PRAIRIE STATION APARTMENTS

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

Prepared for

CITY OF INGLEWOOD
Economic and Community Development Department
Planning Division
One Manchester Boulevard
Inglewood, CA 90301

Prepared by

TERRY A. HAYES ASSOCIATES INC.
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

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1.0 INTRODUCTION

This section provides an overview of the environmental review process for the proposed Prairie Station Apartments (proposed project) located near the intersection of Prairie Avenue and 113th Street in the City of Inglewood and identifies the discretionary actions and approvals needed to implement the proposed project.

1.1 PROJECT OVERVIEW

The proposed project consists of the construction of three podium style apartment buildings that would provide 440 units. Each building would have one to two floors of parking at-grade or partially subterranean and is planned to include six stories of residential units and mezzanines located within the units on the top floor. The overall building height of each residential building would be no higher than 85 feet. The proposed project is located on a 5.07-acre project site at the southwest corner of the intersection of Prairie Avenue and 113th Street (on the west side of Prairie Avenue) in the City of Inglewood. The project site is zoned Airport Commercial (C-2A) and has a General Plan designation of Commercial.

1.2 ENVIRONMENTAL COMPLIANCE REQUIREMENTS

Section 15063(a) of the California Environmental Quality Act (CEQA) Guidelines requires the lead agency to prepare an Initial Study (IS) to determine if the proposed project may have a significant effect on the environment. The purpose of this document is to inform the City of Inglewood, public agencies and interested parties of the potential environmental effects resulting from the proposed project. For the proposed project to obtain an environmental clearance in the form of a Mitigated Negative Declaration (MND), any potential significant adverse effects must be mitigated to a less-than-significant level. This document alone does not determine whether the proposed project will be approved. Rather, it is a disclosure document aimed at equally informing all concerned parties and fostering informed discussion and decision-making regarding all aspects of the proposed project.

1.3 DISCRETIONARY ACTIONS AND APPROVALS

Discretionary actions include those local approvals or entitlements necessary to implement a project. The discretionary actions required for the proposed project include the following:

- Disposition and Development Agreement (DDA)
- Planned Assembly Development (PAD)
- General Plan Amendment
- Zone change

1.4 PROJECT INFORMATION

Project Title/Location: Prairie Station Apartments
Prairie Avenue and 113th Street
Inglewood, CA 90303

Lead Agency Name and Address: City of Inglewood
Economic and Community Development Department
Planning Division
One Manchester Boulevard
Inglewood, CA 90301

Contact Person and Phone Number: Marissa Fewell, Assistant Planner
(310) 412-5230

Project Sponsor's Name and Address: K.I.G. Properties
4585 West 118th Street
Hawthorne, CA 90250

1.5 ORGANIZATION OF THIS IS/MND

The content and format of this Initial Study/Mitigated Negative Declaration (IS/MND) is designed to meet the requirements of CEQA. This IS/MND is organized into the following four sections:

1.0 Introduction. This section provides an overview of the proposed project and the environmental review process.

2.0 Project Description. This section provides a description of the proposed project, a description of the project site and the surrounding uses, and the estimated timeline for the construction and implementation of the proposed project.

3.0 Initial Study Checklist and Evaluation. This section contains the CEQA Guidelines Appendix G: Initial Study Checklist and identifies the level of impact under each environmental impact category. This section also includes a discussion of the environmental impacts and any mitigation measures associated with each category.

4.0 List of Preparers and Sources Consulted. This section provides a list of the consultant team members, and a list of sources and references used in the preparation of this IS/MND.

2.0 PROJECT DESCRIPTION

This section provides a detailed description of the proposed project, the project site, the surrounding land uses, and the estimated timeline for the implementation of the proposed project.

2.1 PROJECT LOCATION

PROJECT SITE

The project site is located on the southeast corner of the intersection of Prairie Avenue and 113th Street along the southern border of the City of Inglewood. The 5.07-acre project site (Assessor's Parcel Numbers 4035-018-015, 4035-018-016, 4035-018-900, 4035-018-901, 4035-018-902, 4035-018-903) is located at the intersection of Prairie Avenue and 113th Street. Five structures have been previously developed on the project site, including two commercial buildings, two single-family dwellings, an equipment building, the Hollywood Park Casino sign, and antenna. All structures have been demolished, except for a parking lot and a one-story, 2,000 square foot building on the north east corner of the project site, which is currently unoccupied and closed off to public access. The remainder of the project site is currently covered with common grasses, and fencing borders the perimeter of the landscaping areas. Presently, 113th Street provides a driveway approach from Prairie Avenue that traverses through the center of the project site, and then continues along the western border of the project site adjacent to Interstate (I)-105. Several mature trees, including palm trees, grow along Prairie Avenue and the western boundary of the project site. According to the City's General Plan, the project site is designated Commercial and has a zoning designation of Airport Commercial (C-2A). The location of the project site is shown in **Figure 2-1**.

SURROUNDING AREA

The adjacent properties along northern and eastern boundaries of the project site are designated for Commercial land uses according to the City's General Plan. The properties adjacent to the eastern boundary of the project site are designated for Commercial (C) uses and include the Palace Surplus grocery store and La Quinta Inn and Suites. Properties north of the project site are designated for Commercial (C) land use and include an auto dealership. The closest residential land uses are located adjacent to, or within 15 feet of, the northeast corner boundaries of the project site. The I-105 borders the project site to the southwest, and an I-105 off-ramp borders the project site to the north. An aerial photograph depicting the project site and the surrounding land uses is presented in **Figure 2-2**.

2.2 DESCRIPTION OF THE PROPOSED PROJECT

The proposed project consists of the construction of three podium style apartment buildings that would provide 440 units including up to 105 with mezzanines. Each building would have one to two floors of parking at grade or partially subterranean and include six stories of residential units and mezzanines located within the units on the top floor. Many units would include private balconies. The overall building height of each residential building would be no higher than 85 feet. The unit mix is to be determined.

The Site Plan, First Floor Plan, Floors 2-6 Plan, and Concept Section, are presented in **Figures 2-3** through **2-5**.



Source: TAHA, 2022.

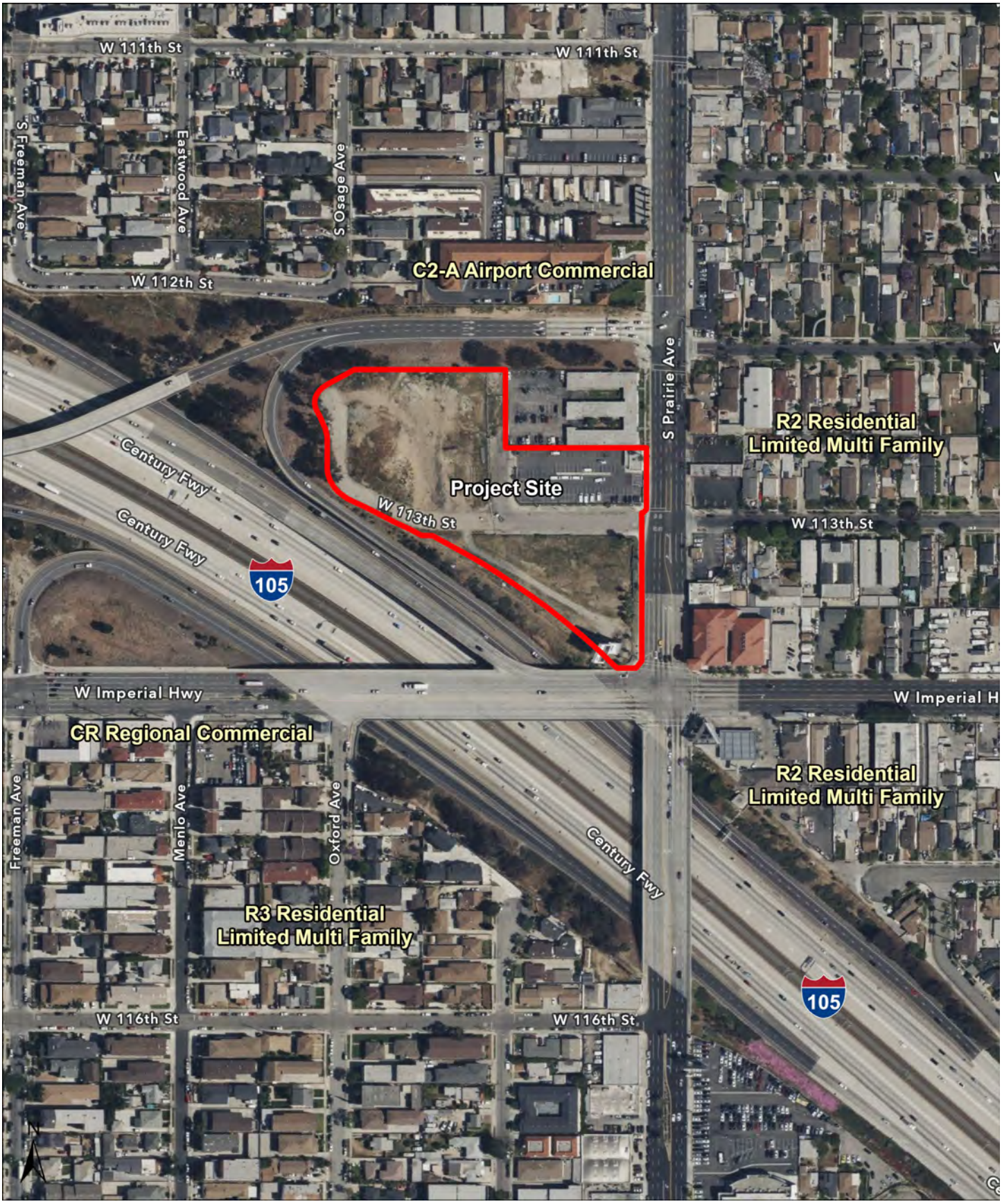
Prairie Station Apartments
Initial Study/Mitigated Negative Declaration

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CITY OF INGLEWOOD

FIGURE 2-1

PROJECT LOCATION



Source: TAHA, 2022.

taha environmental planners

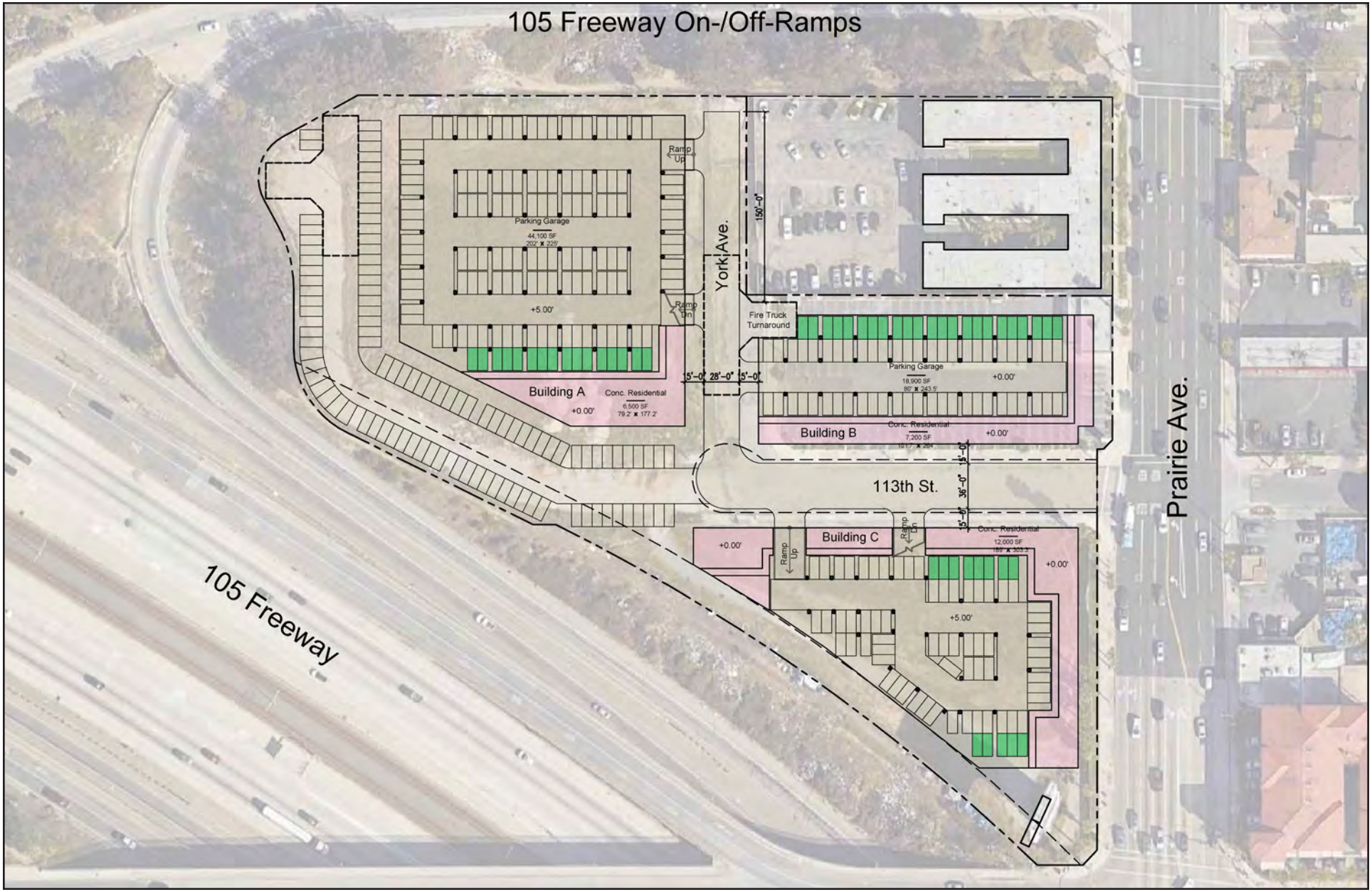
TAHA 2020-023

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FIGURE 2-2

SURROUNDING LAND USE



Source: K.I.G. Properties, 2022.

