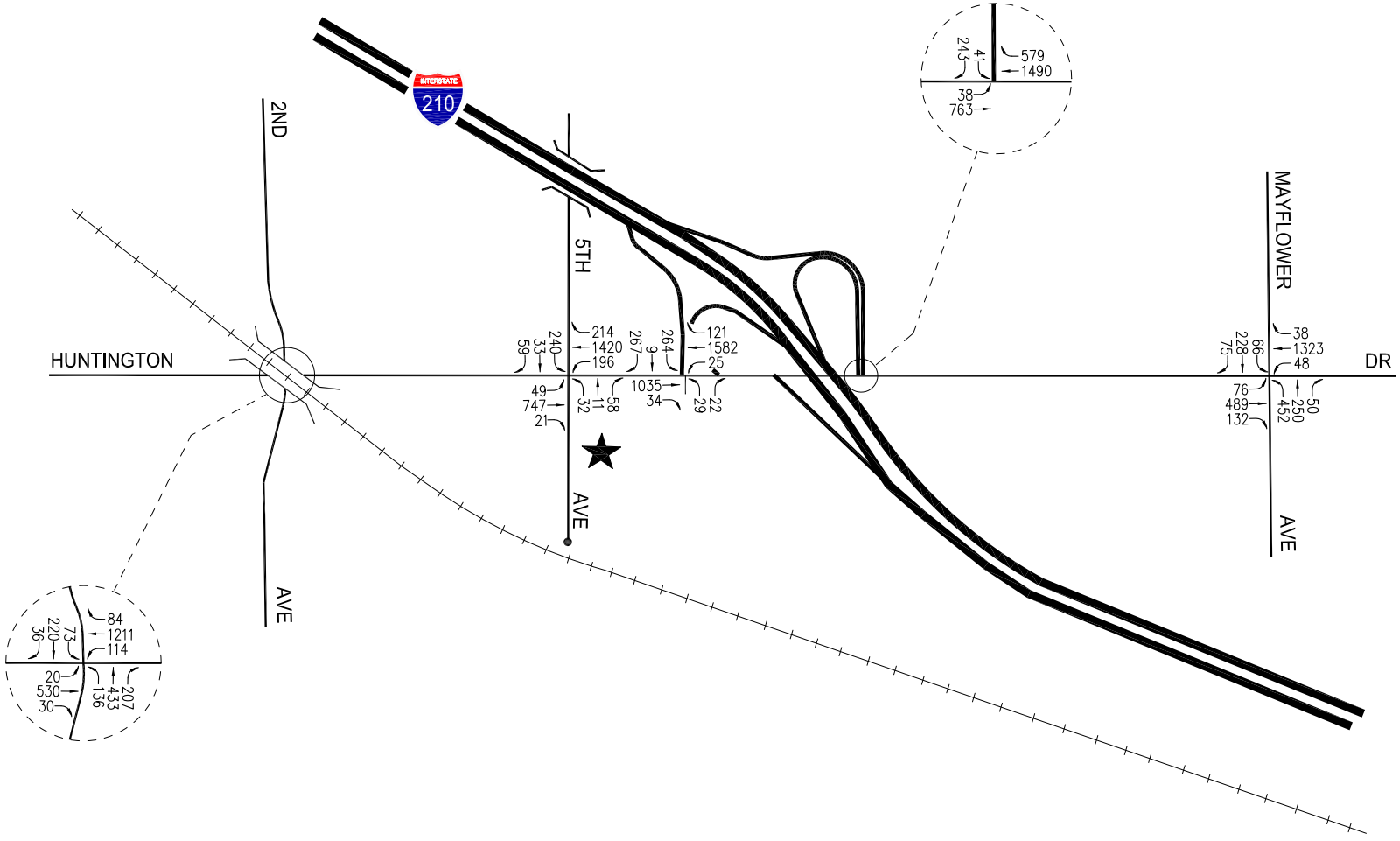
FIGURE 9-4
FUTURE PRE-PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

2015 future pre-project conditions. As indicated in column [4] of *Table 9–1*, application of the City's threshold criteria to the "Year 2015 Future With Project" scenario indicates that the proposed project is not expected to create any significant impacts at the five study intersections. Incremental, but less than significant impacts are noted at the study intersections, as presented in *Table 9–1*. Because there are no significant impacts, no traffic mitigation measures are required or recommended for the study intersections under the "Year 2015 Future With Project" conditions. The future with project (existing, ambient growth, related projects and project) traffic volumes at the study intersections during the weekday AM and PM peak hours are illustrated in ***Figures 9–5*** and ***9–6***, respectively.



N

NOT TO SCALE

★ PROJECT SITE

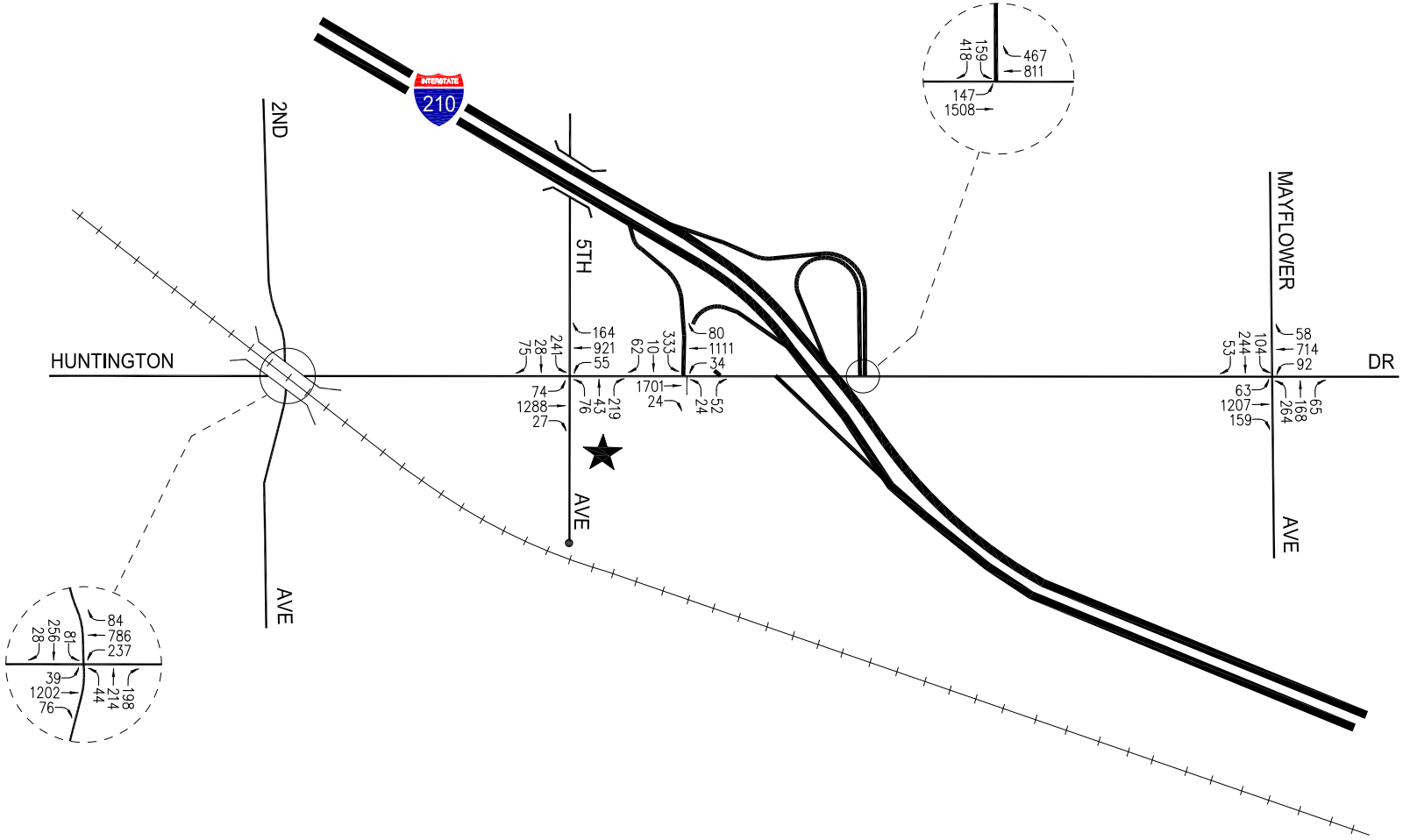
FIGURE 9-5

FUTURE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY AM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers



PROJECT SITE

NOT TO SCALE

FIGURE 9-6
FUTURE WITH PROJECT TRAFFIC VOLUMES

WEEKDAY PM PEAK HOUR

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

LINSCOTT, LAW & GREENSPAN, engineers

10.0 CONGESTION MANAGEMENT PROGRAM TRAFFIC IMPACT ASSESSMENT

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.

As outlined in the 2010 Congestion Management Program for Los Angeles County, a review has been prepared in order to determine if a formal Traffic Impact Assessment (TIA) would be required to determine the potential impacts on designated monitoring locations on the CMP highway system. The review has been prepared in accordance with procedures outlined in the *2010 Congestion Management Program*, County of Los Angeles Metropolitan Transportation Authority, October 2010.

10.1 Intersections

There are no CMP intersection monitoring locations within the City of Monrovia. The nearest CMP intersection monitoring location is the Rosemead Boulevard/Huntington Drive intersection, located approximately three miles west of the project site in an unincorporated area of Los Angeles County. 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 weekday AM or PM peak hours. 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.

10.2 Freeways

The following CMP freeway monitoring locations closest to the project site have been identified:

- CMP Station Segment

  No. 1061 I-210 Freeway at Rosemead Boulevard

  No. 1062 I-210 Freeway west of Route 605

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 weekday AM or PM peak hours. The proposed project will not add 150 or more trips (in either direction) during either the weekday AM or PM peak hours to the CMP freeway monitoring location, 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.

10.3 Transit

As required by the *2010 Congestion Management Program,* a review has been made of the CMP transit service. As previously discussed, existing transit service is provided in the vicinity of the proposed project.

The project trip generation, as shown in *Table 6–1*, 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 four new transit trips during the weekday AM peak hour. During the weekday PM peak hour, the proposed project is anticipated to generate demand for five new transit trips. Over a 24-hour period, the proposed project is forecast to generate demand for 53 daily transit trips. The calculations are as follows:

- AM Peak Hour = 80 × 1.4 × 0.035 = 4 Transit Trips
- PM Peak Hour = 100 × 1.4 × 0.035 = 5 Transit Trips
- Daily Trips = 1,082 × 1.4 × 0.035 = 53 Transit Trips

As shown in *Table 4–1*, Foothill Transit bus routes are provided adjacent to or in close proximity to the project site. As outlined in *Table 4–1* under the "No. of Buses" column, this transit line provides service for an average (i.e., an average of the directional number of buses during the peak hours) of approximately six buses serving the project area during the AM peak hour and approximately six 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 of 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.

11.0 CONCLUSIONS

This traffic impact study has been prepared to identify and evaluate the potential impacts of traffic generated by the proposed 5th Avenue/Huntington Drive Mixed-Use project. The proposed project consists of the development of 154 multi-family apartment dwelling units and approximately 1,341 square feet of retail floor area. Construction of the proposed project is planned to be built and occupied by 2015.

In order to evaluate the potential impacts due to the proposed project, five intersections were identified for evaluation in consultation with the City of Monrovia staff to determine changes in operations following occupancy and utilization of the project. The proposed project is expected to generate 45 net new vehicle trips (11 fewer inbound trips and 56 more outbound trips) during the AM peak hour. During the PM peak hour, the proposed project is expected to generate 67 net new vehicle trips (56 more inbound trips and 11 more outbound trips). Over a 24-hour period, the proposed project is forecast to generate approximately 736 net new daily trip ends during a typical weekday (approximately 368 inbound trips and 368 outbound trips).

It is concluded that the proposed project will not create significant traffic impacts at any of the study intersections. Incremental, but less than significant impacts, are noted at the study intersections. Therefore, no traffic mitigation measures are required or recommended for the study intersections.

A review was conducted to determine whether the proposed project would result in significant traffic impacts to the Congestion Management Program (CMP) roadway system. Based on the CMP threshold criteria, it is concluded that the proposed project will not result in significant impacts at any of the CMP intersection or freeway monitoring locations.

APPENDIX A

MANUAL INTERSECTION TRAFFIC COUNT DATA

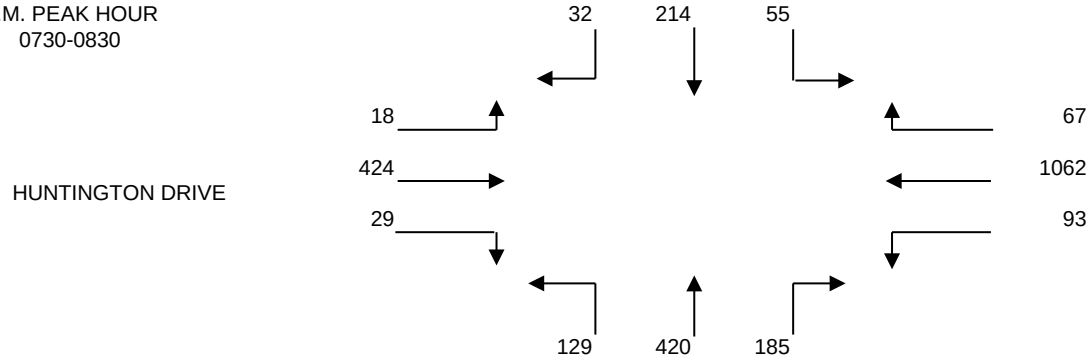
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S 2ND AVENUE
E/W HUNTINGTON DRIVE
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	5	17	15	8	197	13	16	57	24	5	36	3
0715-0730	5	32	12	14	222	21	23	81	21	5	65	2
0730-0745	9	57	15	17	259	22	32	97	35	5	89	5
0745-0800	5	47	18	13	262	24	49	121	25	6	106	7
0800-0815	6	63	11	18	284	25	53	121	39	11	100	3
0815-0830	12	47	11	19	257	22	51	81	30	7	129	3
0830-0845	5	37	10	16	281	36	40	65	20	7	115	5
0845-0900	8	47	8	18	233	36	46	65	16	10	113	5

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	153	60	52	940	80	120	356	105	21	296	17	2224
0715-0815	25	199	56	62	1027	92	157	420	120	27	360	17	2562
0730-0830	32	214	55	67	1062	93	185	420	129	29	424	18	2728
0745-0845	28	194	50	66	1084	107	193	388	114	31	450	18	2723
0800-0900	31	194	40	71	1055	119	190	332	105	35	457	16	2645

A.M. PEAK HOUR
0730-0830



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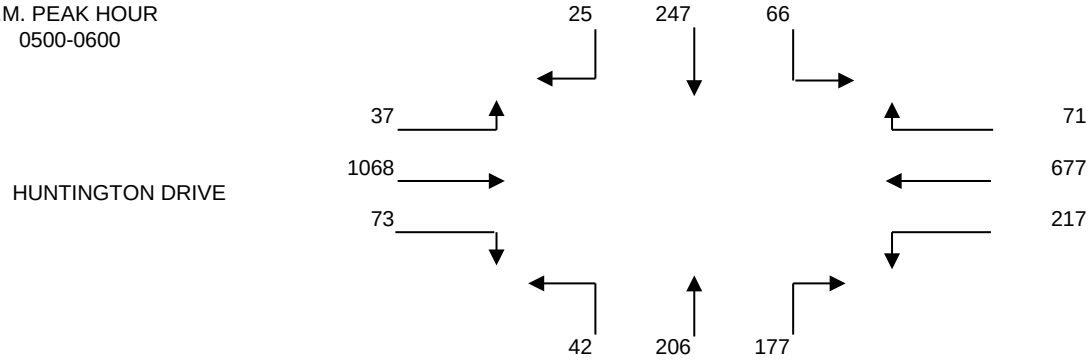
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S 2ND AVENUE
E/W HUNTINGTON DRIVE
FILE NUMBER: 1-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	6	40	17	11	144	42	29	47	9	10	214	6
0415-0430	5	47	18	13	136	45	34	52	14	15	202	6
0430-0445	8	55	13	19	171	43	36	53	6	17	232	7
0445-0500	6	46	15	13	148	52	36	51	6	15	260	5
0500-0515	6	69	18	17	177	63	57	49	10	21	258	11
0515-0530	5	76	19	22	189	55	39	49	8	16	267	7
0530-0545	5	53	19	19	174	56	41	56	12	14	254	11
0545-0600	9	49	10	13	137	43	40	52	12	22	289	8

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	25	188	63	56	599	182	135	203	35	57	908	24	2475
0415-0515	25	217	64	62	632	203	163	205	36	68	952	29	2656
0430-0530	25	246	65	71	685	213	168	202	30	69	1017	30	2821
0445-0545	22	244	71	71	688	226	173	205	36	66	1039	34	2875
0500-0600	25	247	66	71	677	217	177	206	42	73	1068	37	2906

P.M. PEAK HOUR
0500-0600



PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: 2ND AVENUE

HUNTINGTON DRIVE

FILE: 1-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	6	0	3	3
0715-0730	3	2	4	0
0730-0745	2	2	6	2
0745-0800	3	2	4	2
0800-0815	1	0	2	1
0815-0830	1	1	3	0
0830-0845	2	2	2	0
0845-0900	0	0	3	1

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	1	0	0	0
0715-0730	1	1	0	1
0730-0745	0	0	1	1
0745-0800	0	0	3	1
0800-0815	0	0	2	1
0815-0830	1	1	1	0
0830-0845	1	1	0	0
0845-0900	1	0	1	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	14	6	17	7	44
0715-0815	9	6	16	5	36
0730-0830	7	5	15	5	32
0745-0845	7	5	11	3	26
0800-0900	4	3	10	2	19

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	2	1	4	3	10
0715-0815	1	1	6	4	12
0730-0830	1	1	7	3	12
0745-0845	2	2	6	2	12
0800-0900	3	2	4	1	10

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PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: 2ND AVENUE

HUNTINGTON DRIVE

FILE: 1-PM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	0	1	3	3
0415-0430	1	2	8	5
0430-0445	5	5	5	0
0445-0500	0	0	1	2
0500-0515	3	0	1	2
0515-0530	10	2	3	0
0530-0545	3	9	10	1
0545-0600	3	1	5	1