taha environmental planners

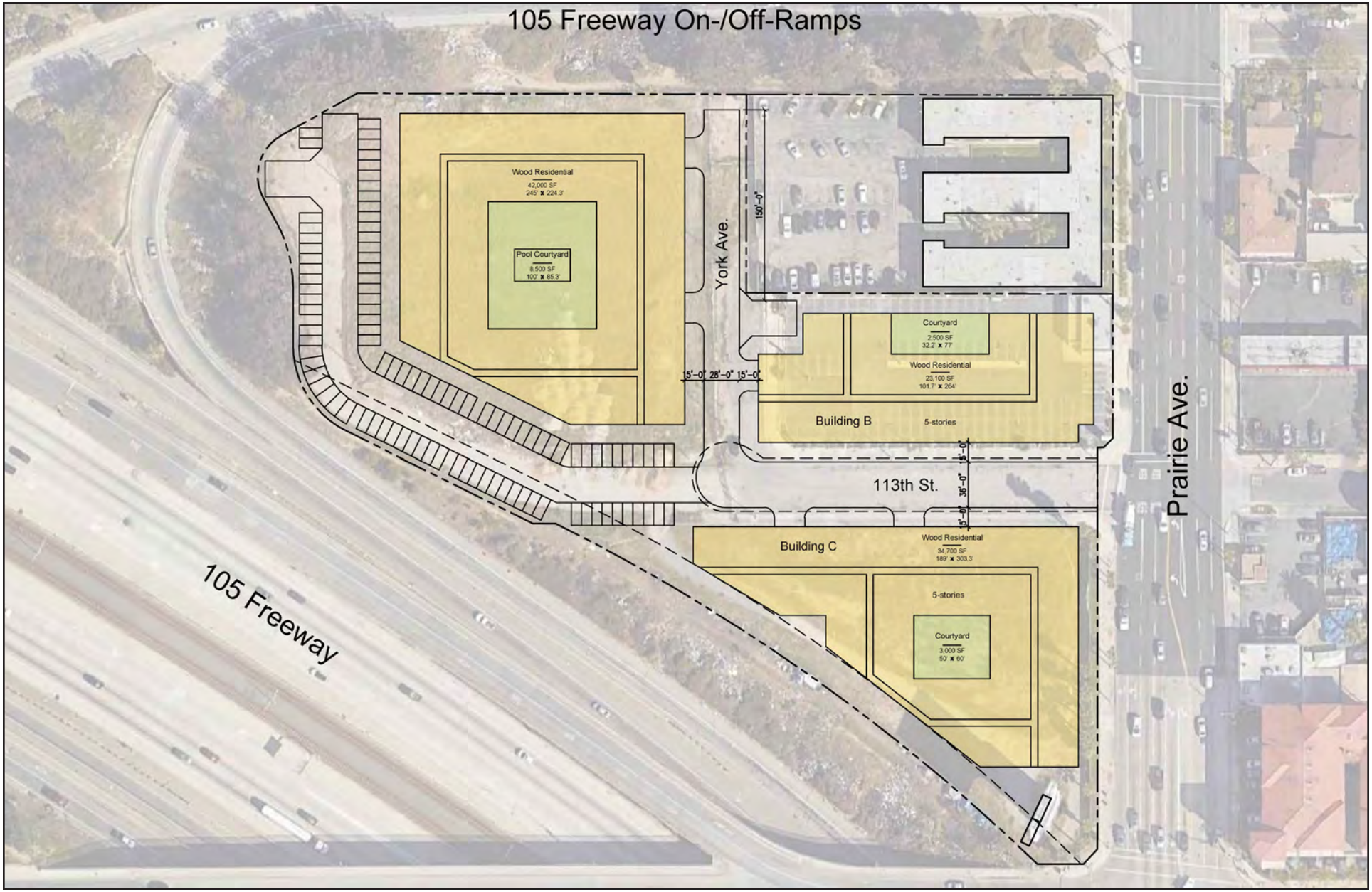
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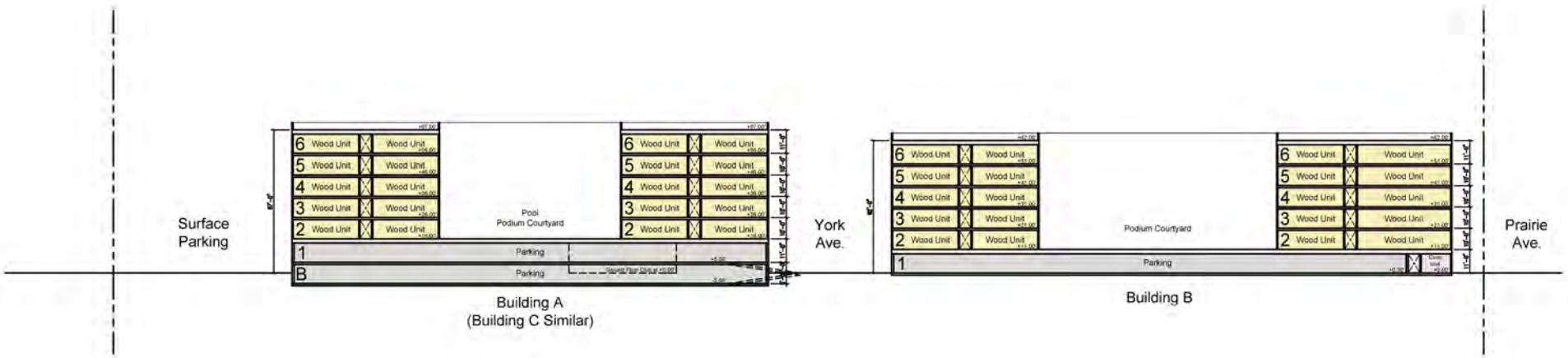
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FIGURE 2-3

SITE PLAN / FIRST FLOOR PLAN



Source: K.I.G. Properties, 2022.



Source: K.I.G. Properties, 2022.

Building A would be located on the northwestern portion of the project site. Building A would include up to 8,500 square feet of courtyard open space on the second floor. The courtyard open space would include a pool. Building B would be located in the northeast corner of the project site. The building would include up to 2,500 square feet of courtyard open space on the second floor. Building C would be located in the southeast corner of the project. The building would include up to 3,000 square feet of courtyard open space on the second floor.

A total of up to 670 parking spaces would be provided including approximately 100 surface parking spaces in addition to the balance of parking spaces in each building's ground floor and/or subterranean concrete parking levels. The southern outer wall of the development could feature a large advertisement billboard facing I-105 freeway.

Vehicles would access the project site from the main entry at 113th Street along Prairie Avenue. The main entry would provide for 36 feet wide vehicular use with 15 feet pedestrian walkways on either side. The project site would also be accessible to pedestrians from the sidewalk on Prairie Avenue.

The project site is designated Commercial and has a zoning designation of Airport Commercial (C-2A) according to the City's General Plan. The project site's current zoning designation does not allow for any newly constructed residential uses; therefore, the proposed project would require discretionary actions such as a General Plan amendment and a zone change prior to implementation.

2.3 CONSTRUCTION ACTIVITIES AND SCHEDULE

Construction of the proposed project would last for approximately 27 months in total, with activities beginning in January 2024 and completion expected in spring 2026. The proposed project comprises three podium building structures with underlying parking garages that would be constructed in two stages, with construction of the first building commencing in March 2024 following clearing and grading of the site, and construction of the second and third buildings beginning in May 2024. **Table 2-1** outlines the activities occurring during the various phases of project construction.

Each construction phase assumes a five day per week work schedule, from Monday through Friday, eight hours per day, between the hours of 7:00 a.m. through 8:00 p.m. as per the requirements of Inglewood Municipal Code (IMC). Demolition, excavation, leveling, paving, and finishing would each require 20 workers per day, and the building construction phases would require 200 workers per day. Over the course of the demolition activities, a total of 400 truck haul trips would haul demolition debris off-site to the nearest applicable landfill facility. Excavation activities would require 4,500 truck hauling trips to haul 33,705 cubic yards of material off-site to the nearest applicable landfill facilities. Each Construction Phase would each require 80 vendor trips per day. The Paving and Finishing, Landscaping, and Coating Phases would each require 40 vendor trips per day. Operation of the proposed project is expected to commence in March 2026.

TABLE 2-1: CONSTRUCTION ACTIVITIES, SCHEDULING, AND EQUIPMENT REQUIREMENTS

Phase	Phase Activities	Construction Equipment	Start Date	End Date	Total Work Days
Demolition	Demolish parking lot and 2,000 square foot building; generate 1,781 tons of debris	One concrete saw, three excavators, and two dozers	January 2024	January 2024	20
Excavation and Shoring	Excavate and export 33,705 cubic yards of material off-site for the subterranean parking.	Three excavators, one grader, one dozer, and three loaders	January 2024	March 2024	30
Leveling and Foundation	Grading activities to prepare for construction	Two crawler tractors, two dozers, one loader, and three backhoes	March 2024	March 2024	10
Podium 1 Construction	Construct Building and two levels of subterranean parking beneath	One crane, one generator set, two rough terrain forklifts, three loaders, and one welder	March 2024	November 2025	425
Private Driveway Paving	Construct and pave the private driveway and access points	Two pavers, two paving equipment, and two rollers	November 2025	January 2026	40
Podium 2 and 3 Construction	Construct Buildings	One crane, one generator set, two rough terrain forklifts, three loaders, and one welder	May 2024	March 2026	475
Finishing, Landscaping, and Coating	Architectural coatings and finishing	Two aerial lifts, two air compressors, and two skid steer loaders	January 2026	March 2026	50

3.0 INITIAL STUDY CHECKLIST AND EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Printed Name	For

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.1 AESTHETICS - Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

a) **No Impact**. A significant impact would occur if the proposed project would have a substantial adverse effect on scenic vista. No scenic vistas are available on the project site or within the surrounding area. The City's General Plan does not designate scenic vistas in the project vicinity. According to the Los Angeles County General Plan, the Santa Monica Mountains are scenic hillsides located approximately 14 miles northwest of the project site and can be viewed from Prairie Avenue. However, views of the Santa Monica Mountains are limited due to intervening buildings and existing ornamental landscaping, and construction of the proposed project would not interrupt views of the Santa Monica Mountains. Therefore, no impact would occur.

b) **No Impact**. A significant impact would occur if the proposed project would substantially damage scenic resources within a State Scenic Highway. The project site is not located on or within the vicinity of a scenic highway. The nearest state-designated scenic highway is Malibu Canyon–Las Virgenes Highway, which is approximately 20 miles northwest of the project site.[1] The project site is not within the viewshed of this scenic highway. Therefore, no impact would occur.

c) **No Impact**. A significant impact would occur if the proposed project substantially degraded the existing visual character or quality of public views of the site and its surroundings. The project site is located within an urbanized area as defined by Section 21071 of the CEQA Guidelines. According to the City's General Plan, the project site is designated Commercial and has a zoning designation of Airport Commercial (C-2A). The adjacent properties along northern and eastern boundaries of the project site are designated for Commercial land uses according to the City's General Plan. The I-105 freeway borders the south-west boundary of the project site. The nearest residential properties are located adjacent to the northeastern corner boundary of the project site boundary and have a zoning designation of R-2, Residential Limited Multi-Family. The

[1]California Department of Transportation, *California Scenic Highway Mapping System*, Los Angeles County, http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways, accessed April 2020.