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	0	1	1	1
0415-0430	0	0	3	3
0430-0445	0	0	1	0
0445-0500	0	0	0	2
0500-0515	0	1	1	0
0515-0530	1	0	2	0
0530-0545	0	0	1	0
0545-0600	0	0	0	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	6	8	17	10	41
0415-0515	9	7	15	9	40
0430-0530	18	7	10	4	39
0445-0545	16	11	15	5	47
0500-0600	19	12	19	4	54

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	0	1	5	6	12
0415-0515	0	1	5	5	11
0430-0530	1	1	4	2	8
0445-0545	1	1	4	2	8
0500-0600	1	1	4	0	6

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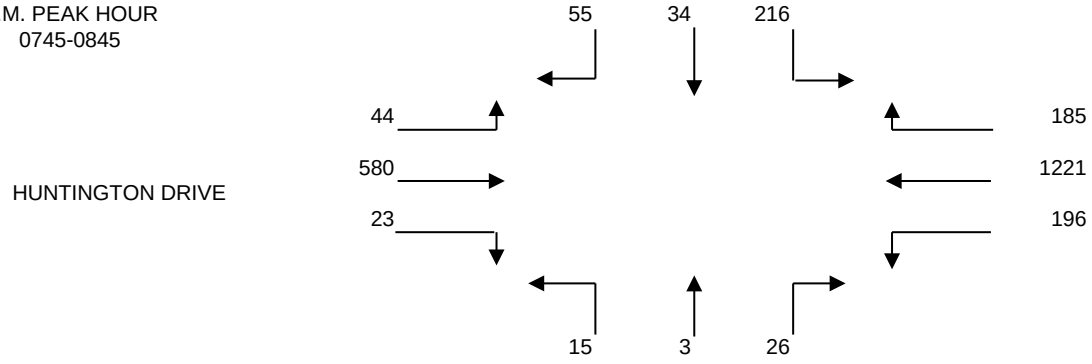
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S 5TH AVENUE
E/W HUNTINGTON DRIVE
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	10	0	38	33	231	25	0	1	1	1	74	4
0715-0730	9	3	42	43	262	27	2	1	0	2	84	7
0730-0745	9	6	59	58	286	42	5	0	0	4	116	9
0745-0800	9	10	69	69	288	52	7	0	3	3	125	12
0800-0815	16	9	61	42	324	57	6	2	3	5	147	11
0815-0830	11	8	41	31	301	42	8	1	5	6	169	9
0830-0845	19	7	45	43	308	45	5	0	4	9	139	12
0845-0900	12	8	30	43	274	37	5	2	5	8	115	13

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	37	19	208	203	1067	146	14	2	4	10	399	32	2141
0715-0815	43	28	231	212	1160	178	20	3	6	14	472	39	2406
0730-0830	45	33	230	200	1199	193	26	3	11	18	557	41	2556
0745-0845	55	34	216	185	1221	196	26	3	15	23	580	44	2598
0800-0900	58	32	177	159	1207	181	24	5	17	28	570	45	2503

A.M. PEAK HOUR
0745-0845



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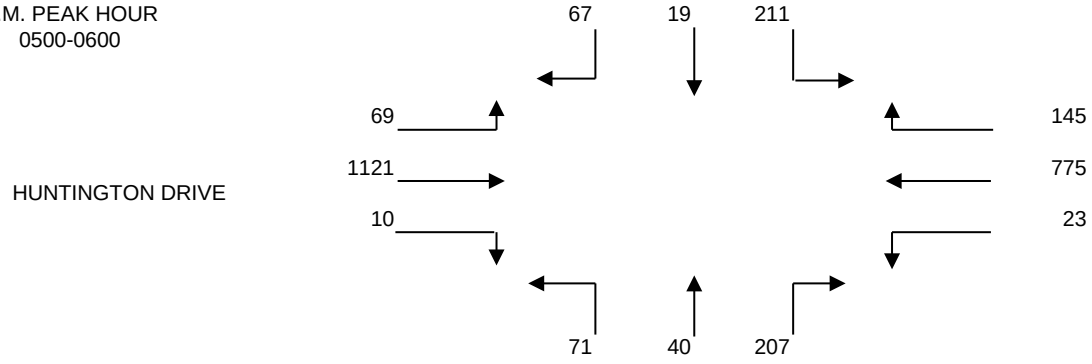
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S 5TH AVENUE
E/W HUNTINGTON DRIVE
FILE NUMBER: 2-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	17	7	32	31	170	7	23	3	12	7	228	15
0415-0430	17	5	44	36	176	17	27	8	15	7	232	12
0430-0445	27	6	52	41	165	12	42	7	19	4	250	13
0445-0500	24	6	51	39	195	11	46	7	15	2	271	18
0500-0515	23	7	50	37	173	5	59	13	26	2	253	23
0515-0530	18	3	52	33	206	6	57	12	23	2	260	19
0530-0545	11	7	52	33	200	8	50	8	14	4	293	12
0545-0600	15	2	57	42	196	4	41	7	8	2	315	15

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	85	24	179	147	706	47	138	25	61	20	981	58	2471
0415-0515	91	24	197	153	709	45	174	35	75	15	1006	66	2590
0430-0530	92	22	205	150	739	34	204	39	83	10	1034	73	2685
0445-0545	76	23	205	142	774	30	212	40	78	10	1077	72	2739
0500-0600	67	19	211	145	775	23	207	40	71	10	1121	69	2758

P.M. PEAK HOUR
0500-0600



5TH AVENUE

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: 5TH AVENUE

HUNTINGTON DRIVE

FILE: 2-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	4	2	3	3
0715-0730	1	2	1	0
0730-0745	1	10	4	1
0745-0800	2	2	4	0
0800-0815	1	2	5	2
0815-0830	1	1	3	5
0830-0845	1	1	2	1
0845-0900	1	3	5	1

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	0	0	0	0
0715-0730	2	0	0	0
0730-0745	0	2	0	0
0745-0800	0	1	3	0
0800-0815	0	0	1	0
0815-0830	0	0	1	0
0830-0845	1	0	0	0
0845-0900	0	0	0	1

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	8	16	12	4	40
0715-0815	5	16	14	3	38
0730-0830	5	15	16	8	44
0745-0845	5	6	14	8	33
0800-0900	4	7	15	9	35

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	2	3	3	0	8
0715-0815	2	3	4	0	9
0730-0830	0	3	5	0	8
0745-0845	1	1	5	0	7
0800-0900	1	0	2	1	4

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PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: 5TH AVENUE

HUNTINGTON DRIVE

FILE: 2-PM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	2	3	2	1
0415-0430	4	2	5	2
0430-0445	2	6	8	0
0445-0500	3	0	2	0
0500-0515	3	0	3	5
0515-0530	7	2	4	0
0530-0545	2	2	5	5
0545-0600	1	1	7	2

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	1	0	0	0
0415-0430	0	0	1	0
0430-0445	1	0	1	0
0445-0500	0	0	1	0
0500-0515	0	1	1	0
0515-0530	0	0	3	0
0530-0545	0	0	1	0
0545-0600	0	0	2	1

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	11	11	17	3	42
0415-0515	12	8	18	7	45
0430-0530	15	8	17	5	45
0445-0545	15	4	14	10	43
0500-0600	13	5	19	12	49

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	2	0	3	0	5
0415-0515	1	1	4	0	6
0430-0530	1	1	6	0	8
0445-0545	0	1	6	0	7
0500-0600	0	1	7	1	9

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

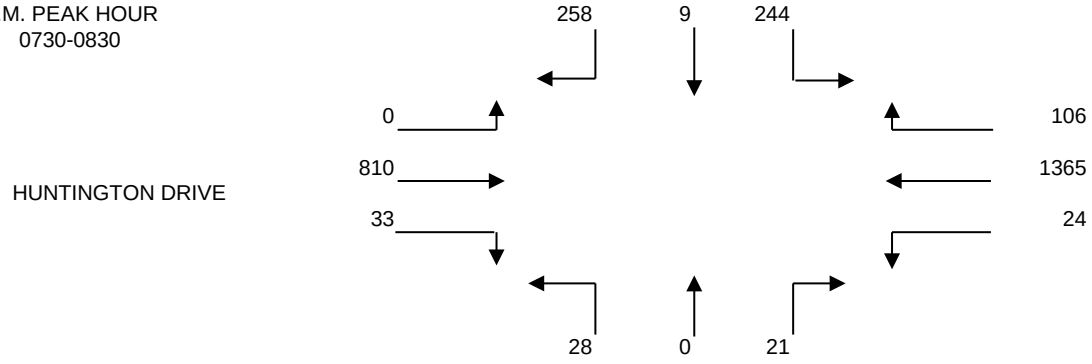
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY
E/W HUNTINGTON DRIVE
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	26	1	53	22	256	9	3	0	2	9	107	0
0715-0730	40	2	56	32	292	14	2	0	4	6	130	0
0730-0745	69	3	49	27	340	8	4	0	16	15	163	0
0745-0800	77	2	68	25	323	5	7	0	3	10	216	0
0800-0815	69	3	70	34	349	8	6	0	5	5	214	0
0815-0830	43	1	57	20	353	3	4	0	4	3	217	0
0830-0845	64	1	65	19	335	1	1	0	4	1	167	0
0845-0900	66	2	43	15	283	1	0	0	4	1	150	0

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	212	8	226	106	1211	36	16	0	25	40	616	0	2496
0715-0815	255	10	243	118	1304	35	19	0	28	36	723	0	2771
0730-0830	258	9	244	106	1365	24	21	0	28	33	810	0	2898
0745-0845	253	7	260	98	1360	17	18	0	16	19	814	0	2862
0800-0900	242	7	235	88	1320	13	11	0	17	10	748	0	2691

A.M. PEAK HOUR
0730-0830



I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006
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trafsolutn@aol.com

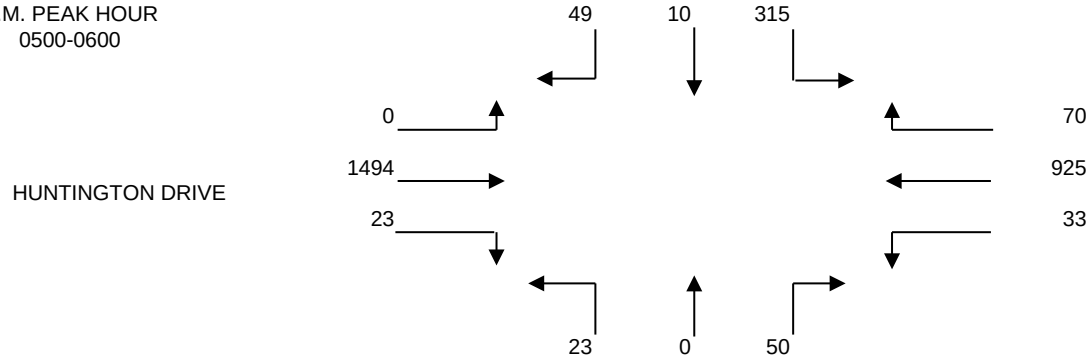
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY
E/W HUNTINGTON DRIVE
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
0400-0415	12	3	48	13	187	6	5	0	6	3	301	0
0415-0430	11	5	50	12	219	7	7	0	7	2	303	0
0430-0445	10	3	61	11	205	4	6	0	6	7	332	0
0445-0500	16	0	52	15	200	7	7	0	3	3	304	0
0500-0515	12	5	64	20	222	6	11	0	7	3	384	0
0515-0530	12	3	75	21	253	7	13	0	6	5	378	0
0530-0545	14	0	84	14	239	8	10	0	3	8	380	0
0545-0600	11	2	92	15	211	12	16	0	7	7	352	0

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	49	11	211	51	811	24	25	0	22	15	1240	0	2459
0415-0515	49	13	227	58	846	24	31	0	23	15	1323	0	2609
0430-0530	50	11	252	67	880	24	37	0	22	18	1398	0	2759
0445-0545	54	8	275	70	914	28	41	0	19	19	1446	0	2874
0500-0600	49	10	315	70	925	33	50	0	23	23	1494	0	2992

P.M. PEAK HOUR
0500-0600



I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY
HUNTINGTON DRIVE

FILE: 3-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	0	0	3	1
0715-0730	0	0	1	1
0730-0745	0	0	3	0
0745-0800	2	0	0	0
0800-0815	0	0	3	2
0815-0830	1	0	1	1
0830-0845	0	0	2	1
0845-0900	0	0	3	1

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	1	0	1	1
0715-0730	1	0	1	0
0730-0745	0	0	0	0
0745-0800	1	0	0	0
0800-0815	0	0	2	0
0815-0830	1	0	1	0
0830-0845	1	0	1	1
0845-0900	0	0	1	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	2	0	7	2	11
0715-0815	2	0	7	3	12
0730-0830	3	0	7	3	13
0745-0845	3	0	6	4	13
0800-0900	1	0	9	5	15

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	3	0	2	1	6
0715-0815	2	0	3	0	5
0730-0830	2	0	3	0	5
0745-0845	3	0	4	1	8
0800-0900	2	0	5	1	8

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: I-210 EB ON-OFF RAMP / COMMERCIAL DRIVEWAY
HUNTINGTON DRIVE

FILE: 3-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	1	0	0	1
0415-0430	0	0	0	1
0430-0445	4	0	1	3
0445-0500	2	0	0	0
0500-0515	2	0	0	4
0515-0530	1	0	0	11
0530-0545	1	0	4	3
0545-0600	1	0	5	4

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	1	0	0	0
0415-0430	0	0	0	0
0430-0445	1	0	0	0
0445-0500	1	0	0	0
0500-0515	0	0	0	0
0515-0530	0	0	0	0
0530-0545	0	0	0	0
0545-0600	0	0	0	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	7	0	1	5	13
0415-0515	8	0	1	8	17
0430-0530	9	0	1	18	28
0445-0545	6	0	4	18	28
0500-0600	5	0	9	22	36

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	3	0	0	0	3
0415-0515	2	0	0	0	2
0430-0530	2	0	0	0	2
0445-0545	1	0	0	0	1
0500-0600	0	0	0	0	0

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

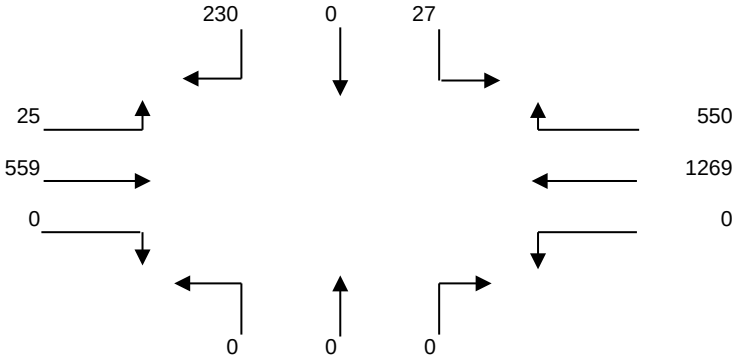
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S I-210 WB ON-OFF RAMP
E/W HUNTINGTON DRIVE
FILE NUMBER: 4-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	45	0	3	180	229	0	0	0	0	0	68	7
0715-0730	43	0	6	164	252	0	0	0	0	0	87	13
0730-0745	52	0	5	116	319	0	0	0	0	0	110	6
0745-0800	63	0	4	139	346	0	0	0	0	0	151	5
0800-0815	61	0	5	147	306	0	0	0	0	0	128	7
0815-0830	49	0	12	111	316	0	0	0	0	0	155	8
0830-0845	57	0	6	153	301	0	0	0	0	0	125	5
0845-0900	60	0	12	138	298	0	0	0	0	0	121	5

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	0	18	599	1146	0	0	0	0	0	416	31	2413
0715-0815	219	0	20	566	1223	0	0	0	0	0	476	31	2535
0730-0830	225	0	26	513	1287	0	0	0	0	0	544	26	2621
0745-0845	230	0	27	550	1269	0	0	0	0	0	559	25	2660
0800-0900	227	0	35	549	1221	0	0	0	0	0	529	25	2586

A.M. PEAK HOUR
0745-0845



I-210 WB ON-OFF RAMP

THE TRAFFIC SOLUTION
329 DIAMOND STREET
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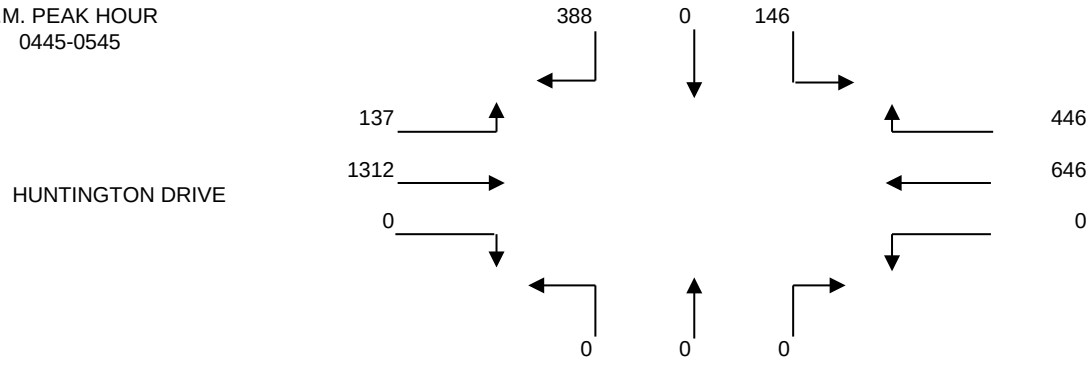
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S I-210 WB ON-OFF RAMP
E/W HUNTINGTON DRIVE
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
0400-0415	79	0	34	76	130	0	0	0	0	0	276	29
0415-0430	88	0	30	71	138	0	0	0	0	0	224	20
0430-0445	89	0	37	100	143	0	0	0	0	0	262	30
0445-0500	82	0	27	88	153	0	0	0	0	0	293	25
0500-0515	99	0	41	132	158	0	0	0	0	0	289	47
0515-0530	111	0	48	124	169	0	0	0	0	0	357	35
0530-0545	96	0	30	102	166	0	0	0	0	0	373	30
0545-0600	104	0	43	107	138	0	0	0	0	0	255	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
0400-0500	338	0	128	335	564	0	0	0	0	0	1055	104	2524
0415-0515	358	0	135	391	592	0	0	0	0	0	1068	122	2666
0430-0530	381	0	153	444	623	0	0	0	0	0	1201	137	2939
0445-0545	388	0	146	446	646	0	0	0	0	0	1312	137	3075
0500-0600	410	0	162	465	631	0	0	0	0	0	1274	132	3074

P.M. PEAK HOUR
0445-0545



I-210 WB ON-OFF RAMP

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: I-210 WB ON-OFF RAMPS

HUNTINGTON DRIVE

FILE: 4-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	0	0	0	0
0715-0730	0	0	0	0
0730-0745	0	0	0	0
0745-0800	1	2	0	0
0800-0815	2	0	0	0
0815-0830	1	0	0	0
0830-0845	0	0	0	0
0845-0900	0	1	0	0

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	0	0	0	0
0715-0730	2	0	0	0
0730-0745	0	0	0	0
0745-0800	0	0	0	0
0800-0815	0	0	0	0
0815-0830	1	0	0	0
0830-0845	1	0	0	0
0845-0900	0	0	0	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	1	2	0	0	3
0715-0815	3	2	0	0	5
0730-0830	4	2	0	0	6
0745-0845	4	2	0	0	6
0800-0900	3	1	0	0	4

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	2	0	0	0	2
0715-0815	2	0	0	0	2
0730-0830	1	0	0	0	1
0745-0845	2	0	0	0	2
0800-0900	2	0	0	0	2

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: I-210 WB ON-OFF RAMPS

HUNTINGTON DRIVE

FILE: 4-PM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	1	0	0	0
0415-0430	0	0	0	0
0430-0445	3	0	0	0
0445-0500	4	0	0	0
0500-0515	2	1	0	0
0515-0530	0	1	0	0
0530-0545	2	0	0	0
0545-0600	0	0	0	0

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	1	0	0	0
0415-0430	0	0	0	0
0430-0445	0	0	0	0
0445-0500	1	0	0	0
0500-0515	1	0	0	0
0515-0530	0	0	0	0
0530-0545	0	0	0	0
0545-0600	0	0	0	0

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	8	0	0	0	8
0415-0515	9	1	0	0	10
0430-0530	9	2	0	0	11
0445-0545	8	2	0	0	10
0500-0600	4	2	0	0	6

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	2	0	0	0	2
0415-0515	2	0	0	0	2
0430-0530	2	0	0	0	2
0445-0545	2	0	0	0	2
0500-0600	1	0	0	0	1

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

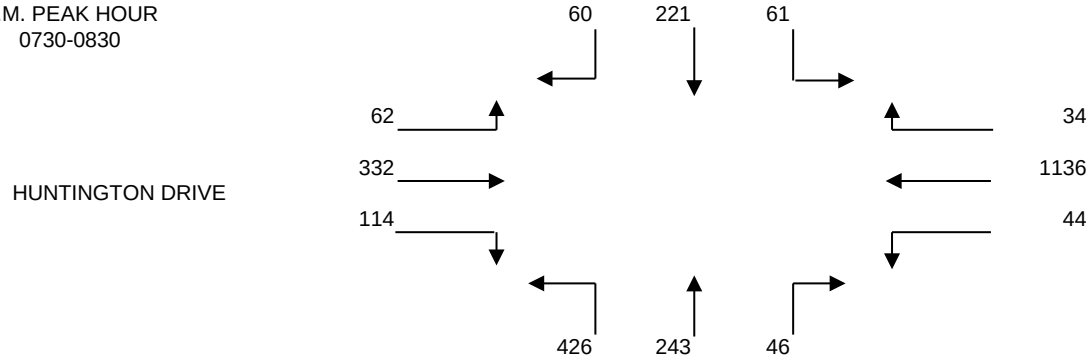
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 07:00 AM TO 09:00 AM
INTERSECTION N/S MAYFLOWER AVENUE
E/W HUNTINGTON DRIVE
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	9	39	5	8	245	8	9	40	102	15	51	5
0715-0730	9	39	10	11	263	8	7	58	96	26	49	10
0730-0745	13	55	15	8	294	9	15	85	116	34	69	16
0745-0800	18	74	18	9	290	8	12	70	108	31	96	16
0800-0815	17	56	17	9	270	13	9	51	106	27	84	12
0815-0830	12	36	11	8	282	14	10	37	96	22	83	18
0830-0845	12	34	17	11	309	10	15	51	111	32	86	10
0845-0900	15	26	9	6	299	11	9	53	86	28	76	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	49	207	48	36	1092	33	43	253	422	106	265	47	2601
0715-0815	57	224	60	37	1117	38	43	264	426	118	298	54	2736
0730-0830	60	221	61	34	1136	44	46	243	426	114	332	62	2779
0745-0845	59	200	63	37	1151	45	46	209	421	112	349	56	2748
0800-0900	56	152	54	34	1160	48	43	192	399	109	329	52	2628

A.M. PEAK HOUR
0730-0830



THE TRAFFIC SOLUTION
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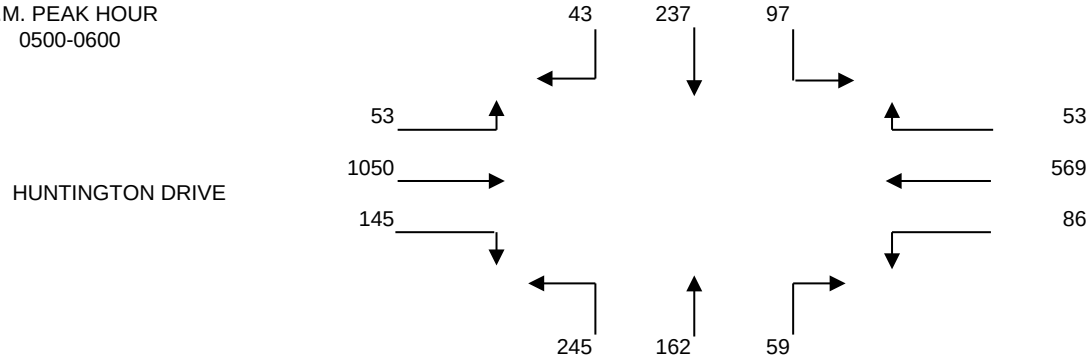
INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - PASADENA
PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED-USE PROJECT
DATE: WEDNESDAY, SEPTEMBER 05, 2012
PERIOD: 04:00 PM TO 06:00 PM
INTERSECTION N/S MAYFLOWER AVENUE
E/W HUNTINGTON DRIVE
FILE NUMBER: 5-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	10	55	18	8	139	17	12	49	42	30	219	13
0415-0430	11	53	24	10	133	25	18	59	44	23	228	13
0430-0445	8	37	17	9	131	22	10	34	30	20	237	10
0445-0500	9	45	18	10	143	21	15	49	42	34	231	10
0500-0515	9	66	21	10	139	24	15	41	62	34	245	13
0515-0530	13	68	25	12	151	18	12	41	64	40	267	15
0530-0545	14	59	29	14	140	20	18	50	68	35	278	12
0545-0600	7	44	22	17	139	24	14	30	51	36	260	13

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	38	190	77	37	546	85	55	191	158	107	915	46	2445
0415-0515	37	201	80	39	546	92	58	183	178	111	941	46	2512
0430-0530	39	216	81	41	564	85	52	165	198	128	980	48	2597
0445-0545	45	238	93	46	573	83	60	181	236	143	1021	50	2769
0500-0600	43	237	97	53	569	86	59	162	245	145	1050	53	2799

P.M. PEAK HOUR
0500-0600



PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 07:00 AM TO 09:00 AM

INTERSECTION: MAYFLOWER AVENUE

HUNTINGTON DRIVE

FILE: 5-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	0	2	4	1
0715-0730	4	7	3	1
0730-0745	1	10	9	7
0745-0800	0	2	2	6
0800-0815	0	3	1	3
0815-0830	3	4	2	4
0830-0845	0	1	0	2
0845-0900	0	2	4	0

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0700-0715	1	2	0	3
0715-0730	1	4	0	1
0730-0745	2	1	0	0
0745-0800	0	0	1	2
0800-0815	0	0	1	0
0815-0830	1	0	1	0
0830-0845	0	0	0	1
0845-0900	0	1	1	1

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	5	21	18	15	59
0715-0815	5	22	15	17	59
0730-0830	4	19	14	20	57
0745-0845	3	10	5	15	33
0800-0900	3	10	7	9	29

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0700-0800	4	7	1	6	18
0715-0815	3	5	2	3	13
0730-0830	3	1	3	2	9
0745-0845	1	0	3	3	7
0800-0900	1	1	3	2	7

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

PEDESTRIAN - BICYCLE COUNT SUMMARY

CLIENT: LLG - ENGINEERS

PROJECT: 5TH AVENUE / HUNTINGTON DRIVE MIXED USE PROJECT

DATE: WEDNESDAY, SEPTEMBER 05, 2012

PERIOD: 04:00 PM TO 06:00 PM

INTERSECTION: MAYFLOWER AVENUE

HUNTINGTON DRIVE

FILE: 5-AM

	PEDESTRIAN MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	0	1	7	4
0415-0430	2	7	9	2
0430-0445	0	2	5	0
0445-0500	2	1	4	6
0500-0515	0	0	2	1
0515-0530	1	3	9	0
0530-0545	0	1	6	0
0545-0600	0	1	5	0

	BICYCLIST MOVEMENTS			
15-MINUTE PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D
0400-0415	2	3	2	1
0415-0430	0	1	3	0
0430-0445	0	1	1	0
0445-0500	3	1	2	1
0500-0515	1	0	1	0
0515-0530	0	1	2	0
0530-0545	0	3	0	1
0545-0600	0	0	0	1

	PEDESTRIAN MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	4	11	25	12	52
0415-0515	4	10	20	9	43
0430-0530	3	6	20	7	36
0445-0545	3	5	21	7	36
0500-0600	1	5	22	1	29

	BICYCLIST MOVEMENTS				
1-HOUR PERIOD	NORTH LEG A	EAST LEG B	SOUTH LEG C	WEST LEG D	TOTALS
0400-0500	5	6	8	2	21
0415-0515	4	3	7	1	15
0430-0530	4	3	6	1	14
0445-0545	4	5	5	2	16
0500-0600	1	4	3	2	10

THE TRAFFIC SOLUTION
329 DIAMOND STREET
ARCADIA, CALIFORNIA 91006

APPENDIX B

ICU AND LEVELS OF SERVICE EXPLANATION
ICU DATA WORKSHEETS – WEEKDAY AM AND PM PEAK HOURS

INTERSECTION CAPACITY UTILIZATION (ICU) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Levels of Service concept denotes any one of a number of differing combinations of operating conditions which may occur as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*, published by the Transportation Research Board. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing, The capacity per hour of green time for each approach is calculated based on the methods of the *Highway Capacity Manual*. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Intersection Capacity Utilization Characteristics

Level of Service	Load Factor	Equivalent ICU
A	0.0	0.00 - 0.60
B	0.0 - 0.1	0.61 - 0.70
C	0.1 - 0.3	0.71 - 0.80
D	0.3 - 0.7	0.81 - 0.90
E	0.7 - 1.0	0.91 - 1.00
F	Not Applicable	Not Applicable

SERVICE LEVEL A
There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B
This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C
At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D
This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E
This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F
Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

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INTERSECTION CAPACITY UTILIZATION

2nd Avenue @ Huntington Drive
Peak hr: AM
Annual Growth: 1.00%

N-S St: 2nd Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU1

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	129	1600	0.081	0	129	1600	0.081	0	129	1600	0.081	4	133	1600	0.083	3	136	1600	0.085	0	136	1600	0.085	0	136	1600	0.085
Nb Thru	420	3200	0.189 *	0	420	3200	0.189 *	0	420	3200	0.189 *	13	433	3200	0.195 *	0	433	3200	0.200 *	0	433	3200	0.200 *	0	433	3200	0.200 *
Nb Right [3]	185	0	-	-1	184	0	-	0	184	0	-	6	191	0	-	17	208	0	-	-1	207	0	-	0	207	0	-
Sb Left	55	1600	0.034 *	0	55	1600	0.034 *	0	55	1600	0.034 *	2	57	1600	0.035 *	16	73	1600	0.045 *	0	73	1600	0.045 *	0	73	1600	0.045 *
Sb Thru	214	3200	0.077	0	214	3200	0.077	0	214	3200	0.077	6	220	3200	0.079	0	220	3200	0.080	0	220	3200	0.080	0	220	3200	0.080
Sb Right [3]	32	0	-	0	32	0	-	0	32	0	-	1	33	0	-	3	36	0	-	0	36	0	-	0	36	0	-
Eb Left	18	1600	0.011 *	0	18	1600	0.011 *	0	18	1600	0.011 *	1	19	1600	0.012 *	1	20	1600	0.012 *	0	20	1600	0.012 *	0	20	1600	0.012 *
Eb Thru	424	3200	0.133	-3	421	3200	0.132	0	421	3200	0.132	13	437	3200	0.136	96	533	3200	0.166	-3	530	3200	0.166	0	530	3200	0.166
Eb Right [3]	29	1600	0.018	0	29	1600	0.018	0	29	1600	0.018	1	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019	0	30	1600	0.019
Wb Left	93	1600	0.058	3	96	1600	0.060	0	96	1600	0.060	3	96	1600	0.060	15	111	1600	0.069	3	114	1600	0.071	0	114	1600	0.071
Wb Thru	1062	3200	0.332 *	14	1076	3200	0.336 *	0	1076	3200	0.336 *	32	1094	3200	0.342 *	103	1197	3200	0.374 *	14	1211	3200	0.378 *	0	1211	3200	0.378 *
Wb Right [3	67	1600	0.042	0	67	1600	0.042	0	67	1600	0.042	2	69	1600	0.043	15	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.667				0.671				0.671				0.684				0.732				0.736				0.736
LOS			B				B				B				B				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 No right-turn on red.

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INTERSECTION CAPACITY UTILIZATION

2nd Avenue @ Huntington Drive
Peak hr: PM
Annual Growth: 1.00%

N-S St: 2nd Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU1

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	42	1600	0.026	0	42	1600	0.026	0	42	1600	0.026	1	43	1600	0.027	1	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028
Nb Thru	206	3200	0.120 *	0	206	3200	0.121 *	0	206	3200	0.121 *	6	212	3200	0.123 *	2	214	3200	0.128 *	0	214	3200	0.129 *	0	214	3200	0.129 *
Nb Right [3]	177	0	-	3	180	0	-	0	180	0	-	5	182	0	-	13	195	0	-	3	198	0	-	0	198	0	-
Sb Left	66	1600	0.041 *	0	66	1600	0.041 *	0	66	1600	0.041 *	2	68	1600	0.042 *	13	81	1600	0.051 *	0	81	1600	0.051 *	0	81	1600	0.051 *
Sb Thru	247	3200	0.085	0	247	3200	0.085	0	247	3200	0.085	7	254	3200	0.088	2	256	3200	0.089	0	256	3200	0.089	0	256	3200	0.089
Sb Right [3]	25	0	-	0	25	0	-	0	25	0	-	1	26	0	-	2	28	0	-	0	28	0	-	0	28	0	-
Eb Left	37	1600	0.023	0	37	1600	0.023	0	37	1600	0.023	1	38	1600	0.024	1	39	1600	0.024	0	39	1600	0.024	0	39	1600	0.024
Eb Thru	1068	3200	0.334 *	14	1082	3200	0.338 *	0	1082	3200	0.338 *	32	1100	3200	0.344 *	88	1188	3200	0.371 *	14	1202	3200	0.376 *	0	1202	3200	0.376 *
Eb Right [3]	73	1600	0.046	0	73	1600	0.046	0	73	1600	0.046	2	75	1600	0.047	1	76	1600	0.048	0	76	1600	0.048	0	76	1600	0.048
Wb Left	217	1600	0.136 *	1	218	1600	0.136 *	0	218	1600	0.136 *	7	224	1600	0.140 *	12	236	1600	0.147 *	1	237	1600	0.148 *	0	237	1600	0.148 *
Wb Thru	677	3200	0.212	3	680	3200	0.213	0	680	3200	0.213	20	697	3200	0.218	86	783	3200	0.245	3	786	3200	0.246	0	786	3200	0.246
Wb Right [3	71	1600	0.044	0	71	1600	0.044	0	71	1600	0.044	2	73	1600	0.046	11	84	1600	0.053	0	84	1600	0.053	0	84	1600	0.053
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.730				0.736				0.736				0.749				0.797				0.803				0.803
LOS			C				C				C				C				C				D				D

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 No right-turn on red.

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INTERSECTION CAPACITY UTILIZATION

5th Avenue @ Huntington Drive
Peak hr: AM
Annual Growth: 1.00%

N-S St: 5th Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU2

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	15	1600	0.009	17	32	1600	0.020	0	32	1600	0.020	0	15	1600	0.010	0	15	1600	0.010	17	32	1600	0.020	0	32	1600	0.020
Nb Thru	3	1600	0.018 *	8	11	1600	0.043 *	0	11	1600	0.043 *	0	3	1600	0.019 *	0	3	1600	0.019 *	8	11	1600	0.043 *	0	11	1600	0.043 *
Nb Right [3]	26	0	-	31	57	0	-	0	57	0	-	1	27	0	-	0	27	0	-	31	58	0	-	0	58	0	-
Sb Left	216	1600	0.135 *	0	216	1600	0.135 *	0	216	1600	0.135 *	6	222	1600	0.139 *	18	240	1600	0.150 *	0	240	1600	0.150 *	0	240	1600	0.150 *
Sb Thru	34	1600	0.056	-2	32	1600	0.054	0	32	1600	0.054	1	35	1600	0.057	0	35	1600	0.059	-2	33	1600	0.057	0	33	1600	0.057
Sb Right	55	0	-	0	55	0	-	0	55	0	-	2	57	0	-	2	59	0	-	0	59	0	-	0	59	0	-
Eb Left	44	1600	0.028 *	0	44	1600	0.028 *	0	44	1600	0.028 *	1	45	1600	0.028 *	4	49	1600	0.031 *	0	49	1600	0.031 *	0	49	1600	0.031 *
Eb Thru	580	3200	0.188	0	580	3200	0.188	0	580	3200	0.188	17	597	3200	0.194	150	747	3200	0.241	0	747	3200	0.240	0	747	3200	0.240
Eb Right	23	0	-	-3	20	0	-	0	20	0	-	1	24	0	-	0	24	0	-	-3	21	0	-	0	21	0	-
Wb Left	196	1600	0.123	-6	190	1600	0.119	0	190	1600	0.119	6	202	1600	0.126	0	202	1600	0.126	-6	196	1600	0.122	0	196	1600	0.122
Wb Thru	1221	3200	0.382 *	0	1221	3200	0.382 *	0	1221	3200	0.382 *	37	1258	3200	0.393 *	162	1420	3200	0.444 *	0	1420	3200	0.444 *	0	1420	3200	0.444 *
Wb Right	185	1600	0.116	0	185	1600	0.116	0	185	1600	0.116	6	191	1600	0.119	23	214	1600	0.133	0	214	1600	0.133	0	214	1600	0.133
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.662				0.687				0.687				0.679				0.743				0.768				0.768
LOS			B				B				B				B				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 No right-turn on red.