properties bordering the project site predominantly consist of commercial uses, including La Quinta Inn and Suites across the street from the eastern border of the project site. The proposed project would require a General Plan amendment and a zoning change in order to be implemented. These requirements are considered discretionary actions and are a requirement for the proposed project. Additionally, the advertisement billboard that would be located on the parking garage would not violate Section 12-75 of the Inglewood Municipal Code (IMC) and would only be visible to passing vehicles driving on I-105. With approval of these discretionary actions, the proposed project would not conflict with applicable zoning or substantially degrade the visual character of the project site. Therefore, no impact would occur.

d) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project created a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The proposed project would construct three podium style apartment buildings on a site that is currently vacant, and thus would introduce new sources of light or glare that could potentially affect day or nighttime views in the area. However, due to the urban setting of the project site, a moderate level of ambient nighttime light already exists on the project site. Existing nighttime lighting sources include surface parking lot lights, streetlights, vehicle headlights, and interior and exterior building illumination. The proposed project would introduce three buildings each with six stories of residential units, mezzanine units on the tops floor, and one to two levels of at grade or subterranean parking. Each residential building would include windows on each floor and residential balconies, and the proposed project would also provide decorative exterior lighting to illuminate walkways, paths, general congregation areas. The proposed project would also construct a billboard sign to be attached to the southern outer wall of the parking garage and facing I-105 freeway. The billboard would comply with Section 12-75 of the IMC and a Special Use Permit pursuant to Article 25 of Chapter 12 of the IMC shall be acquired prior to installation. However, all light sources would fully be pointed downwards and away from neighboring facilities to reduce lighting spillover to the fullest extent possible, and the proposed project would not introduce any major source of glare. Headlights from vehicles exiting to Prairie Avenue from 113th Street would not directly shine on nearby light sensitive land uses. Therefore, a less-than-significant impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.2 AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☑
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☑

a-e) **No Impact**. The project site is located in a fully developed, urbanized area, and surrounded primarily by commercial uses. According to the City's General Plan, no areas in the City are currently zoned, designated, or used for agricultural or forestry activities. The City contains no Prime Farmland, Unique Farmland, or Farmland of Statewide Significance. Due to its urban setting, the project site and its surroundings are not included in the Farmland Mapping and Monitoring Program of the California Department of Conservation.[2] The project site is not zoned for agricultural use and is not under a Williamson Act Contract.[3] In addition, there are no areas of forestland as defined in Public Resources Code Section 12220(g) or timberland as defined in Public Resources Code Section 4526 within the City. The proposed project would not change the existing environment in a manner that would result in the conversion of farmland or forestland to other kinds of land uses. Therefore, no impact would occur.

[2]California Department of Conservation, *Farmland Mapping & Monitoring Program,* https://www.conservation.ca.gov/dlrp/fmmp, accessed April 2020.

[3]California Department of Conservation, *Williamson Act Program*, https://www.conservation.ca.gov/dlrp/wa, accessed April 2020.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.3 AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☑	☐

Air pollutant emissions that would result from construction and operation of the proposed project are addressed separately for each impact criterion. The air quality impact assessment was conducted in accordance with guidance and methodologies propagated by the South Coast Air Quality Management District (SCAQMD). The SCAQMD is charged with regional air quality jurisdiction for the South Coast Air Basin (SCAB). The primary guidance is contained in the SCAQMD *CEQA Air Quality Handbook*, which was published in 1993. Updates to the SCAQMD CEQA guidance are posted on the SCAQMD website.[4]

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The California Air Resources Board (CARB) has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

SCAQMD has established 500 meters, or 1,640 feet, as the distance for assessing localized air quality impacts. The proposed project is substantially surrounded by commercial land uses but also located near many residences. The nearest residence in each direction includes:

- Residences located approximately 100 feet and 200 feet to the east;
- Residences located approximately 15 feet (adjacent), 130 feet and 220 feet to the north;
- Residences located approximately 200 feet to the northwest; and
- Residences located approximately 100 feet, 300 feet, and 450 feet to the northeast.

Other sensitive land uses within 500 meters of the project site include:

- La Quinta Inn and Suite approximately 100 feet to the east;
- Hollypark Motel located approximately 360 feet to the southeast;
- Crystal Inn Suites and Spa LAX approximately 140 feet to the north;

[4]SCAQMD, *Air Quality Analysis Guidance Handbook,* http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

- Welcome Inn approximately 415 feet feet to the north;
- Casa Bell Motel approximately 1,600 feet to the east;
- Amino Leadership High School approximately 785 feet to the northwest;
- Moffett Elementary School approximately 970 feet to the northwest; and
- York Elementary School approximately 1,500 feet to the south.

a) **Less-Than-Significant Impact**. The currently applicable air quality plan is the 2016 AQMP, which was developed in conjunction with regional growth projections incorporated into the Southern California Association of Governments (SCAG) 2020–2045 RTP/SCS. The ensuing discussions address potential air quality impacts in the context of the attainment timeline set forth in the 2016 AQMP and the underlying growth projections derived from the SCAG 2016–2040 RTP/SCS.

The SCAQMD CEQA Air Quality Handbook identifies two key indicators of consistency with the AQMP: 1) whether the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plan; and 2) whether the project would exceed the forecasted growth incorporated into the AQMP via the RTP/SCS. The SCAQMD has developed regionally specific air quality significance thresholds to assess potential impacts that may result from construction and operation of projects. Daily emissions of volatile organic compounds (VOC), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur oxides (SO_X), and respirable particulate matter less than 10 microns in diameter (PM_{10}) and fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) should be quantified and assessed on both regional and localized scales, in accordance with SCAQMD methodology.

The SCAQMD has developed both regional and localized significance thresholds to determine the significance of the construction and operations impacts of a given project. Localized Significance Thresholds (LSTs) selected for comparison values are for a five-acre construction site in sensitive resource area (SRA) 3 with a sensitive receptor within 25 meters. **Table 3-1** shows the daily regional and localized emissions thresholds for both construction and operations.

TABLE 3-1: SCAQMD DAILY EMISSIONS THRESHOLDS (IN POUNDS PER DAY)

	Construction		Operations
Criteria Pollutant	**Regional Emissions**	**Localized Emissions/a/**	**Regional Emissions**
Volatile Organic Compounds (VOC)	75	None Established	55
Nitrogen Oxides (NO_X)	100	131	55
Carbon Monoxide (CO)	550	967	550
Sulfur Oxides (SO_X)	150	None Established	150
Fine Particulates ($PM_{2.5}$)	55	5	55
Particulates (PM_{10})	150	8	150

/a/ The project site is located in LST SRA 3, would have up to two acres of disturbed area daily, and is less than 25 meters from the nearest sensitive receptor (residences adjacent to the north).
SOURCE: SCAQMD, 2022.

Construction. Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trucks traveling to and from the project site. Fugitive dust emissions would primarily result from site preparation (e.g., demolition and

grading) activities. NO_X emissions would predominantly result from the use of construction equipment and haul truck trips. The assessment of construction air quality impacts considers all of these emissions sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the SCAB to comply with SCAQMD Rule 403 for Fugitive Dust. Rule 403 control requirements include measures to prevent the generation of visible dust plumes. Measures include, but are not limited to, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system or other control measures to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional $PM_{2.5}$ and PM_{10} emissions associated with construction activities by approximately 61 percent.

The air quality analysis conducted for the proposed project is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website. The SCAQMD recommends the use of the California Emissions Estimator Model (CalEEMod, Version 2022.1) as a tool for quantifying emissions of air pollutants that will be generated by constructing and operating development projects. Project-specific information was provided describing the schedule of construction activities and the equipment inventory required. The CalEEMod output files can be found in Appendix A.

Construction of the proposed project would last approximately 27 months in total and would involve structure demolition and site clearing, excavation and shoring of cut areas, leveling of the site and foundations, podium construction, paving, and landscaping and finishing of structures and features. Podium construction would be divided into two stages, with Podium I construction beginning in March 2024 following leveling and foundation work and Podium II and III construction beginning in May 2024. The durations of the individual phases of construction are summarized above in **Table 3-1**. Demolition activities are expected to take 20 workdays to complete and would demolish the existing 38,000 square foot parking lot and 2,000 square foot building, which would produce approximately 1,781 tons of debris for off-site disposal. Excavation and shoring activities are expected to take 30 workdays and would require up to 4,500 truck haul trips to excavate 33,705 cubic yards of material for the construction of the subterranean parking. Paving would be required on approximately 0.84 acres of the project site, after which finishing, landscaping, and coating activities are anticipated to take 50 workdays to complete. Activities for the construction of Podiums II & III would overlap with Podium I construction, paving activities, and landscaping and finishing activities. The emissions analysis accounted for the phases of construction that would be ongoing simultaneously. Maximum daily emissions for each activity and overlapping activities were estimated based on heavy duty equipment use and fugitive dust (on-site) and vehicular travel to and from the project site (off-site). **Table 3-2** shows the maximum unmitigated daily regional emissions for activity, including overlapping activities. As shown, maximum daily emissions of all air pollutants would remain below applicable regional SCAQMD screening thresholds identified in **Table 3-1**, above.

TABLE 3-2: ESTIMATED REGIONAL CONSTRUCTION EMISSIONS – UNMITIGATED

Construction Activity	Maximum Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
DEMOLITION						
On-Site Emissions	2.6	25.0	21.7	<0.0	2.3	1.2
Off-Site Emissions	0.2	3.9	3.9	<0.0	0.3	0.1
Total	**2.9**	**28.9**	**25.6**	**0.1**	**2.6**	**1.3**
EXCAVATION & SHORING						
On-Site Emissions	2.4	21.9	24.5	<0.0	2.9	1.8
Off-Site Emissions	0.4	13.1	7.3	0.1	0.9	0.4
Total	**2.8**	**35.0**	**31.8**	**0.1**	**3.8**	**2.2**
LEVELING & FOUNDATIONS						
On-Site Emissions	3.3	31.5	30.0	<0.1	5.3	3.3
Off-Site Emissions	0.2	1.8	3.3	<0.1	0.1	<0.1
Total	**3.5**	**33.3**	**33.3**	**<0.1**	**5.4**	**3.3**
CONSTRUCTION OF PODIUM I (BUILDING A & SUBTERRANEAN PARKING)						
On-Site Emissions	1.8	15.4	20.8	<0.1	0.6	0.6
Off-Site Emissions	1.8	3.9	31.0	<0.1	0.4	<0.1
Total	**3.6**	**19.3**	**51.8**	**<0.1**	**1.0**	**0.6**
PAVING YORK AVE & HARDSCAPE AREAS						
On-Site Emissions	0.9	7.5	10.0	<0.1	0.4	0.3
Off-Site Emissions	0.2	0.9	2.7	<0.1	<0.1	<0.1
Total	**1.1**	**8.4**	**12.7**	**<0.1**	**0.4**	**0.3**
CONSTRUCTION OF PODIUM II & III (BUILDINGS B & C & SUBTERRANEAN PARKING)						
On-Site Emissions	1.8	15.4	20.8	<0.1	0.6	0.6
Off-Site Emissions	1.8	3.9	31.0	<0.1	0.4	<0.1
Total	**3.6**	**19.3**	**51.8**	**<0.1**	**1.0**	**0.6**
FINISHING, LANDSCAPING, AND COATING						
On-Site Emissions	6.1	4.8	6.8	<0.1	0.1	0.1
Off-Site Emissions	0.2	0.9	2.5	<0.1	<0.1	<0.1
Total	**6.3**	**5.7**	**9.4**	**<0.1**	**0.2**	**0.1**
PODIUM I CONSTRUCTION + PODIUM II & III CONSTRUCTION						
On-Site Emissions	3.5	30.8	41.6	0.1	1.3	1.2
Off-Site Emissions	3.7	6.9	61.9	<0.1	0.8	0.1
Total	**7.2**	**37.7**	**103.5**	**0.1**	**2.1**	**1.3**
PAVING + PODIUM II & III CONSTRUCTION						
On-Site Emissions	2.6	21.5	30.7	0.1	0.9	0.8
Off-Site Emissions	2.0	4.4	33.7	<0.1	0.5	0.1
Total	4.6	25.8	64.4	0.1	1.4	0.9
FINISHING/LANDSCAPING/COATING + PODIUM II & III CONSTRUCTION						
On-Site Emissions	7.8	18.8	27.5	0.1	0.7	0.6
Off-Site Emissions	1.9	4.3	26.9	<0.1	0.5	0.1
Total	**9.7**	**23.1**	**54.4**	**0.1**	**1.1**	**0.7**
REGIONAL EMISSIONS ANALYSIS						
Maximum Daily Emissions	**9.7**	**37.7**	**103.5**	**0.1**	**5.4**	**3.3**
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2022.

In addition to maximum daily regional emissions, maximum localized (on-site) emissions were quantified for each construction activity. **Table 3-3** presents the results of emissions modeling from on-site construction sources. The SCAQMD's LSTs selected for comparison values are for a two-acre daily disturbance aera within the construction site in SRA 3 with a sensitive receptor within 25 meters. Maximum on-site emissions during project construction would not exceed the applicable LST values developed to prevent localized pollutant hot-spots and air quality violations. The proposed project would result in a less-than-significant impact related to consistency with the AQMP and construction emissions.