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INTERSECTION CAPACITY UTILIZATION

5th Avenue @ Huntington Drive
Peak hr: PM
Annual Growth: 1.00%

N-S St: 5th Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU2

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	71	1600	0.044	3	74	1600	0.046	0	74	1600	0.046	2	73	1600	0.046	0	73	1600	0.046	3	76	1600	0.048	0	76	1600	0.048
Nb Thru	40	1600	0.154 *	2	42	1600	0.159 *	0	42	1600	0.159 *	1	41	1600	0.159 *	0	41	1600	0.159 *	2	43	1600	0.164 *	0	43	1600	0.164 *
Nb Right [3]	207	0	-	6	213	0	-	0	213	0	-	6	213	0	-	0	213	0	-	6	219	0	-	0	219	0	-
Sb Left	211	1600	0.132 *	0	211	1600	0.132 *	0	211	1600	0.132 *	6	217	1600	0.136 *	24	241	1600	0.151 *	0	241	1600	0.151 *	0	241	1600	0.151 *
Sb Thru	19	1600	0.054	8	27	1600	0.059	0	27	1600	0.059	1	20	1600	0.055	0	20	1600	0.059	8	28	1600	0.064	0	28	1600	0.064
Sb Right	67	0	-	0	67	0	-	0	67	0	-	2	69	0	-	6	75	0	-	0	75	0	-	0	75	0	-
Eb Left	69	1600	0.043	0	69	1600	0.043	0	69	1600	0.043	2	71	1600	0.044	3	74	1600	0.046	0	74	1600	0.046	0	74	1600	0.046
Eb Thru	1121	3200	0.353 *	0	1121	3200	0.359 *	0	1121	3200	0.359 *	34	1155	3200	0.364 *	133	1288	3200	0.406 *	0	1288	3200	0.411 *	0	1288	3200	0.411 *
Eb Right	10	0	-	17	27	0	-	0	27	0	-	0	10	0	-	0	10	0	-	17	27	0	-	0	27	0	-
Wb Left	23	1600	0.014 *	31	54	1600	0.034 *	0	54	1600	0.034 *	1	24	1600	0.015 *	0	24	1600	0.015 *	31	55	1600	0.034 *	0	55	1600	0.034 *
Wb Thru	775	3200	0.242	0	775	3200	0.242	0	775	3200	0.242	23	798	3200	0.249	123	921	3200	0.288	0	921	3200	0.288	0	921	3200	0.288
Wb Right	145	1600	0.091	0	145	1600	0.091	0	145	1600	0.091	4	149	1600	0.093	15	164	1600	0.103	0	164	1600	0.103	0	164	1600	0.103
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.753				0.784				0.784				0.774				0.831				0.860				0.860
LOS			C				C				C				C				D				D				D

** Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 No right-turn on red.

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INTERSECTION CAPACITY UTILIZATION

I-210 Fwy Eastbound Ramps @ Huntington Drive

N-S St: I-210 Fwy Eastbound Ramps
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU3

Peak hr: AM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left [3]	28	1600	0.018 *	0	28	1600	0.018 *	0	28	1600	0.018 *	1	29	1600	0.018 *	0	29	1600	0.018 *	0	29	1600	0.018 *	0	29	1600	0.018 *
Nb Thru [3]	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right [3]	21	1600	0.013	0	21	1600	0.013	0	21	1600	0.013	1	22	1600	0.014	0	22	1600	0.014	0	22	1600	0.014	0	22	1600	0.014
Sb Left [3]	244	0	0.076	0	244	0	0.076	0	244	0	0.076	7	251	0	0.079	13	264	0	0.083	0	264	0	0.083	0	264	0	0.083
Sb Thru [3]	9	3200	0.079	0	9	3200	0.079	0	9	3200	0.079	0	9	3200	0.081	0	9	3200	0.085	0	9	3200	0.085	0	9	3200	0.085
Sb Right [3]	258	1600	0.161 *	-2	256	1600	0.160 *	0	256	1600	0.160 *	8	266	1600	0.166 *	3	269	1600	0.168 *	-2	267	1600	0.167 *	0	267	1600	0.167 *
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	810	4800	0.176	31	841	4800	0.182	0	841	4800	0.182	24	834	4800	0.181	170	1004	4800	0.216	31	1035	4800	0.223	0	1035	4800	0.223
Eb Right	33	0	-	0	33	0	-	0	33	0	-	1	34	0	-	0	34	0	-	0	34	0	-	0	34	0	-
Wb Left	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015	1	25	1600	0.015	0	25	1600	0.015	0	25	1600	0.015	0	25	1600	0.015
Wb Thru	1365	3200	0.427 *	-4	1361	3200	0.425 *	0	1361	3200	0.425 *	41	1406	3200	0.439 *	180	1586	3200	0.496 *	-4	1582	3200	0.494 *	0	1582	3200	0.494 *
Wb Right [4	106	1600	0.066	0	106	1600	0.066	0	106	1600	0.066	3	109	1600	0.068	12	121	1600	0.076	0	121	1600	0.076	0	121	1600	0.076
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.705				0.703				0.703				0.723				0.782				0.779				0.779
LOS			C				C				C				C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 Northbound and Southbound is a split phase.
4 Westbound right-turns operate as a free-flow movement.

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INTERSECTION CAPACITY UTILIZATION

I-210 Fwy Eastbound Ramps @ Huntington Drive

N-S St: I-210 Fwy Eastbound Ramps
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU3

Peak hr: PM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left [3]	23	1600	0.014	0	23	1600	0.014	0	23	1600	0.014	1	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015	0	24	1600	0.015
Nb Thru [3]	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right [3]	50	1600	0.031 *	0	50	1600	0.031 *	0	50	1600	0.031 *	2	52	1600	0.032 *	0	52	1600	0.032 *	0	52	1600	0.032 *	0	52	1600	0.032 *
Sb Left [3]	315	0	0.098	0	315	0	0.098	0	315	0	0.098	9	324	0	0.101	9	333	0	0.104	0	333	0	0.104	0	333	0	0.104
Sb Thru [3]	10	3200	0.102 *	0	10	3200	0.102 *	0	10	3200	0.102 *	0	10	3200	0.105 *	0	10	3200	0.107 *	0	10	3200	0.107 *	0	10	3200	0.107 *
Sb Right [3]	49	1600	0.031	11	60	1600	0.038	0	60	1600	0.038	1	50	1600	0.032	1	51	1600	0.032	11	62	1600	0.039	0	62	1600	0.039
Eb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Eb Thru	1494	4800	0.316 *	6	1500	4800	0.317 *	0	1500	4800	0.317 *	45	1539	4800	0.326 *	156	1695	4800	0.358 *	6	1701	4800	0.359 *	0	1701	4800	0.359 *
Eb Right	23	0	-	0	23	0	-	0	23	0	-	1	24	0	-	0	24	0	-	0	24	0	-	0	24	0	-
Wb Left	33	1600	0.021 *	0	33	1600	0.021 *	0	33	1600	0.021 *	1	34	1600	0.021 *	0	34	1600	0.021 *	0	34	1600	0.021 *	0	34	1600	0.021 *
Wb Thru	925	3200	0.289	20	945	3200	0.295	0	945	3200	0.295	28	953	3200	0.298	138	1091	3200	0.341	20	1111	3200	0.347	0	1111	3200	0.347
Wb Right [4	70	1600	0.044	0	70	1600	0.044	0	70	1600	0.044	2	72	1600	0.045	8	80	1600	0.050	0	80	1600	0.050	0	80	1600	0.050
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.569				0.571				0.571				0.584				0.619				0.620				0.620
LOS			A				A				A				A				B				B				B

** Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green
3 Northbound and Southbound is a split phase.
4 Westbound right-turns operate as a free-flow movement.

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INTERSECTION CAPACITY UTILIZATION

I-210 Fwy Westbound Ramps @ Huntington Drive

N-S St: I-210 Fwy Westbound Ramps
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU4

Peak hr: AM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1		V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	27	0	0.008	0	27	0	0.008	0	27	0	0.008	1	28	0	0.009	13	41	0	0.013	0	41	0	0.013	0	41	0	0.013
Sb Thru	0	3200	0.080 *	0	0	3200	0.080 *	0	0	3200	0.080 *	0	0	3200	0.083 *	0	0	3200	0.089 *	0	0	3200	0.089 *	0	0	3200	0.089 *
Sb Right	230	0	-	-2	228	0	-	0	228	0	-	7	237	0	-	8	245	0	-	-2	243	0	-	0	243	0	-
Eb Left	25	1600	0.016 *	11	36	1600	0.023 *	0	36	1600	0.023 *	1	26	1600	0.016 *	1	27	1600	0.017 *	11	38	1600	0.024 *	0	38	1600	0.024 *
Eb Thru	559	4800	0.116	8	567	4800	0.118	0	567	4800	0.118	17	576	4800	0.120	179	755	4800	0.157	8	763	4800	0.159	0	763	4800	0.159
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	1269	3200	0.397 *	-2	1267	3200	0.396 *	0	1267	3200	0.396 *	38	1307	3200	0.408 *	185	1492	3200	0.466 *	-2	1490	3200	0.466 *	0	1490	3200	0.466 *
Wb Right	550	1600	0.344	0	550	1600	0.344	0	550	1600	0.344	17	567	1600	0.354	12	579	1600	0.362	0	579	1600	0.362	0	579	1600	0.362
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.593				0.598				0.598				0.607				0.672				0.678				0.678
LOS			A				A				A				B				B				B				B

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

I-210 Fwy Westbound Ramps @ Huntington Drive

N-S St: I-210 Fwy Westbound Ramps
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU4

Peak hr: PM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1		V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *	0	0	0	0.000 *
Nb Thru	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Nb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Sb Left	146	0	0.046	0	146	0	0.046	0	146	0	0.046	4	150	0	0.047	9	159	0	0.050	0	159	0	0.050	0	159	0	0.050
Sb Thru	0	3200	0.167 *	0	0	3200	0.170 *	0	0	3200	0.170 *	0	0	3200	0.172 *	0	0	3200	0.177 *	0	0	3200	0.180 *	0	0	3200	0.180 *
Sb Right	388	0	-	11	399	0	-	0	399	0	-	12	400	0	-	7	407	0	-	11	418	0	-	0	418	0	-
Eb Left	137	1600	0.086 *	2	139	1600	0.087 *	0	139	1600	0.087 *	4	141	1600	0.088 *	4	145	1600	0.091 *	2	147	1600	0.092 *	0	147	1600	0.092 *
Eb Thru	1312	4800	0.273	2	1314	4800	0.274	0	1314	4800	0.274	39	1351	4800	0.282	155	1506	4800	0.314	2	1508	4800	0.314	0	1508	4800	0.314
Eb Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Wb Left	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
Wb Thru	646	3200	0.202	8	654	3200	0.204	0	654	3200	0.204	19	665	3200	0.208	138	803	3200	0.251	8	811	3200	0.254	0	811	3200	0.254
Wb Right	446	1600	0.279 *	0	446	1600	0.279 *	0	446	1600	0.279 *	13	459	1600	0.287 *	8	467	1600	0.292 *	0	467	1600	0.292 *	0	467	1600	0.292 *
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.631				0.636				0.636				0.647				0.660				0.664				0.664
LOS			B				B				B				B				B				B				B

** Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Mayflower Avenue @ Huntington Drive

N-S St: Mayflower Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU5

Peak hr: AM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	426	2880	0.148 *	-1	425	2880	0.148 *	0	425	2880	0.148 *	13	439	2880	0.152 *	14	453	2880	0.157 *	-1	452	2880	0.157 *	0	452	2880	0.157 *
Nb Thru	243	1600	0.181	0	243	1600	0.181	0	243	1600	0.181	7	250	1600	0.186	0	250	1600	0.188	0	250	1600	0.188	0	250	1600	0.188
Nb Right	46	0	-	0	46	0	-	0	46	0	-	1	47	0	-	3	50	0	-	0	50	0	-	0	50	0	-
Sb Left	61	1600	0.038	0	61	1600	0.038	0	61	1600	0.038	2	63	1600	0.039	3	66	1600	0.041	0	66	1600	0.041	0	66	1600	0.041
Sb Thru	221	3200	0.088 *	0	221	3200	0.088 *	0	221	3200	0.088 *	7	228	3200	0.090 *	0	228	3200	0.095 *	0	228	3200	0.095 *	0	228	3200	0.095 *
Sb Right	60	0	-	0	60	0	-	0	60	0	-	2	62	0	-	13	75	0	-	0	75	0	-	0	75	0	-
Eb Left	62	1600	0.039 *	0	62	1600	0.039 *	0	62	1600	0.039 *	2	64	1600	0.040 *	12	76	1600	0.047 *	0	76	1600	0.047 *	0	76	1600	0.047 *
Eb Thru	332	3200	0.139	6	338	3200	0.142	0	338	3200	0.142	10	342	3200	0.144	141	483	3200	0.191	6	489	3200	0.194	0	489	3200	0.194
Eb Right	114	0	-	3	117	0	-	0	117	0	-	3	117	0	-	12	129	0	-	3	132	0	-	0	132	0	-
Wb Left	44	1600	0.028	0	44	1600	0.028	0	44	1600	0.028	1	45	1600	0.028	3	48	1600	0.030	0	48	1600	0.030	0	48	1600	0.030
Wb Thru	1136	3200	0.366 *	-1	1135	3200	0.365 *	0	1135	3200	0.365 *	34	1170	3200	0.377 *	154	1324	3200	0.426 *	-1	1323	3200	0.425 *	0	1323	3200	0.425 *
Wb Right	34	0	-	0	34	0	-	0	34	0	-	1	35	0	-	3	38	0	-	0	38	0	-	0	38	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.740				0.739				0.739				0.759				0.825				0.824				0.824
LOS			C				C				C				C				D				D				D

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green

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INTERSECTION CAPACITY UTILIZATION

Mayflower Avenue @ Huntington Drive

N-S St: Mayflower Avenue
E-W St: Huntington Drive
Project: 5th Avenue/Huntington Drive Mixed-Use Project
File: ICU5

Peak hr: PM
Annual Growth: 1.00%

Date: 09/28/2012
Date of Count: 2012
Projection Year: 2015

	2012 EXIST. TRAFFIC			2012 EXISTING PLUS PROJECT				2012 EXIST. W/PROJECT + MITIGATION				2015 FUTURE WITH AMBIENT GROWT				2015 FUTURE PRE-PROJECT + A.G.				2015 FUTURE WITH PROJECT				2015 FUTURE W/PROJECT + MITIGATIO			
	1	2	V/C	Added	Total		V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C	Added	Total	2	V/C
Movement	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio	Volume	Volume	Capacity	Ratio
Nb Left	245	2880	0.085	3	248	2880	0.086	0	248	2880	0.086	7	252	2880	0.088	9	261	2880	0.091	3	264	2880	0.092	0	264	2880	0.092
Nb Thru	162	1600	0.138 *	0	162	1600	0.138 *	0	162	1600	0.138 *	5	167	1600	0.142 *	1	168	1600	0.145 *	0	168	1600	0.145 *	0	168	1600	0.145 *
Nb Right	59	0	-	0	59	0	-	0	59	0	-	2	61	0	-	4	65	0	-	0	65	0	-	0	65	0	-
Sb Left	97	1600	0.061 *	0	97	1600	0.061 *	0	97	1600	0.061 *	3	100	1600	0.062 *	4	104	1600	0.065 *	0	104	1600	0.065 *	0	104	1600	0.065 *
Sb Thru	237	3200	0.088	0	237	3200	0.088	0	237	3200	0.088	7	244	3200	0.090	0	244	3200	0.093	0	244	3200	0.093	0	244	3200	0.093
Sb Right	43	0	-	0	43	0	-	0	43	0	-	1	44	0	-	9	53	0	-	0	53	0	-	0	53	0	-
Eb Left	53	1600	0.033	0	53	1600	0.033	0	53	1600	0.033	2	55	1600	0.034	8	63	1600	0.039	0	63	1600	0.039	0	63	1600	0.039
Eb Thru	1050	3200	0.373 *	1	1051	3200	0.374 *	0	1051	3200	0.374 *	32	1082	3200	0.385 *	124	1206	3200	0.426 *	1	1207	3200	0.427 *	0	1207	3200	0.427 *
Eb Right	145	0	-	1	146	0	-	0	146	0	-	4	149	0	-	9	158	0	-	1	159	0	-	0	159	0	-
Wb Left	86	1600	0.054 *	0	86	1600	0.054 *	0	86	1600	0.054 *	3	89	1600	0.055 *	3	92	1600	0.057 *	0	92	1600	0.057 *	0	92	1600	0.057 *
Wb Thru	569	3200	0.194	6	575	3200	0.196	0	575	3200	0.196	17	586	3200	0.200	122	708	3200	0.239	6	714	3200	0.241	0	714	3200	0.241
Wb Right	53	0	-	0	53	0	-	0	53	0	-	2	55	0	-	3	58	0	-	0	58	0	-	0	58	0	-
Yellow Allowance:			0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *				0.100 *
ICU			0.726				0.727				0.727				0.745				0.794				0.794				0.794
LOS			C				C				C				C				C				C				C

**Key conflicting movement as a part of ICU*
1 Counts conducted by:The Traffic Solution
2 Capacity expressed in veh/hour of green

MEMORANDUM

To:	Mr. Steve R. Loriso, P.E. RKA Consulting Group	Date:	December 26, 2012
From:	Clare Look-Jaeger, P.E. CL-Jaeger Alfred Ying, P.E., PTP ACY. LLG, Engineers	LLG Ref:	1-12-3990-1
Subject:	Fifth Avenue/Huntington Drive Mixed-Use Project – Responses to City Consultant's Comments to the Traffic Impact Study		

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Linscott, Law & Greenspan, Engineers (LLG) has reviewed the City of Monrovia comments provided on the October 15, 2012 traffic impact study prepared for the Fifth Avenue/Huntington Drive Mixed-Use project. Specifically, the City's contract traffic consultant, RKA Consulting Group, provided comments to the traffic impact report in both written as well as redline format. The written comments and the redline copy of the traffic impact report are included in this memorandum for reference. The following paragraphs provide LLG's responses to the City comments. The updated traffic impact study which incorporates the City's comments is also included.

LLG Responses to City of Monrovia's Comments on the October 15, 2012 Traffic Impact Study:

Comment No. 1: Not much of a mixed-use.

Response No. 1: The proposed project consists of the development of 154 residential apartment dwelling units and approximately 1,341 square feet of retail floor area. The project trip generation forecasts, as summarized in *Table 6-1*, Page 21, of the traffic impact study, as well as the corresponding traffic impact analyses appropriately evaluated the project land use components as proposed. The comment expresses an opinion and will be forwarded to the City's decision-makers for their consideration.

Comment No. 2: Parking for retail not convenient to customers.

Response No. 2: It is important to note that the walking distance along Fifth Avenue to the garage entry is less than 300 feet, which is more than a reasonable walking distance (i.e., less than 1/10 of a mile). In addition, on-street parking is available immediately adjacent to the retail component of the project along the east side of Fifth Avenue. Thus, while the design of the retail tenant space does not directly provide a connection to the corridor serving the parking structure, the walking distance along Fifth Avenue is not unreasonable and convenient parking is provided.

Comment No. 3: Page 19, Section 6.1 uses ITE Land use Code 220 (Apartment) but ITE 221 used for parking generation. While the two codes are within 0.05 trips per unit, they should use the same codes.

Response No. 3: The following provides the average weekday daily, AM peak hour, and PM peak hour trip generation rate comparisons between Land Use Code 220 (Apartment) and Land Use Code 221 (Low-Rise Apartment), as contained in the Institute of Transportation Engineers' (ITE) *Trip Generation*[1] publication referenced in the comment:

	LU 220 (Apartment)	LU 221 (Low-Rise Apartment)
AM Peak Hour Trip Rate:	0.51/dwelling unit	0.46/dwelling unit
PM Peak Hour Trip Rate:	0.62/dwelling unit	0.58/dwelling unit
Daily Trip Rate:	6.65/dwelling unit	6.59/dwelling unit

As illustrated above, ITE Land Use Code 220 (Apartment) produces higher trip generation rates than Land Use Code 221 (Low-Rise Apartment) during all three analysis time periods. As a result, use of the higher ITE Land Use Code 220 (Apartment) trip generation rates for the forecast of traffic volumes expected to be generated by the proposed residential component of the project, as evaluated in the traffic impact study, results in a more conservative assessment of both the project trip generation forecast and the potential project traffic impacts. Therefore, no revisions to the project trip generation rates and the corresponding traffic impact analyses are necessary or recommended.

For purposes of the Parking Demand Analysis, it should be noted that the ITE *Parking Generation*[2] publication does not provide data specifically for Land Use Code 220 (Apartment). As a result, the related ITE Land Use Code 221 (Low/Mid-Rise Apartment) average peak parking demand ratio was reviewed and determined to be suitable for use in the forecast of peak parking demand for the residential component of the project.

Comment No. 4: Page 25, Section 7.1, no contact was made with Duarte for future projects that might have an impact such as City of Hope & Transit Development.

Response No. 4: In developing future background traffic volume forecasts for projects of this size and nature, a radius of approximately one and one half mile to two miles from the project site is typically used as a basis for conducting related projects (i.e., cumulative development projects) research. The westernmost city boundary of Duarte is located approximately two miles from the project site. Therefore, coordination with the City of Duarte to obtain the list of related projects was not determined to be necessary at the time of the traffic study preparation. Furthermore, it should be noted that in addition to incorporating potential traffic associated with other known development projects within the approximately two mile

[1] Institute of Transportation Engineers *Trip Generation* manual, 8th Edition, 2008.
[2] Institute of Transportation Engineers *Parking Generation* manual, 4th Edition, Washington D.C., 2010.

radius, an annual ambient traffic growth factor was also applied in the traffic analysis. The intent of the ambient traffic growth factor is to account for unknown related projects in the area as well as for typical growth in traffic volumes due to the development of projects outside of the study area. As a result, the traffic analysis prepared for the Fifth Avenue/Huntington Drive Mixed-Use project already provided a very conservative estimate of future pre-project traffic volume forecasts.

Although it was determined that the traffic impact analysis already provided a conservative estimate of future pre-project traffic volume forecasts, in order to more formally and directly address this comment, LLG has contacted the City of Duarte Planning Department staff and subsequently obtained the list of significant development projects within the City of Duarte for review. The significant development projects list is attached to this memorandum for reference. Based on review of the projects listed, it was confirmed that all of the related projects in the City of Duarte are located more than two miles from the proposed project site. In fact, with the exception of the Rose Gardens at Santa Teresita project and the relatively small 3,500 square-foot retail/commercial development at the former Texaco site, the other related projects in the City of Duarte are located more than three miles from the proposed project site.

In regards to the City of Hope related project specifically raised in the comment, according to the attached City of Duarte development projects list, the City of Hope Kaplan Family Pavilion consists of a 7,200 square-foot visitors center which is comprised of museum and exhibit space, kitchen floor area and other supporting facilities. These uses are considered to be ancillary to the City of Hope main campus and therefore are not expected to generate significant additional traffic. Furthermore, with respect to the Transit Development specifically raised in the comment, based on follow up discussions with the City of Duarte Planning Department staff, detailed project descriptions for the proposed transit-oriented development (TOD) are not currently defined and will be determined throughout the entitlement process for the Duarte TOD project. It is also important to note that this TOD project is located near the Duarte Road/Highland Avenue intersection. It is anticipated that the majority of traffic related to this future TOD project would likely utilize the Duarte Road and Highland Avenue corridors as well as the I-210 freeway ramps at either Buena Vista Street or Mountain Avenue to access the site. As a result, significant traffic increases from this future TOD related project through the project study area intersections is not anticipated.

Based on the above, it is further determined that the traffic impact analysis prepared for the Fifth Avenue/Huntington Drive Mixed-Use project appropriately reflects conservative future traffic volume forecasts in the study area (due to related projects and ambient traffic growth). Therefore, no additional revisions to the future traffic volume forecasts are necessary or recommended.

Comment No. 5: Table 7-1, M1 only includes that portion of Santa Teresita in Monrovia; biggest portion of project is in Duarte. Isn't there a proposed Transit Development/Mixed Use Project in Monrovia?

Response No. 5: Based on the *Rose Gardens at Santa Teresita Master Plan Final Program Environmental Impact Report*[3], *Table 7-1*, Section 7.1 of the December 2012 Traffic Impact Study has been updated to appropriately include Phases 1, 2, and 3 which encompass areas in both the City of Monrovia and the City of Duarte, as noted in the comment. It should be noted that build-out for Phase 4 of the *Rose Gardens at Santa Teresita Master Plan* is expected in year 2020 which is beyond the proposed Fifth Avenue/Huntington Drive Mixed-Use Project build-out year of 2015. Therefore, Phase 4 was excluded from this analysis. Relevant pages including the forecast trip generation (Table 9) as well as the forecast AM/PM peak hour trip assignment (Exhibit 10) as contained in the *Rose Gardens at Santa Teresita Master Plan* are attached to this memorandum for reference. Based on the forecast net new trip generation from Table 9, the combined Phases 1 through 3 of the *Rose Gardens at Santa Teresita Master Plan* are expected to result in a net increase of 99 daily trips, a net reduction of 5 trips during the AM peak hour and a net increase of 9 trips during the PM peak hour. Additionally, Exhibit 10 illustrates that the *Rose Gardens at Santa Teresita Master Plan* is forecast to result in a net increase of 1 AM peak hour trip and 6 PM peak hour trips on Huntington Drive west of Buena Vista Street. As a result, the ambient traffic growth factor employed in the proposed project traffic impact analysis (referred to Response No. 4) is anticipated to more than account for any traffic generated by the *Rose Gardens at Santa Teresita Master Plan* project at the study intersections.

With respect to the comment regarding a proposed Transit Development/Mixed Use Project in Monrovia, it should be noted that the City of Monrovia related projects research was based on information on file with the City of Monrovia Planning Department staff. Based on subsequent coordination with the City of Monrovia Planning staff, any development of the potential transit-oriented development/mixed-use project will likely extend beyond the proposed Fifth Avenue/Huntington Drive Mixed-Use project buildout year of 2015.

Based on the above additional review and coordination with the City of Monrovia Planning Department staff, no additional revisions to the future traffic volume forecasts are necessary or recommended.

Comment No. 6: Page 8, shouldn't Myrtle @ Huntington Drive been included in the intersection study?

[3] *The Rose Gardens at Santa Teresita Master Plan Final Program Environmental Impact Report*, SCH No. 2010091021, prepared by RBF Consulting, May 12, 2011.

Response No. 6: Based on discussions and coordination with Mr. Jun Cervantes, the City Engineer for the City of Monrovia, five area intersections were identified for analysis in the project traffic impact study. The traffic impact study concluded that the proposed project would not result in significant traffic impacts at any of the study intersections. Incremental, but less than significant impacts are noted at the study intersections.

Is should be noted that although the Myrtle Avenue/Huntington Drive intersection as raised in the comment was not specifically identified for analysis by City staff, the nearby Mayflower Avenue/Huntington Drive intersection was included in the traffic impact study. The Mayflower Avenue/Huntington Drive intersection is located approximately one-half mile west of the Myrtle Avenue/Huntington Drive. Based on the proposed project AM and PM peak hour traffic volume forecasts as contained in *Figures 6-2* and *6-3*, Pages 23 and 24 of the traffic study, a total of 5 AM peak hour trips and 7 PM peak hour trips are forecast to be generated on Huntington Drive, east of Mayflower Avenue. As project-related traffic generally tends to dissipate further away from an origin/destination point (e.g., project site), it is reasonable to assume that any project-related traffic contribution east of Mayflower Avenue on Huntington Drive would be nominal. Based on the project trip generation forecasts and assignment, potential project-related traffic impact at the Myrtle Avenue/Huntington Drive intersection is not expected. Analysis of the Myrtle Avenue/Huntington Drive intersection is therefore not necessary or recommended.

Please feel free to contact us with any questions or comments at 626.796.2322.

cc: Jason Silver, Lincoln Property Company
Lisa Brownfield, Hogle-Ireland, Inc.
Chin Taing, PTP, LLG Engineers.

5th Ave/H.D. Traffic Impact-377007

1) Not much of a mixed use.
2) Parking for retail not convenient to customers.
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6) Page 8, shouldn't Myrtle @ Huntington Drive been included in the intersection study?

1st Plan check comments per Dominic Milano, November 13, 2012

CITY OF DUARTE
SIGNIFICANT DEVELOPMENT PROJECT LIST
12/3/2012

Project	Description	Land Use	Location
APPROVED PROJECTS – NOT CONSTRUCTED			
ROSE GARDENS AT SANTA TERESITA	Phased Development. Build out in four phases, with Phase 1 located partially in Monrovia and partially in Duarte. Remaining Phases 2, 3, and 4 are located solely in the City of Duarte. The site will be developed with a mix of skilled nursing facilities, including assisted and independent living units while retaining integral uses and buildings already located within the project area. The project site is approximately 12 acres. The project increases the building square footage from 292,336 square feet to 521,628 square feet (increase of 229,292 net new square feet) and increases the number of beds from the existing 169 to 360. A Program EIR was prepared for the project.	Specific Plan Zone – see project description for land uses.	800 Block of Buena Vista Street
ANDRES DUARTE TERRACE PHASE II	43 unit affordable senior housing development.	High-Density Residential (Specific Plan).	1700 Block Huntington Drive
HUNTINGTON COURTS PHASE III	16 units detached and attached single-family homes; part of a 51 unit development.	Medium-Density Residential.	2400 Block Huntington Drive
APPROVED PROJECTS – UNDER CONSTRUCTION			
HUNTINGTON COURTS PHASE II	14 units detached and attached single family homes.	Single-Family Residential / Multi-Family Residential.	2400 Block Huntington Drive
ATTALLA RANCH (LAS LOMAS ESTATES)	6 Dwelling Units constructed, 9 other SFD in design review. Total 15 DU.	Single-Family Residential.	NE Corner of Sunnydale/Woodbluff

CITY OF DUARTE
SIGNIFICANT DEVELOPMENT PROJECT LIST
12/3/2012

DUARTE GOLDLINE LIGHT RAIL	Construction of appx. 1.5 miles of two-light rails tracks, light-rail station platform, quad-arm crossing gates, and new railroad crossings and modified intersection phasing and turning movements at the intersections of Mountain, Buena Vista and Highland. Mountain Avenue intersection realigned, widened, and lanes added. New signalized intersections at City of Hope/Duarte Road; Business Center/Highland; and Central/Highland. New 125+ stall parking lot at Business Center and Highland. Various other pedestrian, bicycle and bus improvements along the alignment and near the station area. Project commences 2012, anticipated completion 2015.	Public Facilities Zone. Improvements built by Foothill Transit Constructors	METRO ROW, north of Duarte Rd. from west to east city boundary line. Parking lot and streetscape improvements on Highland Avenue from Evergreen to Duarte Rd.
PENDING PROJECTS – NO DECISION			
DUARTE TOD	290 Dwelling Units, 75K SF of retail, 5K SF of office, retain existing 25K SF of retail, 1,500 space parking garage (project development; currently undergoing zoning and environmental processes which will determine ultimate build out).	Mixed-Use.	Duarte Road/Highland Ave
FORMER TEXACO SITE	Approximately 3500 SF of retail commercial development.	General Commercial.	1263 Huntington Drive
CITY OF HOPE - KAPLAN FAMILY PAVILION	Appx. 7,200 s.f. visitors center, museum, exhibition space, kitchen and ancillary facilities.	Hospital	1500 Duarte Rd. North-central portion of campus, directly south of Cooper Auditorium

FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT

THE ROSE GARDENS AT SANTA TERESITA MASTER PLAN

SCH NO. 2010091021

Lead Agency:

CITY OF DUARTE
1600 Huntington Drive
Duarte, California 91010
Contact: Ms. Inma Hernandez
626.357.7931

Prepared by:

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2069
Contact: Ms. Collette L. Morse, AICP
949.472.3505

May 12, 2011

JN 10-107168

Table 9
Forecast Net New Trip Generation of Proposed Project

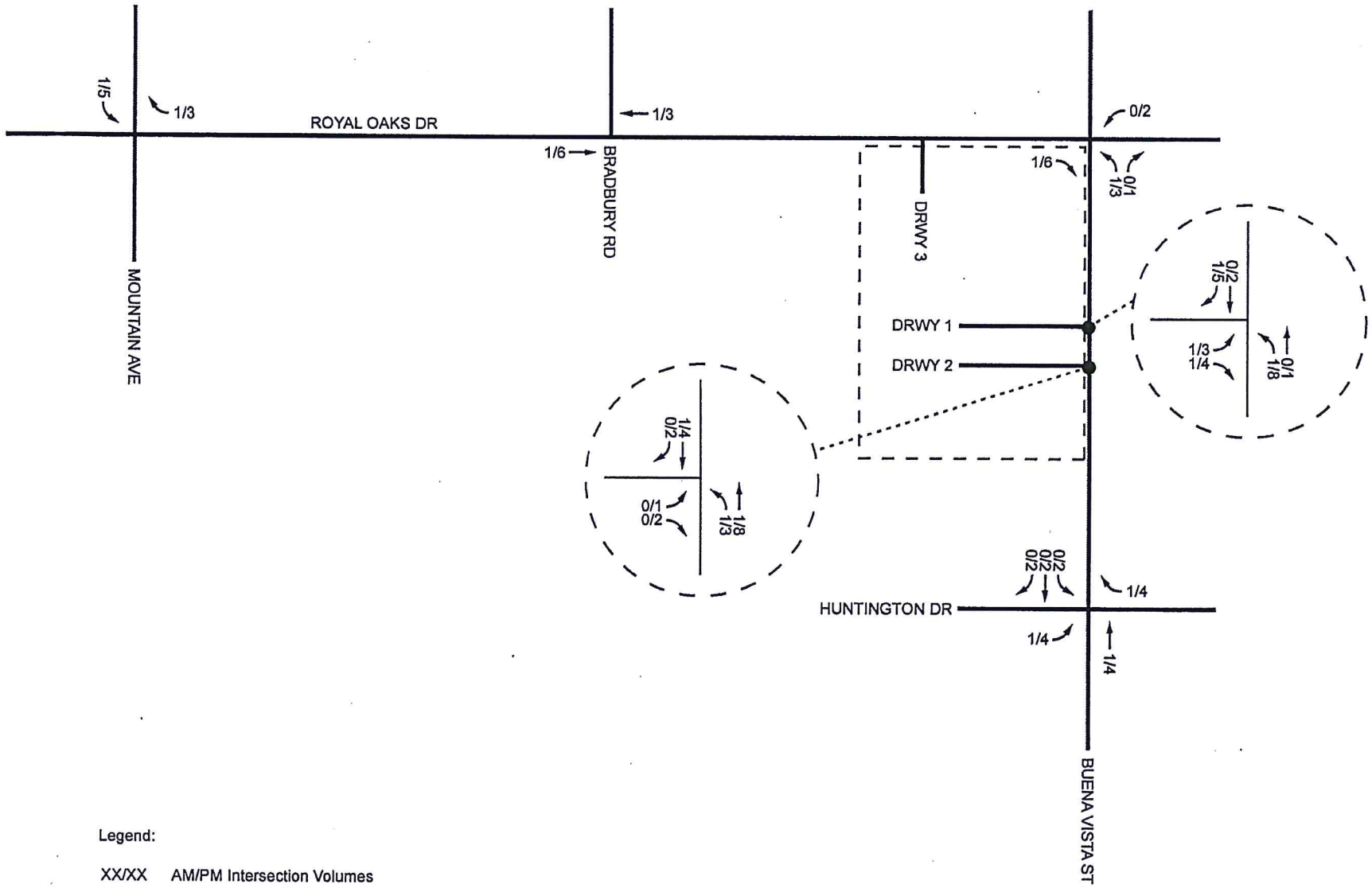
Land Use	Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
		In	Out	Total	In	Out	Total	
Phase 1								
- Demolish currently vacant hospital	N/A	0	0	0	0	0	0	0
- Demolish 118-bed Manor and kitchen	4	-11	-9	-20	-8	-18	-26	-280
- Demolish 7-bed chateau	4	-1	-1	-2	0	-1	-1	-17
- Demolish thrift shop, storage, priest quarters	N/A	0	0	0	0	0	0	0
- Construct 80-bed skilled nursing facility	4	7	6	13	6	12	18	190
- Construct 72-bed Assisted Living Cottages	2	3	1	4	6	6	12	145
- Relocate administrative functions into 5-Story bldg	N/A	0	0	0	0	0	0	0
- Relocate existing surgery center	N/A	0	0	0	0	0	0	0
- Restore Chapel, Villa, Madonna Hall, and convents	N/A	0	0	0	0	0	0	0
- Construct surface parking areas	N/A	0	0	0	0	0	0	0
- Reconstruct Chaplain's residence	N/A	0	0	0	0	0	0	0
Subtotal Phase 1		**-2**	**-3**	**-5**	**4**	**-1**	**3**	**38**
Phase 2								
- Construct 48-bed ALC's	2	2	1	3	4	4	8	97
- Construct 7,500 sf Town Center	N/A	0	0	0	0	0	0	0
- Relocate residents from Bethany to ALC	N/A	0	0	0	0	0	0	0
- Demolish 44-bed Bethany assisted living facility	3	-4	-2	-6	-4	-5	-9	-117
- Construct temporary parking facility	N/A	0	0	0	0	0	0	0
Subtotal Phase 2		**-2**	**-1**	**-3**	**0**	**-1**	**-1**	**-20**
Phase 3								
- Construct 40-bed skilled nursing facility	2	2	1	3	4	3	7	81
- Construct guard/information booths	N/A	0	0	0	0	0	0	0
Subtotal Phase 3		**2**	**1**	**3**	**4**	**3**	**7**	**81**
Phase 4								
- Construct 72-bed congregate care facility	2	3	1	4	6	6	12	145
- Construct 48-unit independent living apartment bldg	1	2	4	6	5	3	8	167
- Construct two-level parking facility	0	0	0	0	0	0	0	0
Subtotal Phase 4		**5**	**5**	**10**	**11**	**9**	**20**	**312**
Total Forecast Trip Generation of Proposed Project		**3**	**2**	**5**	**19**	**10**	**29**	**411**

Note: N/A = Trip generation not applicable since ancillary or support component to proposed project; sf = square feet; ALC = Assisted Living Cottage.