TABLE 3-3: ESTIMATED LOCALIZED CONSTRUCTION EMISSIONS – UNMITIGATED

	Maximum Daily On-Site Emissions (Pounds Per Day)			
Construction Activity	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
EMISSIONS ANALYSIS				
Demolition	25.0	21.7	2.3	1.2
Excavation & Shoring	21.9	24.5	2.9	1.8
Leveling & Foundation	31.5	30.0	5.3	3.3
Podium I + Podium II & III Construction	30.8	41.6	1.3	1.2
Paving + Podium II & III Construction	21.5	30.7	0.5	0.1
Landscaping/Finishing + Podium II & III Construction	18.8	27.5	0.7	0.6
IMPACT ANALYSIS				
Maximum Daily Localized Emissions	**31.5**	**41.6**	**5.3**	**3.3**
Localized Significance Threshold /a/	131	967	8	5
Exceed Threshold?	**No**	**No**	**No**	**No**

/a/ The project site is located in LST SRA 3, would have up to two acres of ground area disturbed daily, and is less than 25 meters from the nearest sensitive receptor.
Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2022.

Operation. The proposed project would generate regional operational emissions from vehicle trips and energy use. The proposed land uses would generate 1,754 daily trips and approximately 16,355 vehicle miles traveled (VMT), which equates to an average trip length of approximately 9.3 miles. The CalEEMod emissions modeling program generates estimates of emissions from consumer products, landscaping, natural gas combustion, and mobile vehicle trips based on the land use type and size of the project. **Table 3-4** presents the CalEEMod results for operation of the proposed project. Future occupation of the proposed project would not result in daily emissions that exceed SCAQMD regional thresholds for any applicable pollutant.

The second consistency criterion requires that the proposed project not exceed the assumptions in the AQMP. Regarding growth forecasts, the residential land use would add 440 apartment dwelling units, including affordable units. The unit mix has yet to be determined. It is anticipated that the proposed project would introduce up to approximately 1,026 new residents in transit-oriented development with access to high quality transit hubs. The proposed 5.07-acre infill development has no potential to interfere with regional and City growth projections, which are orders of magnitude greater than the population, housing, and employment numbers associated with the proposed project. Therefore, the proposed project would have no potential to result in growth that would exceed the projections incorporated into the AQMP, and impacts are less than significant.

TABLE 3-4: ESTIMATED DAILY OPERATIONAL EMISSIONS						
	Maximum Daily Emissions (Pounds Per Day)					
Operational Activity	**VOC**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
EMISSIONS ANALYSIS						
Area Sources	15.1	0.1	31.1	<0.1	<0.1	<0.1
Energy Sources	0.1	1.2	0.5	<0.1	<0.1	<0.1
Mobile Sources	7.5	5.5	53.5	0.1	4.8	0.9
IMPACT ANALYSIS						
Daily Operational Emissions	**22.7**	**6.8**	**89.0**	**0.1**	**4.9**	**1.0**
Regional Threshold	55	55	550	150	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: Emissions modeling files can be found in **Appendix A**.
SOURCE: TAHA, 2022.

b) **Less-Than-Significant Impact**. The SCAB is designated as nonattainment of the California Ambient Air Quality Standards and National Ambient Air Quality Standards for O_3, PM_{10}, and $PM_{2.5}$. Therefore, there is an ongoing regional cumulative impact associated with these air pollutants. Considering the existing environmental conditions, the SCAQMD propagated guidance that an individual project can emit allowable quantities of these pollutants on a regional scale without significantly contributing to the cumulative impacts. As discussed above, air pollutant emissions associated with construction of the proposed project would not exceed any applicable SCAQMD air quality thresholds of significance. The SCAQMD does not consider individual project emissions of lesser magnitude than the mass daily thresholds to be cumulatively considerable. Therefore, the proposed project would not result in a cumulatively considerable net increase of nonattainment pollutants, and impacts are less than significant.

c) **Less-Than-Significant Impact**

Construction. As shown in **Table 3-3**, criteria pollutant and ozone-precursor emissions from on-site sources would remain below applicable localized SCAQMD thresholds, which indicate there is no possibility for the occurrence of substantial concentrations of these pollutants reaching sensitive receptors. With regards to concentrations of air toxics, the use of heavy-duty construction equipment and haul trucks during construction activities would release diesel PM to the atmosphere through exhaust emissions. Diesel PM is a known carcinogen, and extended exposure to elevated concentrations of diesel PM can increase excess cancer risks in individuals. However, carcinogenic risks are typically assessed over timescales of several years to decades, as the carcinogenic dose-response is cumulative in nature. Short term exposures to diesel PM would have to involve extremely high concentrations in order to exceed the SCAQMD air quality significance threshold of 10 excess cancers per million.

Construction of the proposed project would persist for approximately 27 months, which represents only eight percent of the 30-year exposure period that the Office of Environmental Health Hazard Assessment (OEHHA) utilizes for assessing long-term residential and occupational carcinogenic exposures and risks. On average, diesel PM emissions from on-site equipment would be approximately 1.15 pounds per day. The proposed project would comply with the CARB In-Use Off-Road Diesel Vehicle Regulation and the Air Toxics Control Measure, which limit diesel powered equipment

and truck idling to no more than five minutes at a location and minimize diesel PM emissions through inspections and maintenance. Adhering to these provisions would ensure that substantial diesel PM concentrations at sensitive receptor locations would not be generated by on-site equipment activity. A majority of haul truck diesel PM emissions would be dispersed along the haul truck route, and at the project site haul truck idling would be limited to five minutes or less as required by the CARB truck rule. Therefore, the proposed project would result in a less-than-significant impact related to construction TAC emissions, concentrations, and exposures.

Operation. The proposed apartment complex does not include an industrial component that would constitute a new substantial stationary source of operational air pollutant emissions, nor does it include a land use that would generate a substantial number of heavy-duty truck trips within the region. The proposed project would not generate air toxic emissions that would expose sensitive receptors to substantial pollutant concentrations. Therefore, a less-than-significant impact would occur.

d) Less-Than-Significant Impact

Construction. Odors are the only potential construction emissions other than the sources addressed above. Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site and would be temporary in nature and would not persist beyond the termination of construction activities. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. In addition, as construction-related emissions dissipate away from the construction area, the odors associated with these emissions would also decrease and would be quickly diluted. Therefore, the proposed project would result in a less-than-significant impact related to construction odors.

Operation. Odors are the only potential operational emissions other than the sources addressed above. Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding.[5] The operations would comply with SCAQMD Rule 402, which would prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. On-site trash receptacles would have the potential to create adverse odors. The facility would properly maintain odors associated with trash in compliance with the IMC. Therefore, the proposed project would result in a less-than-significant impact related to operations odors.

[5]SCAQMD, *CEQA Air Quality Handbook*, 1993.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.4 BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☑	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	☐	☐	☑	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

a) **No Impact**. A significant impact would occur if the proposed project would have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species. The project site is currently vacant land located in an urbanized area and surrounded primarily by commercial and residential uses. Plant life on the project site is limited to non-native and ornamental species used for landscaping, such as common grasses. Animal life is comprised of common bird, insect, reptile, and small mammal species typical of urban environments. A search of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), the project site is not located in an area where has been recent siting of any endangered, rare, or threatened species.[6] Therefore, the proposed project would not have an effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or the U.S. Fish and Wildlife Service (USFWS), and no impact would occur.

[6]California Department of Fish and Wildlife, *California Natural Diversity Database*, https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data, accessed September 2022.

b) **No Impact**. A significant impact would occur if any riparian habitat or natural community would be lost or destroyed as a result of urban development. As discussed in Response to Checklist Question 3.4(a), the project site is located within an urbanized area surrounded primarily by commercial and residential uses. The project site does not contain any riparian habitat and does not contain any streams or water courses necessary to support riparian habitat. Therefore, the proposed project would not have any effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS, and no impact would occur.

c) **No Impact**. The project site does not contain any state or federally protected wetlands. The project site is located in an urbanized area and is zoned for commercial uses. The proposed project would not have any effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, no impact would occur.

d) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would interfere with, or remove access to, a migratory wildlife corridor or impede use of native wildlife nursery sites. The project site and the surrounding area are highly urbanized, and there are no wildlife corridors on or in proximity to the project site according to the California Department of Fish and Wildlife's Biogeographic Information and Observation System (BIOS). The project site does not contain any state or federally protected wetlands that would contain migratory fish or other wildlife species. If migratory birds were to traverse the project site, the birds would likely utilize mature vegetation around the project site, some of which may potentially provide nesting sites for migratory birds. Several mature trees line the perimeter of the project site. Construction of the proposed project would preserve as many trees as possible, however it is anticipated that the proposed project may necessitate some trees to be removed or pruned, which could potentially affect migratory birds; however, the proposed project is required to comply with the Migratory Bird Treaty Act (MBTA). Under the MBTA, if such removal activities occur during the nesting season (February 15 through August 15), a biological monitor shall be present during the removal activities to ensure that no active nests would be adversely affected. Therefore, with implementation of Mitigation Measure **BR-1**, the proposed project is not expected to interfere with wildlife movement or impede the use of native wildlife nursery sites

e) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project were inconsistent with local regulations pertaining to biological resources. As discussed in Response to Checklist Question 3.4(d), several trees along the perimeter of the project site that may need to be removed as part of the proposed project. Any removal of trees on the project site is required to comply with the City's tree preservation ordinance (IMC, Chapter 12, Article 32) and obtain a tree removal permit prior to construction. As the project applicant would be required to comply with the City's tree preservation ordinance, the proposed project would not conflict with any local policies or ordinances protecting biological resources. Therefore, a less-than-significant Impact would occur.

f) **No Impact**. A significant impact would occur if the proposed project were inconsistent with any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP) or other approved local, regional, or state habitat conservation plan. The project site is located in an urbanized area and surrounded primarily by commercial and residential uses. The project site is not located within or adjacent to the boundaries of any adopted

habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

MITGATION MEASURES

BR-1 All on-site tree removal shall be performed prior to or after the bird-breeding season of February 1st through August 15th (i.e., only between August 16 and January 31). If clearing/vegetation removal is planned to occur during the breeding season, a pre-construction nest survey shall be conducted one week prior to any clearing. Work may proceed only if no active bird nests are detected. By avoiding clearing during the bird-breeding season or performing pre-construction surveys to ensure no active nests are present prior to clearing, the proposed project will be in compliance with the Migratory Bird Treaty Act and pertinent sections of the California Department of Fish and Wildlife Code.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.5 CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☑	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☑	☐	☐

a) **No Impact**. A significant impact would occur if the proposed project would cause a substantial adverse change in the significance of a historical resource. CEQA Guidelines Section 15064.5 generally defines a historical resource as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. The project site is currently vacant and contains no historical resources. The City also maintains a list of local, significant resources, and there are no historical resources within the project area. Therefore, no impact would occur.

b) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if a known or unknown archaeological resource would be removed, altered, or destroyed as a result of the proposed project. CEQA Guidelines Section 15064.5 defines significant archaeological resources as resources which meet the criteria for historical resources, as discussed above, or resources that constitute unique archaeological resources associated with a scientifically recognized important prehistoric or historic event or person. Inglewood is located in Southern California, which is the ancestral territory of several Native American tribes. Archaeological materials associated with occupation of the City are known to exist and have the potential to provide important scientific information regarding history and prehistory. The project site is located in an urbanized area, and has been subject to previous grading and development multiple times. Any surficial archaeological resources that may have existed on the project site are likely to have been previously disturbed or removed. However, given there is a possibility of encountering unknown archaeological resources during excavation, Mitigation Measure **CUL-1** provides a protocol for the inadvertent discovery of archaeological resources. Therefore, with implementation of Mitigation Measure **CUL-1** impacts related to archaeological resources would be less than significant.

c) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if previously interred human remains would be disturbed during excavation of the project site. While no formal cemeteries, other places of human interment, or burial grounds or sites are known to exist within the project site, there is always a possibility that human remains may be unexpectedly encountered during construction. The project site has been subject to multiple instances of grading and development, and therefore it is highly unlikely that any human remains would be encountered during construction. In the unlikely event that human remains are encountered during

construction, Mitigation Measure **CUL-2** would require the compliance with Section 7050.5 of the California Health and Safety Code. If human remains of Native American origin are discovered during construction activities, the proposed project would be required to comply with state laws, under the jurisdiction of the Native American Heritage Commission (Public Resources Code Section 5097), relating to handling of Native American burials. Therefore, with implementation of Mitigation Measure **CUL-2**, impacts related to human remains would be less than significant.