Land Use:

1 = Senior Housing – Attached.
2 = Congregate Care Facility.
3 = Assisted Living.
4 = Nursing Home.

As shown in Table 9, when accounting for bed reallocation and proposed uses, the proposed project is forecast to generate approximately 411 net new daily trips, which include approximately 5 net new a.m. peak hour trips and approximately 29 net new p.m. peak hour trips.



Legend:

XX/XX AM/PM Intersection Volumes

– – – Project Site Boundary

Not to Scale

RBF

Forecast AM/PM Peak Hour Trip Assignment of Proposed Project

H:\pdata\10107168\Traffic\Exhibits\Exh10.ai NOV/2010

Exhibit 10

B

Appendix B
Parking Study

5th & Huntington Specific Plan

CITY OF MONROVIA

Appendix B
Traffic Study

LINSCOTT LAW & GREENSPAN engineers

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MEMORANDUM

To:	Mr. Jason Silver Lincoln Property Company	Date:	January 16, 2013
From:	Clare M. Look-Jaeger, P.E. CL-Jaeger Alfred C. Ying, P.E., PTP ACY. LLG, Engineers	LLG Ref:	1-12-3990-1
Subject:	Parking Demand Analysis for the Proposed Fifth Avenue/Huntington Drive Mixed-Use Project City of Monrovia, California		

This memorandum has been prepared to summarize the parking demand analysis associated with the proposed Fifth Avenue/Huntington Drive Mixed-Use project located in the City of Monrovia, California. Pursuant to the request of the City of Monrovia, LLG Engineers has prepared this parking analysis as part of the entitlement process for the proposed project. This analysis is used as a basis so that a determination can be made as to the adequacy of the future planned parking supply to meet the anticipated peak site-wide parking demand following development of the proposed Fifth Avenue/Huntington Drive Mixed-Use project.

Briefly, it is concluded that the proposed project parking supply is sufficient to meet the forecast peak parking demand (assuming full occupancy of all 154 residential dwelling units). The following highlights the key findings of this parking analysis:

<u>City Code Parking Requirement</u>

- Proposed Project Parking Requirement Per City Code = 392 spaces (385 spaces for residential component and seven spaces for retail component)

<u>Proposed Project Parking Supply</u>

- Proposed Project Parking Supply = 283 spaces (279 spaces for residential component and four spaces for retail component)

<u>Proposed Residential Component Parking Demand Ratio Evaluation</u>

- ITE[1] Average Peak Period Parking Demand Ratio = 1.20 spaces/dwelling unit
- ULI[2] Recommended Parking Demand Ratio = 1.65 spaces/dwelling unit
- Observed Peak Parking Demand Ratios at Three Comparable Sites (at full occupancy)
  Paragon at Old Town Monrovia = 1.48 spaces/dwelling unit
  Trio Apartments Pasadena = 1.22 spaces/dwelling unit
  Main Street Village Irvine = 1.42 spaces/dwelling unit

[1] Institute of Transportation Engineers *Parking Generation* manual, 4th Edition, Washington D.C., 2010.
[2] Urban Land Institute, *Shared Parking*, 2nd Edition, Washington D.C., 2005.

Proposed Residential Component Peak Parking Demand Ratio

- Proposed Project Residential Peak Parking Demand Ratio = 1.48 spaces/ dwelling unit

Forecast Project Peak Parking Demand

- Forecast Project Peak Parking Demand = 235 spaces (228 spaces for residential component and seven spaces for retail component)

Parking Analysis Conclusion

- Forecast Project Parking Surplus During Peak Conditions = 48 spaces

PROJECT SETTING AND PARKING SUPPLY

The project site is located at 1110 and 1212 South Fifth Avenue, just south of Huntington Drive in the City of Monrovia, California. The proposed project is situated on the east side of Fifth Avenue, south of Huntington Drive. The existing triangular site is generally bounded by a surface parking lot to the northeast, Fifth Avenue to the west, and the existing Southern California Edison building to the south. The proposed project site and general vicinity is illustrated in ***Figure 1***.

The southern portion of the project site is currently developed and occupied by a 16,363 square-foot business park while the remainder of the site is occupied by approximately 39,000 square feet of warehouse use. The existing buildings on the project site will be razed to accommodate construction of the proposed project.

The proposed project is a mixed-use development consisting of 154 residential apartment dwelling units and approximately 1,341 square feet of retail floor area near the north end of the site. A total of seven studio units, 91 one-bedroom units, and 56 two-bedroom units are proposed. Other ancillary uses to the site include a leasing office, a club house, a fitness center, and other recreational facilities. In addition, a new parking structure is planned to be constructed on-site to accommodate both the proposed residential and retail project components. Construction of the proposed project is planned to commence in late 2013 with completion by Spring of 2015. The proposed project site plan is illustrated in ***Figure 2***. A cross section of the on-site parking structure is shown in ***Figure 3***.

Based on information provided by the project applicant team, a total of 283 parking spaces is planned to be provided site-wide to accommodate the proposed multi-family residences and guests as well as patrons for the retail use(s) as follows:

- Multi-Family Residential: 258 Spaces

- Multi-Family Residential (Guest): 21 Spaces
- Retail: 4 Spaces

Total 283 Spaces

The retail and residential guest parking will be provided on the basement and first levels, with the residential parking provided in the remaining levels (i.e., first through sixth level) of the parking structure. The project will provide a total of 11 handicap accessible spaces which exceeds the American with Disabilities Act requirement of seven spaces of the overall parking supply for parking facilities between 201 to 300 spaces, with one in every six handicap spaces being van accessible.

CITY OF MONROVIA CODE PARKING REQUIREMENTS

The City of Monrovia off-street parking requirements for the multi-family residential and retail land use components are set forth in Sections 17.24.030 and 17.24.060 of the Municipal Code, respectively. In accordance with the Municipal Code parking regulations, the following parking requirements have been identified for the proposed project:

- Multi-Family Residential – Two (2.0) spaces for every unit plus an additional one-half (0.5) space per dwelling unit for guest parking.
- Retail – One (1.0) space for every 200 square feet of gross floor area.

Based on project description information provided by the project applicant and application of the Code parking requirements, a total of 392 spaces would be required for the project site as summarized below:

- Multi-Family Residential: 154 units x 2.0 space/unit = 308 spaces
- Multi-Family Residential (Guest): 154 units x 0.5 space/unit = 77 spaces
- Retail Space: 1,341 SF x 1.0 space/200 SF = 7 spaces
  Total City Code Required Project Parking = 392 spaces

Thus, strict application of Municipal Code parking requirements to the project when compared to the proposed project parking supply of 283 spaces would result in a shortfall of 109 parking spaces. It should be noted that the City of Monrovia (Section 17.24.100) contains provisions which allow for the joint use of parking spaces, dependent upon the land uses and nature of offset parking demands. In the case of the Fifth Avenue/Huntington Drive Mixed-Use project, all of the required retail spaces could be shared with the residential guest spaces. The residential parking will be gated within the parking structure and will only be accessible to the residents.

Based on the nature of the unit type mix, reviews of other parking standards established by other agencies in surrounding communities and parking demand

characteristics at other apartment complexes similar to the proposed Fifth Avenue/Huntington Drive Mixed-Use project, it can be expected that parking demand would be lower for the project than what is currently required by strict application of the City Code. The following sections provide a summary of these reviews.

COMPARISON OF PARKING STANDARDS

Other Agency Parking Requirements

Research was conducted regarding the parking requirements for multi-family (e.g., apartments) residential land uses in nearby communities and is summarized in ***Table 1***. In many cases the published parking requirements range between 1.0 space per unit (for efficiencies and small-sized units) to 2.0 or more spaces per unit (for two or more bedroom units), in addition to a provision for guest parking for multi-family residential uses, which generally ranged between 0.5 space per unit to 0.1 space per unit.

These parking standards are provided for informational purposes only as it is recognized that parking demand is also influenced by a site's proximity (i.e., walking distance) to employment, shopping, entertainment and recreational activities, adjacent and convenient public transportation services, nearby bicycle route networks, and commercial uses provided within the sites to offer convenience services to site residents, etc. It can be concluded that several agencies have employed parking ratios lower than 2.0 spaces per unit.

ITE and ULI Parking Demand Ratios for Multi-Family Residential Use

In addition to reviewing Code parking requirements, the average peak parking demand for multi-family residential uses are often estimated using ratios published in the ITE *Parking Generation* publication. When utilizing the ITE publication, the parking demand for the proposed Fifth Avenue/Huntington Drive Mixed-Use project can be calculated based upon ratios per dwelling unit for the apartment use and per 1,000 square feet of gross floor area for the retail component. More specifically, the ITE Land Use Code 221 (Low/Mid-Rise Apartment) average peak parking demand ratio was used to forecast the peak parking demand expected for the proposed project. It is noted that the ITE low/mid-rise apartment database consisted of a mix of urban and suburban sites throughout the United States. The parking demand ratios for urban and suburban sites are summarized below:

- Average peak period parking demand ratio (Urban): 1.20 spaces per dwelling unit (40 study sites)

- Average peak period parking demand ratio (Suburban): 1.23 spaces per dwelling unit (21 study sites)

The ITE Land Use Code 221 average peak period parking demand ratio for low/mid-rise apartments is therefore either 1.20 or 1.23 spaces per dwelling unit depending on the location of the site. Application of the ITE published parking demand ratio for an urban location to the proposed 154-unit apartment project would yield an average peak parking demand of 185 spaces (i.e., 1.20 space/du x 154 du = 185 parking spaces) for the residential component of the project.

The Urban Land Institute (ULI) also has published parking ratios for various land uses as summarized in their *Shared Parking* manual. For residential (rental) units similar to the Fifth Avenue/Huntington Drive Mixed-Use project, the ULI publication cites the following recommended base parking ratio:

- Base parking demand ratio: 1.65 spaces per dwelling unit (including resident and visitor parking demand)

Application of the ULI published parking ratio to the proposed 154-unit apartment project would yield an average peak parking demand of 254 spaces (i.e., 1.65 space/du x 154 du = 254 parking spaces) for the residential component of the project. While the ULI residential (rental) parking ratio is higher than the ITE publication (i.e., 1.20 spaces per dwelling unit), it is lower than the Code parking requirement of 2.0 spaces per unit for residential parking plus 0.5 spaces per unit for guest parking. Furthermore, as both ITE and ULI parking ratios are much lower than the Code parking requirement, an empirical parking demand study of existing facilities that are similar in nature (i.e., site location, demographics, facility amenities, etc.) to the proposed project has been prepared for the project parking analysis.

EMPIRICAL PARKING DEMAND STUDIES OF EXISTING MULTI-FAMILY RESIDENTIAL SITES

Empirical parking demand studies of existing multi-family residential sites that are similar in nature to the proposed project have also been conducted as part of this parking analysis. The purpose for these studies was to determine existing parking demand ratios for other multi-family residential sites that are similar in nature to the proposed project and to compare the parking demand using the derived empirical parking ratios to that calculated simply through strict application of the City Code.

The existing sites chosen for the empirical parking demand study were based on the following factors:

- Site Location: The existing facilities should be located near a major arterial, preferably in a stand-alone site with dedicated parking.
- Demographics: Local community population and economic conditions similar to the City of Monrovia.

- Facility Amenities: The existing facilities should provide similar types of amenities (e.g., swimming pool, lounge, gymnasium, etc.) as planned for the proposed project.

A list of three comparable sites was identified and provided by the Lincoln Property Company representatives. These sites were independently review by LLG Engineers and were determined to be comparable to the proposed Fifth Avenue/Huntington Drive Mixed-Use project in terms of its relative unit size, unit mix, facility amenities, and target population. The locations of the three comparable sites are illustrated in ***Figure 4***.

Each site was reviewed to document general on-site and on-street parking conditions, existing site development, current occupancy and other pertinent information. The following three multi-family residential sites were identified for inclusion in the parking demand analysis:

- Paragon at Old Town located at 700 S. Myrtle Avenue, Monrovia (163 units)
- Trio Apartments located at 44 N. Madison Avenue, Pasadena (304 units)
- Main Street Village located at 2555 Main Street, Irvine (481 units)

The site representatives also provided characteristics associated with each individual property, including the number and type of residential units, property management information, parking control details, etc. Secured parking is provided on-site for the residents at each property. Detailed summaries of the comparable properties in comparison with the proposed project are contained in ***Table 2***.

Parking accumulation surveys were conducted at the three sites to document on-site parking demand. These surveys were conducted by a traffic count subconsultant (The Traffic Solution) in hourly time increments from 10:00 PM to 12:00 AM midnight for two consecutive mid-week days in September 2012 for the Main Street Village and Trio Apartments sites. For the Paragon at Old Town site, the parking accumulation surveys and license plate surveys were conducted in hourly time increments from 6:00 PM to 12:00 AM midnight in order to capture and include on-street and on-site parking demand by the residents and guests. It should be noted that for the Paragon site, vehicles that were parked on-street for more than three consecutive hours in the project vicinity and were not observed to patronize other nearby establishments in the area were assumed to be Paragon-related residents/guests. The on-street parking counts included observations along the north and south sides of Olive Avenue and Walnut Avenue, as well as the east and west sides of Myrtle Avenue along the property frontage. In addition, the parking counts also included vehicles parked in the visitor/guest spaces on the first level of the Paragon parking structure, which was signed for public parking. This ensures a conservative analysis of parking demand.

The survey days and time periods were selected based on a review of parking characteristics so as to capture the peak on-site parking usage periods. During the late evening time periods, most, if not all residents would be expected to occupy their units. An inventory of the on-site parking supply for each site was also conducted by LLG Engineers. The parking inventory included all marked parking spaces provided on-site (i.e., resident, handicap accessible, visitors, etc.) Based on information provided by the site property managers, the three sites were near full occupancy with vacancy rates ranging between 4.3 to 6.2 percent at the time of the parking observations.

The parking accumulation surveys for the three comparable sites are summarized in ***Appendix A*** (refer to *Appendix Tables A-1, A-2,* and *A-3*). As shown in *Appendix A*, the Paragon at Old Town in Monrovia was observed to experience its highest demand for parking at 11:00 PM on Wednesday with 231 parking spaces utilized (i.e., 209 on-site spaces and 22 on-street spaces). The Trio Apartments in Pasadena was observed to experience its highest demand for parking at 12:00 AM midnight on Thursday with 348 parking spaces utilized (i.e., 347 on-site spaces and 1 on-street space). The Main Street Village in Irvine was observed to experience its highest demand for parking at 12:00 AM midnight on Wednesday with 639 on-site parking spaces utilized.

A summary of the existing parking supply ratios, as well as the observed and forecast (i.e., at full occupancy) parking demand ratios based on the number of units at the comparable sites is provided in ***Table 3***. As shown in *Table 3,* accounting for full occupancy of all units, the peak parking demand ratios for these facilities ranged between 1.22 spaces per unit (i.e., Trio Apartments) to 1.48 spaces per unit (i.e., Paragon at Old Town). In addition, the observed average peak parking demand ratio for the three surveyed sites, assuming full occupancy, was 1.36 spaces per unit. By comparison, the total parking supply ratio between the three sites was 2.01 spaces per unit. Thus, the average observed parking demand ratio (assuming full occupancy) represents a 30 percent decrease when compared to the average parking supply ratio. This is very conservative since it is typical in a multi-family development to have a small percentage of vacancies based on the transient nature of rental projects.

FORECAST PROJECT PEAK PARKING DEMAND

As described above, based on the empirical surveys conducted at the three comparable sites, the highest peak parking demand ratio was determined to be 1.48 spaces per unit at the Paragon at Old Town development (assuming full occupancy). As discussed previously, this empirical parking demand ratio accounts for the parking demand of the residents as well as other visitors or guests who utilize the public parking on the first level of the parking structure. Application of this peak parking demand ratio is appropriate as it reflects the site closest to the project site, accounts for any guest/public parking and results in a conservative analysis. Application of this peak parking demand ratio to the proposed 154-unit residential apartment project

yields a forecast peak parking demand of 228 spaces (i.e., [154 × 1.48 = 228 parking spaces]). Combining this forecast residential demand with the Code-required parking of seven (7) spaces for the retail component (which can be expected to be shared with the residential guest parking), the total forecast peak parking demand for the Fifth Avenue/Huntington Drive Mixed-Use project is 235 spaces.

Based on a comparison of the proposed site-wide parking supply of 283 spaces and the forecast peak weekday parking demand of 235 spaces, it is determined that the parking supply is sufficient to meet the projected site-wide peak parking demand. This would result in a parking surplus of 48 spaces during the peak weekday evening parking conditions. It should be noted that during other time periods of the day and other days of the week, a greater parking surplus (i.e., more than 48 spaces) is expected for the proposed project.

CONCLUSIONS

This parking demand analysis was conducted for the proposed Fifth Avenue/Huntington Drive Mixed-Use project so that a determination could be made as to the adequacy of the future planned parking supply to meet the anticipated peak parking demand for the project. Based on direct application of City Code parking rates, a shortage of on-site parking spaces is calculated. Accordingly, a review of other published standard parking ratios was conducted as well as parking accumulation surveys at other similar multi-family residential complexes. Based on the parking analysis, the following conclusions are made:

- A total of 283 on-site parking spaces is planned to be provided in a six-level parking structure at the proposed Fifth Avenue/Huntington Drive Mixed-Use project.

- Direct application of the City of Monrovia Municipal Code would yield a total on-site parking requirement of 392 parking spaces (i.e., 385 parking spaces for the residential project component and 7 parking spaces for the retail project component). Thus, comparing the Code parking requirement to the proposed parking supply would result in a shortfall of 109 parking spaces.

- Based on the ITE *Parking Generation* publication, the average peak period parking demand ratio for multi-family residential (rental) uses is 1.20 spaces per unit located in an urban setting environment. Application of this average peak parking demand ratio to the proposed residential component of the project would yield a future peak demand of 185 parking spaces.

- Based on the ULI *Shared Parking* publication, the average peak period parking demand ratio for multi-family residential (rental) uses is 1.65 spaces per unit. Application of this average peak parking demand ratio to the

proposed Fifth Avenue/Huntington Drive Mixed-Use project would yield a future peak demand of 254 parking spaces for the residential component.

- Empirical parking demand studies of three existing multi-family residential sites that are similar in nature to the proposed project have also been conducted as part of this parking analysis. Application of this peak parking demand ratio to the proposed 154-unit residential apartment project yields a forecast peak parking demand of 228 spaces (i.e., [154 × 1.48 = 228 parking spaces]). Combining this forecast residential demand with the Code-required parking of seven (7) spaces for the retail component (which can be expected to be shared with the residential guest parking), the total forecast peak parking demand for the Fifth Avenue/Huntington Drive Mixed-Use project is 235 spaces.

- Based on a comparison of the proposed on-site parking supply of 283 spaces, it is concluded that the proposed parking supply is more than sufficient to meet the projected peak parking demand. A surplus of approximately 48 spaces is forecast during peak parking demand conditions.

Please feel free to contact us at 626.796.2322, if you have any questions regarding the parking analysis.

cc: Lisa Brownfield, Hogle-Ireland, Inc.
Chin S. Taing, PTP, LLG Engineers
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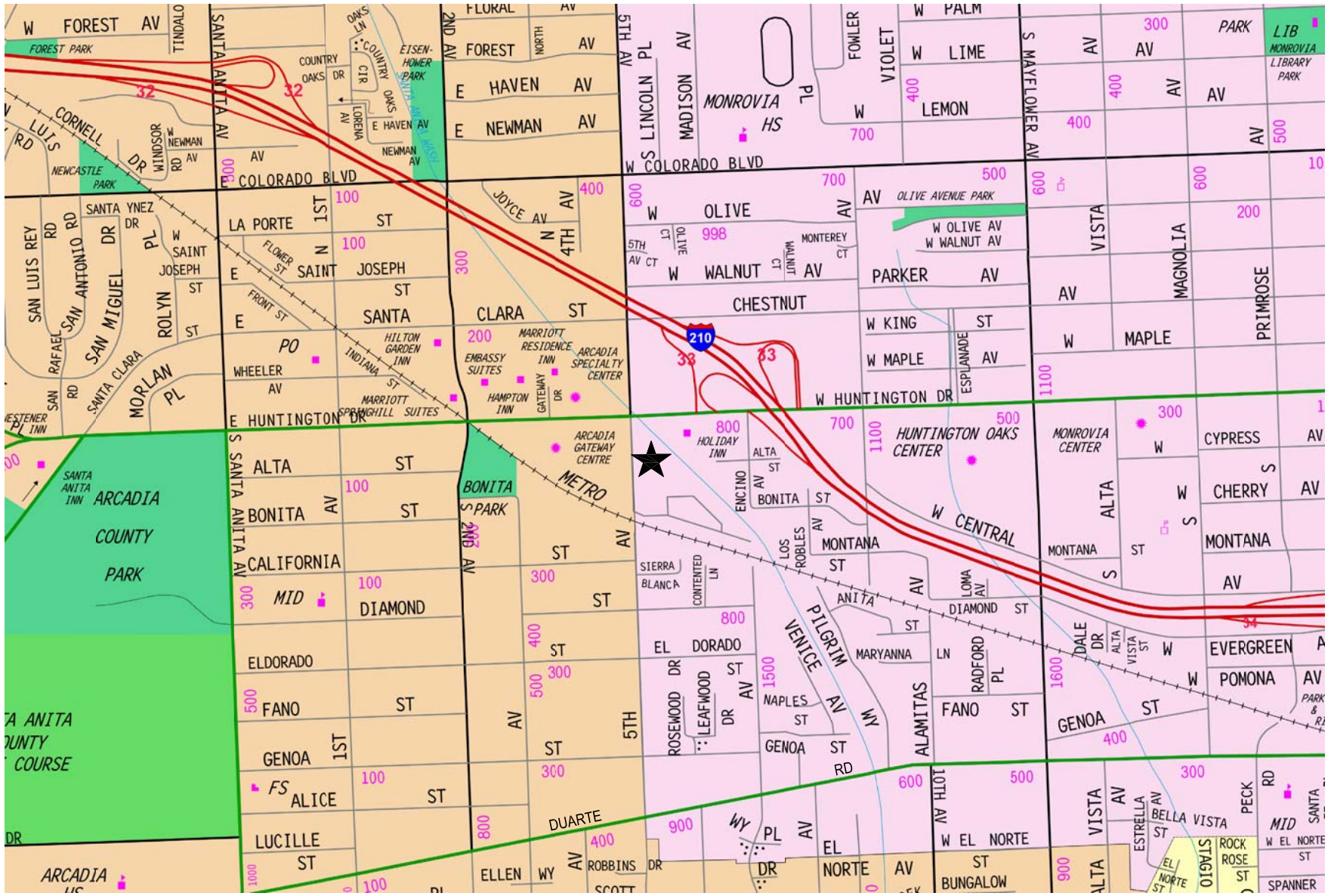

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NOT TO SCALE

MAP SOURCE: RAND MCNALLY & COMPANY

★ PROJECT SITE

FIGURE 1
VICINITY MAP

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

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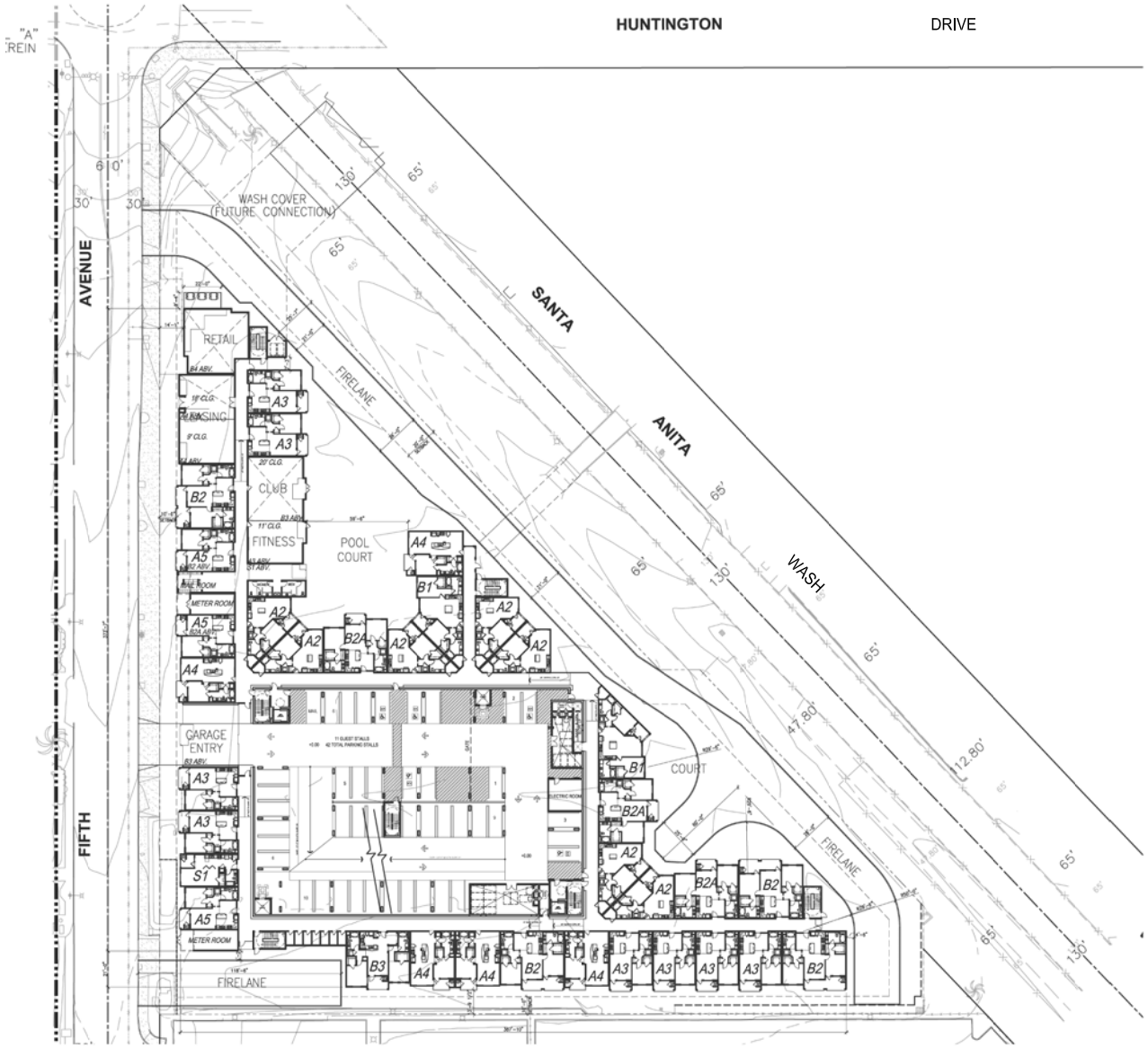

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SOURCE: ARCHITECTS ORANGE

FIGURE 2
SITE PLAN

LINSCOTT, LAW & GREENSPAN, engineers

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

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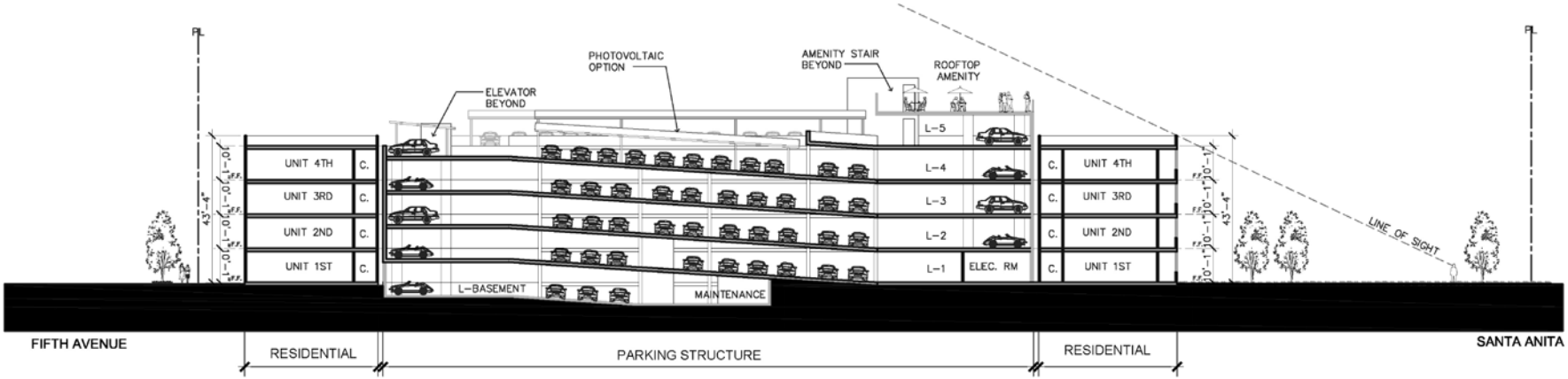

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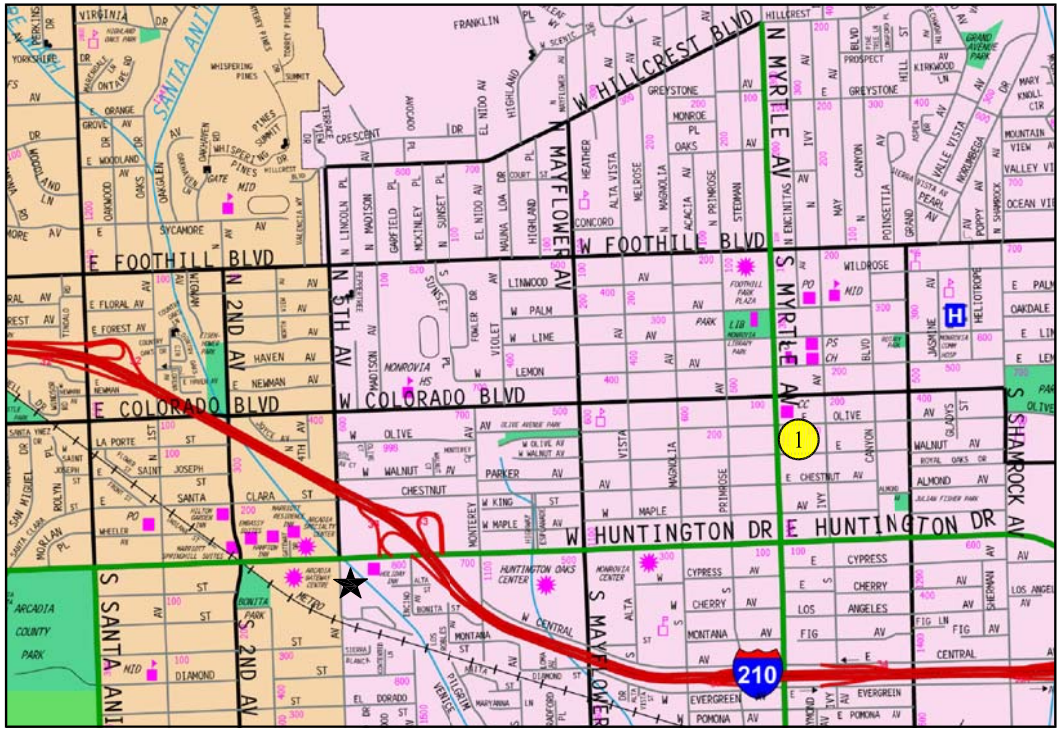
SOURCE: ARCHITECTS ORANGE

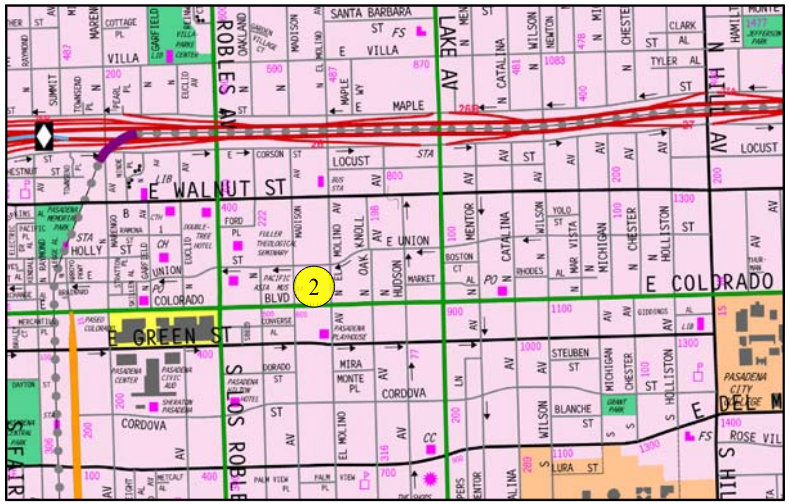
FIGURE 3
SITE SECTION

LINSCOTT, LAW & GREENSPAN, engineers

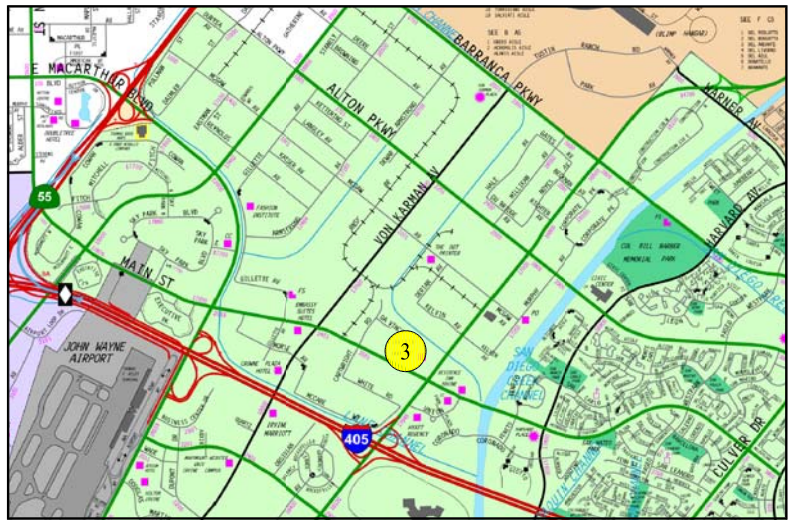
5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT



Monrovia Location



Pasadena Location



Irvine Location

MAP SOURCE: RAND MCNALLY & COMPANY

NOT TO SCALE

★ PROJECT SITE

1. PARAGON AT OLD TOWN - 700 S. MYRTLE AVENUE, MONROVIA
2. TRIO APARTMENTS - 44 N. MADISON AVENUE, PASADENA
3. MAIN STREET VILLAGE APARTEMENTS - 2555 MAIN STREET, IRVINE

LINSCOTT, LAW & GREENSPAN, engineers

FIGURE 4
MULTI-FAMILY RESIDENTIAL SURVEYED SITES

5TH AVENUE/HUNTINGTON DRIVE MIXED-USE PROJECT

Table 1
PARKING STANDARDS COMPARISON [1]

JURISDICTION	LAND USE	PARKING RATIOS
City of Arcadia	Mixed-Use Residential Mixed-Use Residential (guest parking) Multi-Family Multi-Family (guest parking)	1.5 spaces per unit 1 space for each 2 units 2 spaces per unit 1 space for each 2 units
City of Pasadena	Multi-Family (< 650 sq. ft.) Multi-Family (> 650 sq. ft.) Multi-Family (guest parking)	1 space per unit 2 spaces per unit 1 space for each 10 units
City of South Pasadena	Multi-Family (1 bedroom) Multi-Family (2 or more bedrooms) Multi-Family (guest parking)	1 space per unit 2 spaces per unit 1 space for each 2 units
City of Glendale (Downtown Specific Plan Zone)	Multi-Family (1 bedroom) Multi-Family (2 or more bedrooms) Multi-Family (guest parking)	1 space per unit 2 spaces per unit 1 space for each 10 units
City of Los Angeles	Multi-Family (< 3 - habitable rooms, e.g., a typical single unit) Multi-Family (= 3 - habitable rooms, e.g., a typical 1 bedroom unit) Multi-Family (> 3 - habitable rooms, e.g., a typical 2 bedroom unit)	1 space per unit 1.5 spaces per unit 2 spaces per unit
Los Angeles County	Multi-Family/Apartment (bachelor unit) Multi-Family/Apartment (efficiency or 1 bedroom) Multi-Family/Apartment (2 or more bedrooms) Multi-Family/Apartment (guest parking)	1 space per unit 1.5 spaces per unit 2 spaces per unit 1 space for each 4 units

[1] Sources: City of Arcadia, City of Pasadena, City of South Pasadena, City of Glendale, City of Los Angeles, County of Los Angeles Municipal Codes.