MITIGATION MEASURES

CUL-1 If buried materials of potential cultural significance are discovered within an undisturbed context during earth-moving operations associated with the project, then all work in that area shall be halted or diverted away from the discovery to a distance of 50 feet until the monitor and a qualified archaeological supervisor can evaluate the nature and/or significance of the find(s).

Construction shall not resume in the locality of the discovery until consultation between the qualified supervisor, the lead agency, the applicant's representative, and all other concerned parties, takes place and reaches a conclusion approved by the Lead Agency. However, further survey work, evaluation tasks, or data recovery of the significant resource may be required by the Lead Agency if the resource cannot be avoided. In response to the discovery of significant cultural resources, the Lead Agency may also add additional compliance tasks to be followed during the continued site development, which may include additional monitoring.

CUL-2 The inadvertent discovery of human remains is always a possibility during ground disturbances; State of California Health and Safety Code Section 7050.5 addresses these findings. This code section states that in the event human remains are uncovered, no further disturbance shall occur until the County Coroner has determined the origin and disposition of the remains pursuant to California Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately, together with the lead agency and the property owner.

If human remains of Native American origin are discovered during construction activities, the proposed project would be required to comply with state laws, under the jurisdiction of the Native American Heritage Commission (Public Resources Code Section 5097), relating to handling of Native American burials. The Coroner must notify the Native American Heritage Commission within 24 hours, which shall determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection of the project site within 48 hours of being granted access to the project site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials and an appropriate re-internment site.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.6 ENERGY - Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☑	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☑	☐

a-b) **Less-Than-Significant Impact**. The main forms of available energy supply are electricity, natural gas, and oil. During construction of the proposed project, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control, powering lights, electronic equipment, or other construction activities that require electrical power. Construction activities typically do not involve the consumption of natural gas. Construction activities would consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment, round-trip construction worker travel to the project site, and delivery and haul truck trips. Construction activities would comply with CARB's "In-Use Off-Road Diesel Fueled Fleets Regulation", which limits engine idling times to reduce harmful emissions and reduce wasteful consumption of petroleum-based fuel. Additionally, the proposed project would comply the California Renewable Portfolio Standard, the Clean Energy and Pollution reduction Act of 2015 (Senate Bill 350). Compliance with local, state, and federal regulations would reduce short-term energy demand during the proposed project's construction to the extent feasible, and proposed project construction would not result in a wasteful or inefficient use of energy.

During operations of the proposed project, Southern California Edison would provide electricity and Southern California Gas Company would provide natural gas to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, elevators, ventilation, air conditioning, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed apartment complex. However, the proposed project does not involve any characteristics or processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or involve the use of equipment that would not conform to current emissions standards and related fuel efficiencies.

In March 2013, the City of Inglewood adopted an Energy and Climate Action Plan to guide the City toward attainable conservation goals that may also significantly reduce the impact of greenhouse gas emissions within the community. The Energy and Climate Action Plan proposes several policies related to energy-efficiency and conservation, including energy and water conservation design features in new development projects. The proposed project will be subject to the California Green Building Standards Code, which requires new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert

construction waste from landfills, and install low pollutant-emitting finish materials. The proposed project does not include any feature (i.e., substantially alter energy demands) that would interfere with implementation of these state and City codes and plans. Therefore, a less-than-significant impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.7 GEOLOGY AND SOILS - Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☑	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☑	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	☑
d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or unique geologic feature?	☐	☐	☑	☐

a.i) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions by increasing the potential to expose people or structures to the rupture of a known earthquake fault. The Alquist-Priolo Earthquake Fault Zoning Act regulates development near active faults to mitigate the hazard of surface fault rupture. It prohibits the location of most structures for human occupancy across the trace of active faults. The Act also establishes Earthquake Fault Zones and requires geologic/seismic studies of all proposed developments within 1,000 feet of the zone. The Earthquake Fault Zones are delineated and defined by the State Geologist and identify areas where potential surface rupture along a fault could occur. According to the California Department of Conservation Earthquake Zones of Required Investigation map, the project site is not

located within the Alquist-Priolo Special Studies Zone, and no trace of any known active or potentially active fault passes through the project site.[7] Therefore, no impact would occur.

a.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions by increasing the potential to expose people or structures to substantial adverse effects related to strong ground shaking from severe earthquakes. As with all properties in the seismically active Southern California region, the project site is susceptible to ground shaking during a seismic event. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. The proposed project does not include activities that would increase the potential to expose people or structures to the adverse effects involving strong seismic ground shaking. Additionally, the design and construction of the proposed building is required to conform to the California Building Code seismic standards, as well as all other applicable codes and standards to reduce impacts from strong seismic ground shaking. Therefore, a less-than-significant impact would occur.

a.iii) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions by increasing the potential to expose people or structures to substantial adverse effects related to seismic-related ground failure, including liquefaction. Liquefaction typically occurs when a saturated or partially saturated soil becomes malleable and loses strength and stiffness in response to an applied stress caused by earthquake shaking or other sudden change in stress conditions. Soil liquefaction occurs when loose, saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Liquefaction usually results in horizontal and vertical movements from the lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. According to the California Department of Conservation's Earthquake Zones of Required Investigation map, the project site is not located within a liquefaction hazard zone.[8] In addition, prior to the issue of building permits, a site-specific geotechnical study would be prepared by a licensed engineer to outline structural design elements that would maintain structural integrity to the maximum extent. Furthermore, the proposed project would be constructed in accordance with the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, no impact would occur.

a.iv) **No Impact**. A significant impact would occur if the proposed project would exacerbate existing environmental conditions by increasing the potential to expose people or structures to substantial adverse effects related to landslides. According to the California Department of Conservation's Earthquake Zones of Required Investigation map, the project site is not located within an earthquake-induced landslide area.[9] Therefore, no impact would occur.

[7] California Department of Conservation, *Earthquake Zones of Required Investigation,* https://maps.conservation.ca.gov/cgs/EQZApp/app/, April 16, 2020.
[8] *Ibid*.
[9] *Ibid*.

b) **Less-Than-Significant Impact**. A significant impact would occur if construction activities or future uses of the proposed project would result in substantial soil erosion or loss of topsoil. During ground disturbing activities, such as grading, the project site could potentially be subject to soil erosion or loss of topsoil. However, the proposed project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion impacts. The project applicant would also be required to comply with Section 10-208 of the IMC, which controls pollutants from new development/redevelopment projects. In accordance with the requirements of the NPDES permit and Section 10-208 of the IMC, the project applicant would be required to comply with the current MS4 Permit (Order No. R4-2012-0175). The project applicant shall prepare and implement a standard urban stormwater mitigation plan (SUSMP) that the City would review and approve prior to construction and operation of the proposed project. The SUSMP shall implement set LID standards and practices for stormwater pollution mitigation. Therefore, less-than-significant impacts related to soil erosion or the loss of topsoil would occur.

c) **No Impact**. A significant impact would occur if the proposed project would cause geologic unit or soil on the project site to become unstable or, if the project site is on unstable geologic unit or soil, the proposed project would exacerbate existing conditions so as to increase the potential for landslides, lateral spreading, subsidence, liquefaction, or collapse. As discussed above, the project site is not located within a liquefaction hazard zone or an earthquake-induced landslide area, respectively.[10] The proposed project would not create liquefaction or landslide hazards because the proposed project does not involve activities that would affect seismic conditions or alter underlying soil or groundwater characteristics that govern liquefaction potential. Additionally, the project site and the surrounding area are relatively flat and, thus, are not susceptible to landslides.

Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The compaction of subsurface sediments by fluid withdrawal will cause subsidence or ground collapse overlying a pumped reservoir. The project site and its vicinity do not contain any subsurface oil extraction facilities or groundwater withdrawal activities. The proposed project would not introduce any subsurface oil extraction facilities, mining activities, or extraction of mineral resources. In addition, prior to the issue of building permits, a site-specific geotechnical study would be prepared by a licensed engineer to outline structural design elements that would maintain structural integrity to the maximum extent. Thus, the proposed project would not cause or exacerbate existing conditions associated with subsidence and collapse. Furthermore, the proposed project would be constructed in accordance with the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, no impact would occur.

d) **No Impact**. A significant impact would occur if the proposed project would be built on expansive soils without proper site preparation or adequate foundations for proposed buildings, thus posing a hazard to life and property. Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall,

[10]California Department of Conservation, *Earthquake Zones of Required Investigation,* https://maps.conservation.ca.gov/cgs/EQZApp/app/, April 16, 2020.

and utility leakage. Expansive soils are commonly very fine-grained with high to very high percentages of clay and are usually found in areas where underlying formations contain an abundance of clay minerals. Due to high clay content, expansive soils expand with the addition of water and shrink when dried, which can cause damage to overlying structures. Prior to the issue of building permits, a site-specific geotechnical study would be prepared by a licensed engineer to outline structural design elements that would maintain structural integrity to the maximum extent. In addition, the proposed project would be constructed in accordance with the California Building Code, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, no impact would occur.

e) **No Impact**. A significant impact would occur if adequate wastewater disposal were not available to the project site. The project site is fully developed and located in an urbanized area of the City, where wastewater infrastructure is currently in place. The proposed project would connect to the existing sanitary sewer system and would not include septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

f) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project directly or indirectly destroyed a unique paleontological resource or unique geologic feature. Paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities in fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface. The project site is underlain with Quaternary Old Alluvial Valley Deposits (Qoa), which are sediment deposited from rivers. These types of rocks typically do not form fossil bearing rock, as opposed to sedimentary rock. The likelihood of encountering paleontological resources within Qoa is very unlikely. Furthermore, as discussed in Response to Checklist Question 3.5(b), any ground-disturbing activities associated with the proposed project would cease if any archaeological or paleontological resources are encountered. Therefore, less-than-significant impacts would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.8 GREENHOUSE GAS EMISSIONS - Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

a) Less-Than-Significant Impact. The following GHG analysis is based on this study. GHG emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), keep the average surface temperature of the Earth close to 60°F. Without the natural greenhouse effect, the Earth's surface would be about 61°F cooler.[11]

In addition to CO_2, CH_4, and N_2O, GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), black carbon (black carbon is the most strongly light-absorbing component of particulate matter emitted from burning fuels, such as coal, diesel, and biomass), and water vapor. CO_2 is the most abundant pollutant that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant but have higher global warming potential than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO_2, denoted as CO_2e. CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

The CEQA Guidelines require lead agencies to adopt GHG thresholds of significance. When adopting these thresholds, the amended Guidelines allows lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold. Neither the City nor SCAQMD has officially adopted a quantitative threshold value for determining the significance of GHG emissions that will be generated by projects under CEQA.

SCAQMD published the Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold in October 2008.[12] SCAQMD convened a GHG CEQA Significance Threshold Stakeholder Working Group beginning in April of 2008 to examine alternatives for establishing quantitative GHG thresholds within the district's jurisdiction. The Working Group proposed a tiered screening methodology for assessing the potential significance of GHG emissions generated by CEQA projects. The tiered

[11]California Environmental Protection Agency Climate Action Team, *Climate Action Report to Governor Schwarzenegger and the California Legislator*, March 2006.

[12]SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, October 2008.

screening methodology was outlined in the minutes of the final Working Group meeting on September 28, 2010.[13] For the purposes of this environmental assessment, the interim Tier III screening threshold value of 3,000 $MTCO_2e$ per year is the most appropriate comparison value for impacts determination based on the commercial elements comprising the proposed project.

GHG emissions that will be generated by the proposed project were estimated using CalEEMod, as recommended by the SCAQMD. CalEEMod quantifies GHG emissions from construction activities and future operation of projects. Sources of GHG emissions during project construction will include heavy-duty off-road diesel equipment and vehicular travel to and from the project site. Sources of GHG emissions during project operation will include employee and delivery vehicular travel, energy demand, water use, and waste generation. In accordance with SCAQMD methodology, the total amount of GHG emissions that would be generated by construction of the proposed project was amortized over a 30-year operational period to represent long-term impacts.

Table 3-5 presents the estimated GHG emissions that would be released to the atmosphere on an annual basis by the proposed project. Construction of the proposed project would produce approximately 4,029.6 $MTCO_2e$, or 134.3 $MTCO_2e$ annually over a 30-year operational horizon. The total annual operating emissions would be approximately 2,761.3 $MTCO_2e$ per year after accounting for amortized construction emissions. This mass rate is adequately below the most applicable quantitative draft interim threshold of 3,000 $MTCO_2e$ per year recommended by SCAQMD to capture 90 percent of CEQA projects within its jurisdiction. Therefore, impacts would be less than significant.

TABLE 3-5: PROPOSED PROJECT ANNUAL GREENHOUSE GAS EMISSIONS

Scenario and Emission Source	Carbon Dioxide Equivalent (Metric Tons per Year)
Construction Emissions Amortized (Direct) /a/	134.3
Area Source Emissions (Direct)	10.7
Energy Source Emissions (Indirect)	602.6
Mobile Source Emissions (Direct)	1,872.0
Waste Disposal Emissions (Indirect)	102.0
Water Distribution Emissions (Indirect)	40.0
TOTAL	**2,761.3**
SCAQMD Draft Interim Significance Threshold	**3,000**
Exceed Threshold?	**No**

/a/ Based on SCAQMD guidance, the emissions summary also includes construction emissions amortized over a 30-year span.
SOURCE: TAHA, 2022.

[13]SCAQMD, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15*, September 28, 2010, http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf?sfvrsn=2, accessed on June 4, 2019.

b) **Less-Than-Significant Impact**. Assembly Bill 32 requires CARB to develop and enforce regulations for the reporting and verification of statewide GHG emissions and directs CARB to set a GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. On December 11, 2008, CARB adopted the Scoping Plan, which sets forth the framework for facilitating the State's goal of reducing GHG emissions to 1990 levels by 2020. The First Update of the Scoping Plan was adopted on May 22, 2014. CARB has adopted the 2017 Scoping Plan in November 2017 which details strategies to cut back 40 percent of GHGs by 2030. Neither Assembly Bill 32, the updated first Scoping Plan or the 2017 Scoping Plan establishes regulations implementing, for specific projects, the Legislature's Statewide goals for reducing GHGs.[14] The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), and increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. These measures are designed to be implemented by state agencies, and therefore the proposed project would not interfere with implementation of the Assembly Bill 32 measures.

The California legislature enacted Senate Bill (SB) 375 in 2008 to set regional targets for the reduction of GHG emissions and require the preparation of SCSs by metropolitan planning organizations. For the SCAG region, the SCS is contained in the 2020–2045 RTP/SCS. The RTP/SCS focuses the majority of new job growth in high-quality transit areas and other opportunity areas on existing main streets, in downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. The proposed project would be an infill development located within walking distance of the Los Angeles County Metropolitan Transportation Authority (Metro) Lines 211, 212, and 312, which run via Prairie Avenue; and Lines 120 and 207 runs via Imperial Highway. These bus routes would provide convenient connection to the regional transit system. The proposed project is located approximately 0.38 miles from the Metro C Line (Green) Hawthorne/Lennox Station, which provides light-rail service to Redondo Beach and Norwalk and is considered a major transit stop. The project is located within a Transit Priority Area (TPA) as defined by the SCAG, as part of SCAG's 2045 plan. In addition to the project site's proximity to local and regional transit system as previously stated, the proposed project would also introduce 26 short-term bicycle parking and 65 long-term bicycle parking spaces. Therefore, the proposed project would be consistent with the RTP/SCS and SB 375.

SB 743 was enacted in 2013 to evolve the assessment of transportation impacts under CEQA, and in 2018 new CEQA Guidelines were published that incorporated SB 743 by promulgating the use of VMT and VMT reductions as a significance threshold metric. Because the proposed project is located within a TPA and provides bicycle parking, the proposed project would not have the potential to conflict with the regional VMT reduction efforts of SB 743 and impacts are presumed to be less than significant.

With regards to local climate planning initiatives, the City adopted an Energy and Climate Action Plan (ECAP) in 2013 to guide the City toward attainable conservation goals that may also significantly reduce the impact of GHG emissions within the

[14] *Center for Biological Diversity v. California Department of Fish and Game* (2015) 62 CAl.4th 204, 259.).

community. The ECAP established four primary compliance paths which projects may choose to adhere to, including: ministerial and exempt project status, implementation of a combination of sustainable development standards, performance-based compliance, or payment of an in-lieu fee. This analysis utilizes the Climate-Ready Development Standards included as Appendix F to the ECAP as the metric for demonstrating Project consistency with the applicable local GHG emissions reduction plan. These measures were developed on a points-based system, which were chosen because they have been demonstrated by various studies to directly reduce GHG emissions or support changes in activities that lead to GHG emissions reductions.

Each Climate-Ready Development Standard has a point value associated with it that reflects its general effectiveness at reducing GHG emissions. The standards apply to various types of projects, and a qualifier is included denoting which types of projects may implement the standard. Applicants have discretion regarding which measures that they would want their project to comply with; however, for a project to be fully compliant with the goals of the ECAP it must incorporate features meeting the standards sufficient to accrue a total of 20 points. **Table 3-6** presents the ECAP Climate-Ready Development Standards that are applicable to the Project and that the Applicant has identified will be incorporated into the design. As shown in **Table 3-6**, project design features total 23 points according to the ECAP standards. Furthermore, the proposed project would be consistent with the Energy and Climate Action Plan by complying with the California Building Code (Title 24), including the California Green Building Standards Code.

The California Green Building Standard Code, referred to as CalGreen, is the first statewide Green Building Code. CalGreen lays out minimum requirements for newly constructed buildings in California, which will reduce GHG emissions through improved efficiency and process improvements. It requires builders to install plumbing that cuts indoor water use by as much as 20 percent, to divert 50 percent of construction waste from landfills to recycling, and to use low-pollutant paints, carpets, and floors. Therefore, the Project would be consistent with the local GHG emissions reduction efforts adopted by the City of Inglewood, and this impact would be less than significant with regards to local planning.

Additionally, the Conservation Element of the City's General Plan states that the City has the responsibility to monitor development and to plan and implement programs and measures to improve mobility and reduce air pollution, such as transit-oriented development (TOD). The proposed project is located within one-half mile of the C Line Hawthorne/Lennox Station and within one-quarter mile of a high-frequency bus stop, and therefore satisfies the goals of the Conservation Element. Therefore, impacts would be less than significant.

TABLE 3-6: CONSISTENCY WITH ECAP CLIMATE-READY DEVELOPMENT STANDARDS

Design Standard	Applicable to Project	Points
Demonstrate the building will perform at least 15% better than the current Title 24 energy efficiency standards (at the time of MND Certification).	Yes	3
Provide preferred parking for low-emitting and fuel efficient vehicles for 5% of the total vehicle parking capacity OR provide electric vehicle recharging stations for 3% of the total vehicle parking capacity.	Yes	3
All non-permeable paving materials shall be high albedo materials with a Solar Reflectance Index of at least 29.	Yes	2
Provide continuous rows of appropriately spaced trees (every 25 feet) along all streets (or an equivalent number of trees placed offsite at the discretion of the Planning Director). Trees shall be of a type and nature that have broad canopies and provide ample shade. Evergreen trees are preferred. Palm trees shall be prohibited from consideration towards achieving this standard.	Yes	2
If a facade faces a street or sidewalk, 30% or greater of its continuous length shall not be blank (without windows and doors).	Yes	2
It is prohibited for more than 20% of the linear street frontage of new buildings to be garages and service bay openings.	Yes	2
New multi-unit developments must install electricity, gas, and water meters for each unit.	Yes	2
Provide at least one secure, enclosed bicycle storage space, separate and independent from the required automobile parking areas, per occupant for a percentage of the planned occupancy and no less than one space per unit. For provision of spaces for 15% of planned occupancy, 1 point	Yes	1
Minimize the number of driveway cuts that intersect with sidewalks and other pedestrian walkways.	Yes	1
Locate the majority entry points to new buildings within a ¼ mile of a transit stop	Yes	1
Locate all new off-street surface parking lots at the side or rear of buildings, leaving building frontages facing streets free of surface parking lots.	Yes	1
Provide designated space, facilities, and services for recycling.	Yes	1
Use only high efficiency lighting.	Yes	1
Use of efficient irrigation systems and weather-based irrigation controllers.	Yes	1
Total	**-**	***23***

SOURCE: Inglewood Energy Climate Action Plan, Appendix F.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.9 HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☑	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☑	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

a-b) Less-Than-Significant Impact. A significant impact would occur if the proposed project created a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials, or if it created a significant hazard through the accidental release of hazardous materials into the environment. Construction of the proposed project would involve the temporary use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. However, all hazardous materials during construction and operations would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. The proposed multi-family residential apartments would involve storage and use of small amounts of commercially available janitorial and landscaping supplies. No industrial uses or activities are proposed that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through transport, use, or disposal. Therefore, impacts related to the creation of hazards to the public or the environment through the routine transport, use, disposal, or release of hazardous materials would be less than significant.

c) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Amino Leadership High School, Moffett Elementary School, and York Elementary School are located within one-quarter mile of the project site. There is a potential for release of hazardous emissions or handling of hazardous materials and substances during the short-term construction activities associated with the proposed project. There is a potential for release of hazardous emissions or handling of hazardous materials and substances during the short-term construction activities for the proposed development and, as discussed above, the proposed project is a residential facility that would involve storage and use of small amounts of commercially available janitorial and landscaping supplies. However, any hazardous materials used during construction of the proposed project would be handled in accordance with applicable state laws and regulations. Therefore, a less-than-significant impact would occur. During operations, as discussed in Response to Checklist Question 3.9(a-b), any hazardous materials used by the proposed apartment complex would be handled in accordance with applicable state laws and regulations and manufacturer's instructions. Therefore, a less-than-significant impact would occur.

d) **No Impact**. A significant impact would occur if the proposed project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The California Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) each maintain a database (EnviroStor and GeoTracker, respectively) that provides access to detailed information on hazardous waste sites and their cleanup statuses. EnviroStor focuses on hazardous waste facilities and sites with known contamination or sites with possible reason for further investigation. GeoTracker focuses on sites that impact or have the potential to impact water quality in California, with an emphasis on groundwater. A search of the EnviroStor and Geotracker databases determined that the project site is not included on any list compiled pursuant to Section 65962.5 of the Government Code.[15,16] Therefore, no impact would occur.

e) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project was located within an airport land use plan or within two miles of a public airport or public use airport and would result in a safety hazard or excessive noise for people residing or working in the project area. The project site is located in an airport land use plan area within two miles of the Hawthorne Municipal Airport; however, the project site is not located within the boundaries of the Hawthorne Municipal Airport Master Plan. The project is not located with the Airport Influence Area would not be subjected to substantial noise levels from the airport. Therefore, the proposed project would not result in an airport- or airstrip-related safety hazard for people residing or working in the area, and impacts would be less than significant.

[15]Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/, accessed September 2019.

[16]Department of Toxic Substances Control, *GeoTracker*, https://geotracker.waterboards.ca.gov/, accessed September 2019.

f) **No Impact**. A significant impact would occur if the proposed project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project is located just north of the emergency/disaster routes I-105 freeway and Imperial Highway.[17] However, the proposed project would not involve any uses that would interfere with an emergency response or evacuation plan, or with the use of these disaster routes in the event of an emergency or evacuation. Additionally, all areas of the project site can be accessed by emergency services via either 113th Street or the fire lane. In the event of an emergency, the proposed project would comply with the City's Multi-Hazard Functional Plan (MHFP), which addresses Inglewood's planned response to extraordinary emergency situations associated with man-made and natural disasters.[18] Additionally, the proposed project would be reviewed by the City's Fire Department to ensure that the proposed project would not interfere with the City's MHFP or evacuation routes. Therefore, the proposed project would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

g) **No Impact**. A significant impact would occur if the proposed project would expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires. The project site is located in an urbanized area of the City and is surrounded primarily by commercial uses. The project site is not located within a wildland area, and no wildlands are identified within the City.[19] Therefore, no impact would occur.