Table 2
PROPOSED PROJECT DESCRIPTION AND COMPARISON TO OTHER COMPARABLE SITES
UNIT TYPE MIX AND ON-SITE PARKING SUPPLY

PROPERTY NAME / ADDRESS	UNIT TYPE MIX [1]					TOTAL ON-SITE PARKING SUPPLY [2]			PARKING SUPPLY RATIO [3]
	Studio	One-Bedroom	Two-Bedrooms	Three-Bedrooms	Total	Residential	Public/Guests	Total	
A. *Proposed Project* *1110 and 1212 S. Fifth Avenue, Monrovia*	*7*	*91*	*56*	*0*	*154*	*258*	*25*	*283*	*1.81* *[4]*
1. Paragon at Old Town 700 S. Myrtle Avenue, Monrovia	0	82	81	0	163	329	75	404	2.48
2. Trio Apartments 44 N. Madison Avenue, Pasadena	46	141	117	0	304	450	30	480	1.58
3. Main Street Village 2555 Main Street, Irvine	0	265	200	16	481	847	173	1,020	2.12

[1] The three existing comparable sites were selected based on their relative unit size, unit mix percentages, facility amenities and target population characteristics. The site characteristics, including the unit type breakdown were provided by the Lincoln Property Company representatives.

[2] On-site parking supply of the existing comparable sites were based on field reviews by LLG Engineers in September 2012.

[3] The parking supply ratios were derived by dividing the total parking supply by the total number of units.

[4] A total of 258 parking spaces will be provided for the residents and 21 parking spaces will be provided for guests/visitors. Thus, the parking supply ratio for the residential component is determined to be (258 spaces + 21 spaces) / 154 dwelling units = 1.81 spaces/dwelling unit.

Table 3
SUMMARY OF PARKING DEMAND RATIOS [1]
PROPOSED PROJECT COMPARISON TO OTHER COMPARABLE SITES

SITES	TOTAL NO. OF DWELLING UNITS [2]	UNIT OCCUPANCY LEVELS [2]	EXISTING ON-SITE [3]		EXISTING OBSERVED [4]		AT FULL OCCUPANCY [5]	
			ON-SITE PARKING SUPPLY	PARKING SUPPLY RATIO (SPACES/UNIT)	PEAK PARKING DEMAND	PEAK PARKING DEMAND RATIO (SPACES/UNIT)	PEAK PARKING DEMAND	PEAK PARKING DEMAND RATIO (SPACES/UNIT)
A. *Proposed Project [6]*	*154*	*NA*	*283*	*1.81*	*NA*	*NA*	*NA*	*NA*
1. Paragon at Old Town	163	95.7%	404	2.48	231	1.42	241	1.48
2. Trio Apartments	304	94.0%	480	1.58	348	1.14	370	1.22
3. Main Street Village	481	93.8%	1,020	2.12	639	1.33	681	1.42
TOTALS (1 + 2 + 3)	**948**	**94.5%**	**1,904**	**2.01**	**1,218**	**1.28**	**1,292**	**1.36**

[1] The parking demand ratios were developed based on the number of dwelling units and parking spaces provided at each observation site, as well as the results of the parking accumulation surveys conducted for each site (on-site and on-street as applicable) in September 2012 (refer to Appendix A for a summary of the parking surveys for each site).

[2] The site characteristics, including number of residential units and the site occupancy levels at the time of the parking accumulation surveys were provided by Lincoln Property Company representatives.

[3] The parking supply was inventoried by LLG Engineers in September 2012. The parking supply includes all marked parking spaces provided on-site (i.e., regular, handicap, visitor, etc.) for residents, guests, vendors. The existing supply parking ratios are based on the number of spaces provided on-site divided by the total number of dwelling units.

[4] The existing peak parking demand was observed to occur at 11:00 PM for the Paragon at Old Town and at 12:00 AM midnight for the Trio Apartments and Main Street Village. The existing peak parking demand for the Paragon at Old Town and Trio Apartments included on-site and on-street observed parking demand associated with residents/guests for the sites. Refer to Appendix A for the parking surveys for each site. The weekday parking demand ratios are based on the parking demand observed for each site divided by the total number of dwelling units.

[5] Peak parking demand was forecasted at full (100%) occupancy for each site. The peak parking demand ratios at full occupancy were derived by dividing the peak parking demand by the total number of dwelling units.

[6] A total of 258 parking spaces will be provided for the residents and 21 parking spaces will be provided for guests/visitors. Thus, the parking supply ratio for the residential component is determined to be (258 spaces + 21 spaces) / 154 dwelling units = 1.81 spaces/dwelling unit.

APPENDIX A

PARKING ACCUMULATION SURVEYS

Appendix Table A-1

PARAGON AT OLD TOWN (700 SOUTH MYRTLE, MONROVIA) PARKING ACCUMULATION SURVEYS [1]

SURVEY DATES: WEDNESDAY (SEPTEMBER 12, 2012) AND THURSDAY (SEPTEMBER 13, 2012)

PARKING LOCATION	[2] NO. OF SPACES	WEDNESDAY, SEPTEMBER 12, 2012													
		6:00 PM		7:00 PM		8:00 PM		9:00 PM		10:00 PM		11:00 PM		12:00 AM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
Residential Parking															
Standard Spaces	325	117	36.0%	140	43.1%	157	48.3%	172	52.9%	178	54.8%	180	55.4%	182	56.0%
Handicap Spaces	4	3	75.0%	2	50.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%
Total Residential Parking	329	120	36.5%	142	43.2%	160	48.6%	175	53.2%	181	55.0%	183	55.6%	185	56.2%
Public/Visitor Parking															
Standard Spaces	70	37	52.9%	37	52.9%	30	42.9%	25	35.7%	23	32.9%	25	35.7%	24	34.3%
Handicap Spaces	5	0	0.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%
Total Public/Visitor Parking	75	37	49.3%	38	50.7%	31	41.3%	26	34.7%	24	32.0%	26	34.7%	25	33.3%
Total On-Site Parking	404	157		180		191		201		205		209		210	
On-Street Parking	--	19		23		30		25		23		22		18	
Total Parking Occupancy	404	176	43.6%	203	50.2%	221	54.7%	226	55.9%	228	56.4%	**231**	**57.2%**	228	56.4%

PARKING LOCATION	[2] NO. OF SPACES	THURSDAY, SEPTEMBER 13, 2012													
		6:00 PM		7:00 PM		8:00 PM		9:00 PM		10:00 PM		11:00 PM		12:00 AM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
Residential Parking															
Standard Spaces	325	114	35.1%	134	41.2%	144	44.3%	151	46.5%	168	51.7%	175	53.8%	178	54.8%
Handicap Spaces	4	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%	3	75.0%
Total Residential Parking	329	117	35.6%	137	41.6%	147	44.7%	154	46.8%	171	52.0%	178	54.1%	181	55.0%
Public/Visitor Parking															
Standard Spaces	70	41	58.6%	34	48.6%	28	40.0%	25	35.7%	26	37.1%	24	34.3%	26	37.1%
Handicap Spaces	5	0	0.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%	1	20.0%
Total Public/Visitor Parking	75	41	54.7%	35	46.7%	29	38.7%	26	34.7%	27	36.0%	25	33.3%	27	36.0%
Total On-Site Parking	404	158		172		176		180		198		203		208	
On-Street Parking	--	11		15		19		19		20		19		16	
Total Parking Occupancy	404	169	41.8%	187	46.3%	195	48.3%	199	49.3%	218	54.0%	222	55.0%	224	55.4%

[1] The parking survey was conducted by The Traffic Solution.

[2] Parking inventory based on field review by LLG Engineers in September 2012.

[3] Vehicles parked on-street for more than three consecutive hours along the property frontages (i.e., north and south sides of Olive Avenue and Walnut Avenue, and east and west sides of Myrtle Avenue) that were not observed to patronize other nearby uses in the surrounding area were conservatively assumed to be related to the Paragon at Old Town (i.e., residents and/or guests).

Appendix Table A-2

TRIO APARTMENTS (44 NORTH MADISON AVENUE, PASADENA) PARKING ACCUMULATION SURVEYS [1]

SURVEY DATES: WEDNESDAY (SEPTEMBER 19, 2012) AND THURSDAY (SEPTEMBER 20, 2012)

PARKING LOCATION	[2] NO. OF SPACES	WEDNESDAY, SEPTEMBER 19, 2012					
		10:00 PM		11:00 PM		12:00 AM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
Residential Parking							
Standard Spaces	438	291	66.4%	304	69.4%	311	71.0%
Employee Spaces	2	0	0.0%	0	0.0%	0	0.0%
Handicap Spaces	10	5	50.0%	5	50.0%	7	70.0%
Total Residential Parking	450	296	65.8%	309	68.7%	318	70.7%
Vendor/Visitor Parking							
Standard Spaces	28	3	10.7%	3	10.7%	3	10.7%
Handicap Spaces	2	0	0.0%	0	0.0%	0	0.0%
Total Vendor/Visitor Parking	30	3	10.0%	3	10.0%	3	10.0%
Total On-Site Parking	480	299		312		321	
On-Street Parking [3]	--	4		1		1	
Total Parking Occupancy	480	303	63.1%	313	65.2%	322	67.1%

PARKING LOCATION	[2] NO. OF SPACES	THURSDAY, SEPTEMBER 20, 2012					
		10:00 PM		11:00 PM		12:00 AM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
Residential Parking							
Standard Spaces	438	322	73.5%	334	76.3%	337	76.9%
Employee Spaces	2	0	0.0%	0	0.0%	0	0.0%
Handicap Spaces	10	5	50.0%	6	60.0%	7	70.0%
Total Residential Parking	450	327	72.7%	340	75.6%	344	76.4%
Vendor/Visitor Parking							
Standard Spaces	28	6	21.4%	3	10.7%	3	10.7%
Handicap Spaces	2	0	0.0%	0	0.0%	0	0.0%
Total Vendor/Visitor Parking	30	6	20.0%	3	10.0%	3	10.0%
Total On-Site Parking	480	333		343		347	
On-Street Parking [3]	--	1		1		1	
Total Parking Occupancy	480	334	69.6%	344	71.7%	**348**	**72.5%**

[1] The parking survey was conducted by The Traffic Solution.

[2] Parking inventory based on field review by LLG Engineers in September 2012.

[3] Vehicles parked on Union Street (i.e., south side of Union Street between Madison Avenue and El Molino Avenue) along the property frontage and observed to be Trio Apartment residents/guests were included.

Appendix Table A-3
MAIN STREET VILLAGE (2555 MAIN STREET, IRVINE) PARKING ACCUMULATION SURVEYS [1]
SURVEY DATES: WEDNESDAY (SEPTEMBER 12, 2012) AND THURSDAY (SEPTEMBER 13, 2012)

PARKING LOCATION	[2] NO. OF SPACES	WEDNESDAY, SEPTEMBER 12, 2012						THURSDAY, SEPTEMBER 13, 2012					
		10:00 PM		11:00 PM		12:00 AM		10:00 PM		11:00 PM		12:00 AM	
		OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT	OCC.	PERCENT
Basement Level													
Unmarked Spaces	152	102	67.1%	108	71.1%	117	77.0%	100	65.8%	105	69.1%	107	70.4%
LEV/FEV Spaces	12	9	75.0%	9	75.0%	9	75.0%	8	66.7%	7	58.3%	9	75.0%
Resident Unassigned Spaces	1	1	100.0%	1	100.0%	1	100.0%	1	100.0%	1	100.0%	1	100.0%
Handicap Spaces	2	0	0.0%	2	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Fenced Off-Bicycle Pkg Spaces	12	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Basement Parking	179	112	62.6%	120	67.0%	127	70.9%	109	60.9%	113	63.1%	117	65.4%
Level 1													
Unmarked Spaces	110	61	55.5%	65	59.1%	71	64.5%	60	54.5%	69	62.7%	69	62.7%
LEV/FEV Spaces	12	12	100.0%	12	100.0%	12	100.0%	12	100.0%	12	100.0%	12	100.0%
Resident Unassigned Spaces	12	12	100.0%	12	100.0%	12	100.0%	11	91.7%	12	100.0%	12	100.0%
Leasing Spaces	7	6	85.7%	6	85.7%	6	85.7%	3	42.9%	7	100.0%	7	100.0%
5-Minute Spaces	1	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Handicap Spaces	6	2	33.3%	3	50.0%	2	33.3%	3	50.0%	3	50.0%	3	50.0%
Total Level 1 Parking	148	93	62.8%	98	66.2%	103	69.6%	89	60.1%	103	69.6%	103	69.6%
Level 2													
Unmarked Spaces	126	92	73.0%	97	77.0%	99	78.6%	91	72.2%	94	74.6%	95	75.4%
LEV/FEV Spaces	12	12	100.0%	12	100.0%	12	100.0%	12	100.0%	12	100.0%	12	100.0%
Resident Unassigned Spaces	15	15	100.0%	15	100.0%	14	93.3%	15	100.0%	15	100.0%	15	100.0%
Handicap Spaces	6	3	50.0%	4	66.7%	3	50.0%	3	50.0%	3	50.0%	3	50.0%
Total Level 2 Parking	159	122	76.7%	128	80.5%	128	80.5%	121	76.1%	124	78.0%	125	78.6%
Level 3													
Unmarked Spaces	124	75	60.5%	78	62.9%	82	66.1%	79	63.7%	77	62.1%	83	66.9%
LEV/FEV Spaces	12	12	100.0%	11	91.7%	12	100.0%	12	100.0%	12	100.0%	12	100.0%
Resident Spaces	2	1	50.0%	2	100.0%	2	100.0%	2	100.0%	2	100.0%	2	100.0%
Resident Unassigned Spaces	15	14	93.3%	15	100.0%	14	93.3%	15	100.0%	15	100.0%	15	100.0%
Handicap Spaces	6	2	33.3%	3	50.0%	3	50.0%	2	33.3%	2	33.3%	2	33.3%
Total Level 3 Parking	159	104	65.4%	109	68.6%	113	71.1%	110	69.2%	108	67.9%	114	71.7%
Level 4													
Unmarked Spaces	127	67	52.8%	61	48.0%	72	56.7%	72	56.7%	77	60.6%	77	60.6%
LEV/FEV Spaces	12	10	83.3%	11	91.7%	11	91.7%	11	91.7%	11	91.7%	11	91.7%
Resident Spaces	17	15	88.2%	15	88.2%	15	88.2%	15	88.2%	17	100.0%	17	100.0%
Handicap Spaces	4	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Level 4 Parking	160	92	57.5%	87	54.4%	98	61.3%	98	61.3%	105	65.6%	105	65.6%
Level 5													
Visitor Spaces	152	62	40.8%	62	40.8%	64	42.1%	67	44.1%	60	39.5%	60	39.5%
Visitor Spaces (coned-off)	8	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
LEV/FEV Spaces	6	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Visitor LEV/FEV Spaces	7	2	28.6%	3	42.9%	4	57.1%	2	28.6%	3	42.9%	3	42.9%
Total Level 5 Parking	173	64	37.0%	65	37.6%	68	39.3%	69	39.9%	63	36.4%	63	36.4%
Level 6													
Unmarked Spaces	42	2	4.8%	2	4.8%	2	4.8%	1	2.4%	1	2.4%	0	0.0%
Total Level 6 Parking	42	2	4.8%	2	4.8%	2	4.8%	0	0.0%	0	0.0%	0	0.0%
Total On-Site Parking	1,020	589	57.7%	609	59.7%	**639**	**62.6%**	596	58.4%	616	60.4%	627	61.5%

[1] The parking survey was conducted by The Traffic Solution.
[2] Parking inventory based on field review by LLG Engineers in September 2012.