[17]County of Los Angeles Department of Public Works, *Disaster Routes*, http://dpw.lacounty.gov/dsg/disasterroutes/map/West%20Covina.pdf, accessed September 2022.
[18]City of Inglewood, *Multi-Hazard Functional Plan,* http://v1.cityofinglewood.org/depts/admin/emergency_preparedness.asp, accessed September 2022.
[19]City of Inglewood, *Land Use Element of the General Plan,* adopted September 2016.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.10 HYDROLOGY AND WATER QUALITY - Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☑	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☑	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☑	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☑	☐
iv) impede or redirect flood flows?	☐	☐	☑	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☑	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☑

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Construction of the proposed project would require grading and construction of the proposed apartment complex. Ground disturbing activities would result in exposed soils and debris, as well as equipment and materials that may contribute pollutants in stormwater runoff. However, the proposed project would be required to comply with all federal, State, and local regulations related to water quality standards and wastewater discharge. Construction contractors would be required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Activity Permit. The project applicant would also be required to comply with the requirements of the NPDES permit and implement a standard urban stormwater mitigation plan (SUSMP) prior to construction and operation of the proposed project. The SUSMP would include low impact development, structural and non-structural best management practices (BMPs) and source control BMPs. Compliance with these regulations would reduce the risk of water degradation from soil erosion and other pollutants related to construction activities, and

potential violations of water quality standards would be minimized through required BMPs. Therefore, less-than-significant impacts would occur.

b) **No Impact**. A significant impact would occur if the proposed project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the proposed project may impede sustainable groundwater management of the basin. The proposed project would not require the use of groundwater, and the project site is not currently used for groundwater recharge activities. Furthermore, the proposed project would not install any groundwater wells and would not otherwise directly withdraw any groundwater during construction or operations of the proposed project. Therefore, no impact would occur.

c.i) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would substantially alter the existing drainage pattern of the project site, including through the alteration of the course of an existing stream or river or through the addition of impervious surfaces, in a manner that would result in a substantial erosion or siltation on or off-site. The project site is located in an urbanized area of the City, and there are no streams or rivers in the vicinity of the project site. The project site is currently vacant with ornamental landscaping and common grasses. During construction, on-site soils would temporarily be exposed to surface water runoff; however, the proposed project would be required to comply with local, State, and federal regulations and standards related to minimizing potential erosion. Section 10-208 of the IMC requires every new development to comply with Part VI.D.7.c of the MS4 Permit and be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces. The proposed project would comply with Section 10-208 of the IMC and the requirements of the NPDES General Construction Activity Permit, therefore, would not alter existing drainage patterns in a manner that would result in erosion or flooding or increase stormwater runoff that would likely exceed existing storm drain capacity or increase pollutants in stormwater runoff. Therefore, less-than-significant impacts would occur.

c.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project site is located within an urbanized area of the City with existing stormwater infrastructure in place. Runoff from the site currently discharges to existing storm drains in the surrounding streets. Following construction of the proposed project, stormwater runoff from the project site would be directed into existing storm drains that currently receive surface water runoff under existing conditions. While the proposed project would introduce impervious surfaces to the currently vacant project site, the proposed project would be required to comply with the stormwater pollution control measures and low impact development requirements found in Section 10-208 of the IMC. Therefore, the proposed project is not expected to result in impacts to the existing drainage pattern such that it would result in on- or off-site flooding. Therefore, less-than-significant impacts would occur.

c.iii-iv) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems, provide substantial additional sources of polluted runoff, or impede or redirect floods. As discussed above, the proposed project would be required to comply with all federal, State, and local regulations related to water quality standards and wastewater discharge. Because construction of the proposed project would disturb more than one acre of soil,

construction contractors would be required to obtain coverage under the NPDES General Construction Activity Permit. The project applicant would adhere to the SUSMP which would include low impact development, structural and non-structural best management practices BMPs. Compliance with these regulations and policies would ensure that during construction, impacts related to the capacity of the City's existing storm drain system, the generation of polluted runoff, impede or redirection of runoff would be less than significant. No substantial changes in the existing drainage pattern would occur. Therefore, less-than-significant impacts would occur.

d) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project was located in a flood hazard, tsunami, or seiche zones, and therefore at risk of release of pollutants due to project inundation. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, or lake. A tsunami is a sea wave produced by a significant undersea disturbance. Mudflows result from the down-slope movement of soil and/or rock under the influence of gravity. The project site is not located near a body of water that is large enough to create a seiche during a seismic event. The project site is located approximately five miles east of the Pacific Ocean and is not within a coastal zone or tsunami inundation area. The proposed project and surrounding area is located within an Area of Minimal Flood Hazard.[20] Additionally, Section 10-184 of the IMC provides provisions for flood hazard reductions, including construction standards for developments located in a flood prone area. Therefore, less-than-significant impacts would occur.

e) **No Impact**. A significant impact would occur if the proposed project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The proposed project would be served with a potable water supply from imported surface water purchased from the Metropolitan Water District through the West Basin Municipal Water District and local groundwater produced from the West Coast Groundwater Basin via City-owned and operated wells[21]. These providers have sufficient supplies available to serve the project from existing entitlements and resources.

The project site is underlain by the West Coast Groundwater Basin, which provides groundwater to approximately eleven cities and unincorporated areas of Los Angeles County. This average annual production is roughly 52,000 acre-feet (AF), which accounts for 20 percent of total retail demands[22]. Groundwater quality and recharge regulations for the West Coast Groundwater Basin are governed by Water Replenishment District of Southern California (WRD) as identified in the Groundwater Basins Master Plan (GBMP).[23] The plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The proposed project would be required to comply with all federal, State, and local regulations related to water quality standards and wastewater discharge. Construction contractors would be required to obtain coverage under the NPDES General Construction Activity Permit. The project applicant would also be required to comply with

[20]Federal Emergency Management Agency, *Flood Insurance Rate Map*, https://msc.fema.gov/portal/search?AddressQuery=Inglewood%2C%20CA#searchresultsanchor, accessed April 2020.

[21]City of Inglewood, *Water Works,* https://www.cityofinglewood.org/463/Water-Works*,* accessed September 2022.

[22]West Basin Municipal Water District, *West Coast Groundwater Basin,* https://www.westbasin.org/water-supplies-groundwater/west-coast-groundwater-basin*, a*ccessed September 2022.

[23]The Water Replenishment District of Southern California (WRD), *Groundwater Basins Master Plan,* https://www.wrd.org/sites/pr/files/GBMP_FinalReport_Text%20and%20Appendicies.pdf, September 2016.

IMC Section 10-208, which controls pollutants from new development/redevelopment projects. In accordance with the requirements of the NPDES permit and IMC Section 10-208, the project applicant would be required to prepare and implement a SUSMP that the City would review and approve prior to construction and operation of a new development. The SUSMP shall include conditions that consist of low impact development, structural and non-structural BMPs and source control BMPs. Compliance with these regulations and policies would ensure that the proposed project would not conflict or obstruct implementation water quality control plan or sustainable groundwater management plan. Therefore, no impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.11 LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☑	☐

a) **No Impact**. A significant impact would occur if the proposed project would physically divide an established community. The project site is located within an urbanized area surrounded by primarily by commercial and residential uses and served by existing roadways. Upon approval of the discretionary actions needed to implement the proposed project, the proposed apartment building would be consistent with the uses that surround the project site. Similar to existing conditions, Prairie Avenue would continue to provide vehicular access to the project site. The I-105 freeway adjacent to the southern boundary of the project site provides regional access. The proposed project would not involve any street closure, would not result in the development of new thoroughfares or highways, and would not block access to or through the community. Pedestrian access would be maintained on the sidewalks along public roads surrounding the project site. No separation of uses or disruption of access between land use types would occur as a result of the proposed project. Therefore, no impact would occur.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. According to the City's General Plan, the project site is designated Commercial and has a zoning designation of Airport Commercial (C-2A), which does not permit residential uses. However, Policies 1.1, 1.2, 3.4, 3.5, and 3.6, of City's General Plan's Housing Element encourage the construction and support of affordable housing units such as in the proposed project. The discretionary actions required for the proposed project include the approval of a Disposition and Development Agreement (DDA), General Plan Amendment and Zone change. In addition, the project requires approval of a Planned Assembly Development (PAD). The PAD procedure encourages creative approaches to development that would not be realized through application of standard zoning regulations. The procedure is applied to sites of not less than 25,000 square feet to provide pre-planned and coordinated phases of development that would be mutually complementary when assembled together. The goals of the PAD procedure are to:

- Encourage the assembly of land into larger and more usable parcels;
- Achieve flexibility and variety in the physical development pattern of the City;
- Permit development that may vary from the specific provisions of City zoning regulations; and
- Encourage the better utilization of open space, better separation of pedestrian and vehicular traffic, and improved compatibility with surrounding neighborhoods particularly with mixed or different land uses.

The PAD process has produced developments that are aesthetically appealing, pedestrian oriented, afford additional open/green space, and have improved neighborhood compatibility. With approval of the requested discretionary actions, the proposed project would be consistent with the City's General Plan and IMC, and no impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.12 MINERAL RESOURCES - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☑

a-b) **No Impact**. A significant impact would occur if the proposed project would result in the loss of availability of a known mineral resource that would be of value to the region or locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan. The project site is located in an urbanized area and is surrounded primarily by residential and commercial uses. There are no areas within Inglewood containing known mineral resources appropriate for mineral extraction. As a result, no impacts relating to mineral resource extraction would occur from implementation of the proposed project. The project site is also not located on or near any oil fields, and no oil extraction and/or quarry activities have historically occurred on or are presently conducted at the project site. Therefore, the proposed project would not result in the loss of availability of any known regionally valuable or locally important mineral resource, and no impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.13 NOISE - Would the project:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☑	☐	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☑	☐	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	☐	☐	☑	☐

a) **Less-Than-Significant Impact with Mitigation Incorporated**. Sound is technically described in terms of the loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The A-weighted scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear.

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA and a 10-dBA increase is subjectively heard as a doubling in loudness. Noise levels decrease as the distance from the noise source to the receiver increases. Noise levels generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces (e.g., pavement) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet over hard surface from the noise source, 77 dBA at a distance of 200 feet, and so on. Noise levels generated by a mobile source will decrease by approximately 3 dBA over hard surfaces for each doubling of the distance.

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL) and Equivalent Noise Level (L_{eq}). CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to

7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night from 10:00 p.m. to 7:00 a.m. Because CNEL accounts for human sensitivity to sound, the CNEL is always a higher number than the actual 24-hour average. L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the average energy noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Summary of Applicable Noise Regulations/Standards

The City has established noise standards to control unnecessary, excessive and annoying noise. The standards are codified in IMC Chapter 5, Article 2 (Noise Regulations).

Construction noise is governed by IMC Section 5-41 (Construction of Building and Projects, Noise Regulated), which prohibits the use of construction tools, equipment, or the performance of any outside construction between the hours of 7:00 a.m. to 8:00 p.m. on buildings, structures, or projects within 500 feet of a residential zone in such a manner that a reasonable person residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been obtained from the Permits and Licenses Committee of the City.

Base Ambient Noise Levels (BANL), found in IMC Section 5-27 (Base Ambient Noise Levels), are noise levels specified by time period and land use zone. **Table 3-7** below displays the City's BANL. The IMC states that actual noise level measurements that exceed the levels outline in **Table 3-7** shall be employed as the BANL. Operational noise is governed by IMC Sections 5-30 (Maximum Residential Noise Levels) and Section 5-31 (Maximum Nonresidential Noise Levels), which establishes a maximum duration period during which exterior and interior noise levels on a property may exceed the BANL. Maximum residential noise levels are shown in **Table 3-8**. For commercial and industrial land uses noise levels shall not exceed the BAN for a maximum of 30 cumulative minutes in any hour.

TABLE 3-7: BASE AMBIENT NOISE LEVELS

Decibels	Time	Land Use Zone
45 dB(A)	10:00 p.m. – 7:00 a.m.	Residential
55 dB(A)	7:00 a.m. – 10:00 p.m.	Residential
65 dB(A)	Anytime	Commercial and uses not specified
75 dB(A)	Anytime	Industrial

SOURCE: City of Inglewood Municipal Code, *Section 5-27 (Base Ambient Noise Level)*.

The City's General Plan Noise Element provides guidance on improving the safety and health of the community and abatement of excessive noise. The General Plan outlines land use compatibility standards as a guideline for locating new land uses, which have been adopted from the California Office of Noise Control. As shown in **Table 3-9**, the General Plan Noise Element also contains operational noise standards for various noise sensitive uses.

TABLE 3-8: MAXIMUM RESIDENTIAL NOISE LEVELS	
Noise Level Exceeded	**Maximum Duration Period Land Use Zone**
EXTERIOR NOISE	
BANL	30 minutes in any hour
5 dBA above BANL	15 minutes in any hour
10 dBA above BANL	5 minutes in any hour
15 dBA above BANL	1 minute in any hour
20 dBA above BANL	Not permitted
INTERIOR NOISE	
BANL	5 minutes in any hour
5 dBA above BANL	1 minute in any hour
10 dBA above BANL	Not permitted
SOURCE: City of Inglewood Municipal Code, *Section 5-30 (Maximum Residential Noise Levels))*.	

TABLE 3-9: INTERIOR AND EXTERIOR NOISE STANDARDS			
Land Use Categories	**Land Use**	**Noise Level (dBA CNEL)**	
		Interior	**Exterior**
Residential	Single Family, Duplex, Multiple Family	45	65
	Mobile Homes	-	65
Commercial Industrial Institutional	Hotel, Motel, Transient Lodging	45	65
	Commercial Retail, Bank, Restaurant	55	-
	Office Building, Research and Development, Offices, City Office Building	45	-
	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	45	-
	Gymnasium (multipurpose)	50	-
	Sports Club	55	-
	Manufacturing, Warehousing, Wholesale, Utilities	65	-
	Movie Theatres	45	-
Institutional	Hospital, Schools' Classroom	45	65
	Church, Library	45	-
Open Space	Park	-	65
SOURCE: City of Inglewood, General Plan.			

Existing Noise Levels

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise.

Sensitive receptors have been identified within 500 feet of the proposed project and include:

- Residences adjacent to the north;
- Residences located approximately 100 feet to the east;
- La Quinta Inn and Suites located approximately 100 feet to the east;
- Residences located approximately 100 feet to the northeast;
- Residences located approximately 130 feet to the north;
- Crystal Inn Suites and Spa LAX located approximately 140 feet to the north;
- Residences located approximately 200 feet to the northwest;
- Residences located approximately 200 feet to the east;

- Residences located approximately 220 feet to the north;
- Residences located approximately 300 feet to the northeast;
- Anand Care Center located approximately 350 feet to the north;
- Hollypark Motel located approximately 360 feet to the southeast;
- Welcome Inn approximately 415 feet to the north; and
- Residences located approximately 450 feet to the northeast.

To characterize the existing noise environment, short-term noise measurements were taken using a SoundPro DL Sound Level Meter on Monday, November 9, 2020 between 12:00 p.m. and 3:30 p.m. Hourly noise levels within the project area ranged from 57.5 dBA L_{eq} to 75.9 dBA L_{eq}. Roadway noise from Prairie Avenue and the Interstate 105 Freeway were the most significant source of noise in the project area. Intermittent spikes in ambient noise in the project area can also be attributed to aircraft flyovers. Monitoring locations and existing noise levels are shown in **Table 3-10**.

TABLE 3-10: EXISTING NOISE LEVELS

Noise Monitoring Location	Sound Level (dBA, L_{eq})
11146 S Osage Ave.	61.7
113th St.	62.6
11222 Prairie Ave.	69.6
3910 W. 113th St.	57.5
3921 W. Imperial Highway	75.9

Noise monitoring information can be found in Appendix B.
SOURCE: TAHA, 2020.

Construction

Construction activity would result in temporary increases in ambient noise levels in the project area on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Typical noise levels from various types of equipment that may be used during each construction phase are listed in **Table 3-11**.

Construction activities typically require the use of numerous pieces of noise-generating equipment. In addition, truck trips would be required to remove of 33,705 cubic yards of excavated soil for the construction of the subterranean parking. The noise levels shown in **Table 3-12** take into account the likelihood that multiple pieces of construction equipment would be operating simultaneously and the typical overall noise levels that would be expected for each phase of construction. When considered as an entire process with multiple pieces of equipment, demolition would generate the loudest noise level of approximately 84.6 dBA L_{eq} at 50 feet.

TABLE 3-11: CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES	
Construction Equipment	**Noise Level at 50 feet (dBA, L_{eq})**
DEMOLITION PHASE	
Concrete Saw	82.6
Dozer	77.7
Excavator	76.7
EXCAVATION & SHORING	
Excavator	76.7
Grader	81.0
Dozer	77.7
Loaders	75.1
LEVELING & FOUNDATION	
Crawler Tractor	80.0
Dozer	77.7
Backhoe	73.6
Loaders	75.1
PODIUM 1 CONSTRUCTION	
Crane	72.6
Rough Terrain Forklift	79.4
Generator	77.6
Loaders	75.1
Welder	70.0
PRIVATE DRIVEWAY PAVING PHASE	
Paving Equipment	76.2
Paver	74.2
Roller	73.0
PODIUM 2 AND 3 CONSTRUCTION	
Crane	72.6
Rough Terrain Forklift	79.4
Generator	77.6
Loaders	75.1
Welder	70.0
FINISHING, LANDSCAPING, & COATING	
Air Compressor	73.7
Aerial Lifts	67.7
Skid Steer Loaders	75.1
SOURCE: FHWA, *Roadway Construction Noise Model, Version 1.1*, 2008.	

TABLE 3-12: CONSTRUCTION PHASE NOISE LEVELS	
Construction Phase	**Noise Level At 50 Feet (dBA)**
Demolition	84.6
Excavation & Shoring	84.2
Leveling & Foundation	83.3
Podium 1 Construction	83.1
Paving	79.4
Podium 2 and 3 Construction	83.1
Finishing, Landscaping, & Coating	77.9
SOURCE: FHWA, *Roadway Construction Noise Model, Version 1.1,* 2008.	

Table 3-13 presents the estimated noise levels at the sensitive receptors nearest to the project site for informational purposes. The most noise-intensive construction activities would occur during the early phases of construction (e.g., demolition, excavation, and shoring). The majority of the latter phases of construction would occur within the newly constructed building, and result in lower noise levels than exterior construction.

TABLE 3-13: UNMITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

Sensitive Receptors	Distance to Construction (Feet)	Typical Construction Noise Level at Sensitive Receptor (dBA, L_{eq})
Residences adjacent to the north	15	95.1
Residences to the east	100	78.6
La Quinta Inn and Suite	100	78.6
Residences to the northeast	100	78.6
Residences to the north	130	76.3
Crystal Inn Suites and Spa LAX	140	75.7
Residences to the northwest	200	72.6
Residences to the east	200	72.6
Residences to the north	220	71.7
Residences to the northeast	300	64.5
Anand Care Center	350	63.2
Hollypark Motel to the southeast	360	63.0
Welcome Inn Motel to the north	415	60.2
Residences to the northeast	450	61.0

SOURCE: TAHA, 2020.

The proposed project would be constructed in a manner typical of urban infill projects and would not require unusually noisy activities such as pile driving. In addition, the proposed project would not require nighttime construction activities. The City controls noise exposure from typical construction activities through time limitations. Construction would comply with the IMC Section 5-41 allowable construction hours of 7:00 a.m. to 8:00 p.m., which is designed to control noise exposure. Therefore, on-site construction noise impacts would be less-than-significant.

However, the proposed project may result in noise levels that would be disruptive to nearby residences. In order to reduce on-site construction noise levels, the proposed project would be required to implement Mitigation Measures **N-1** through **N-4**. Mitigation Measure **N-1** would require construction equipment to be equipped with mufflers to reduce engine noise. This would result in approximately 3 dB of noise reduction. Mitigation Measure **N-2** would require the installation of a temporary noise barrier between the project site and residences adjacent to the north, which would reduce construction noise levels by approximately 10 dBA. Although difficult to quantify, Mitigation Measures **N-3** and **N-4** would also help control noise levels by locating construction staging areas away from sensitive receptors and establishing a noise disturbance coordinator. As shown in **Table 3-14**, Mitigation Measures **N-1** through **N-4** would reduce construction noise levels at nearby sensitive receptors.

TABLE 3-14: MITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

Sensitive Receptors	Distance to Construction (Feet)	Unmitigated Noise Level (dBA, L_{eq})	Mitigated Noise Level (dBA, L_{eq}) /a/ /b/
Residences adjacent to the north	15	95.1	82.1
Residences to the east	100	78.6	75.6
La Quinta Inn and Suite	100	78.6	75.6
Residences to the northeast	100	78.6	75.6
Residences to the north	130	76.3	73.3
Crystal Inn Suites and Spa LAX	140	75.7	72.7
Residences to the northwest	200	72.6	69.6
Residences to the east	200	72.6	69.6
Residences to the north	220	71.7	68.7
Residences to the north	300	64.5	61.5
Anand Care Center	350	63.2	60.2
Hollypark Motel to the southeast	360	63.0	60.0
Welcome Inn Motel to the north	415	60.2	57.2
Residences to the northeast	450	61.0	58.0

/a/ Includes a 3 dB reduction for equipment mufflers.
/b/ Residences adjacent to the north includes a 10 dBA reduction for a temporary noise barrier.
SOURCE: TAHA, 2020.

In addition to on-site construction, off-site haul truck trips would potentially increase noise levels during the removal of approximately 33,705 cubic yards of excavated soil for the construction of the subterranean parking and removal of approximately 1,781 tons of demolition debris. The anticipated haul route is along Prairie Avenue to the I-105 freeway. The greatest number of hourly haul truck trips would occur during the excavation and shoring phase, which would require approximately 140 daily truck trips or 17 haul trucks per hour. Incremental increases in noise levels were estimated by adding haul truck volumes to Existing (2020) conditions. As shown in **Table 3-15**, the maximum incremental increase over existing conditions as a result of haul truck trips would be approximately 0.2 dBA. Although haul truck pass-by noise may result in temporary increases in noise, the hourly increase would be less than 5 dBA. Therefore, the proposed project would result in a less-than-significant impact related to haul truck noise.

TABLE 3-15: ESTIMATED CONSTRUCTION MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq}		
	Existing (2020)	Existing (2020) Plus Haul Trucks	Increase
Prairie Ave. between 113th St. and Imperial Hwy.	71.5	71.7	0.2
Prairie Ave. between 112th St. and 113th St.	72.3	72.5	0.2
Imperial Hwy. between I-105 EB On-Ramp and Prairie Ave.	71.0	71.2	0.2

SOURCE: TAHA, 2020.

Operations

Stationary Sources. The proposed project would include several stationary sources of noise typical of apartment complexes. Heating, ventilation, and air conditioning (HVAC) systems in particular may generate unwanted noise in the project vicinity. HVAC

equipment without muffling or enclosures typically generates a noise level of approximately 60 dBA at 50 feet. The rooftop would also include a parapet wall at the edge of the building which would reduce HVAC noise levels by approximately 10 dBA. Section 5-39 of the IMC prohibits the operations of an air-conditioning apparatus or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient noise base level by 5 dBA. The nearest property line would be at the residences adjacent to the north. The diagonal distance from the rooftop of the proposed project to the property line of the residences to the north would be approximately 55 feet. At this distance HVAC noise would be approximately 49.2 dBA L_{eq}, which would not be audible above the existing noise level of 69.6 dBA L_{eq} along Prairie Avenue. HVAC noise levels would not result 5 dBA above the existing noise level. Therefore, the proposed project would result in a less than significant impact related to HVAC equipment.

A total of up to 670 parking spaces would be provided including approximately 100 surface parking spaces in addition to the balance of parking spaces in each building's ground floor and/or subterranean concrete parking levels. Sources of noise would include engines accelerating, doors slamming, car alarms, and people talking. The parking structure would be fully enclosed and not generate noise levels off-site that would result in a 5 dBA increase above existing noise levels. Similarly, the subterranean parking structure would not generate noise at the street level. Therefore, the proposed project would result in a less than significant impact related to parking noise.

The proposed project's internal courtyard and walkways would also be a source of stationary noise related to human speech. In social situations, people often talk at distances of approximately three to 13 feet. A typical voice level at this distance is approximately 60 dBA.[24] The interior courtyards would include landscaping, trees, and color concrete pathways. The intent of the courtyards would be a place to relax and would not generate noise similar to other public spaces, such as a rooftop bar. Furthermore, the courtyards and walkways would be shielded from adjacent sensitive receptors by the apartment structures. The courtyards and walkways would not generate noise that would result in a 5 dBA or more increase at adjacent sensitive receptors. Therefore, the proposed project would result in a less than significant impact related to courtyard noise.

Building A, located in the northwest portion of the project site, would include up to 8,500 square feet of courtyard open space on the second floor and a pool. Sources of noise would include people speaking in raised voice and general recreational noise. A person speaking in a raised voice at a distance of three feet generates a noise level of approximately 66 dBA.[25] Conservatively, it has been assumed that 10 people would be speaking simultaneously at the edge of the pool deck nearest to the residences adjacent to the north. Ten people speaking simultaneously with raised voices would generate a noise level of approximately 76 dBA at three feet. The residences adjacent to the north are located approximately 140 feet away and at this distance the noise level would be 42.6 dBA. This would be well below the existing noise level of 69.6 dBA L_{eq} and pool deck noise would not be audible over existing noise on Prairie Avenue, the I-105 freeway, and Imperial Highway. Therefore, the proposed project would result in a less than significant impact related to noise at the pool deck and amenity space.

[24]The Engineering Toolbox, *Voice Level and Distance*, http://www.engineeringtoolbox.com/voice-level-d_938.html.
[25]*Ibid*.

Mobile Sources. The proposed project would generate approximately 1,998 daily trips, 163 AM peak hour trips, and 172 PM peak hour trips. **Table 3-16** shows roadway noise levels for Existing Conditions (2020), Opening Year No Project (2026), and Opening Year with Project (2026). As shown in **Table 3-17**, the roadway noise increase attributed to the proposed project would be less than 3 dBA on the local roadway network and is not anticipated to result in a perceptible change in sound level for a person with normal hearing sensitivity or result in a 5 dBA CNEL or more increase. Therefore, the proposed project would result in a less than significant impact related to mobile noise levels.

TABLE 3-16: ESTIMATED MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq}		
	Existing (2020)	Opening Year No Project (2026)	Opening year with Project (2026)
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	63.4	65.5	65.5
Prairie Ave. between Lennox Blvd. and 112th St.	72.0	72.7	72.7
Prairie Ave. between 113th St. and Imperial Hwy.	71.5	72.1	72.2
Prairie Ave. between 112th St. and 113th St.	72.3	72.9	72.9
Imperial Hwy. between I-105 EB On-Ramp and Prairie Ave.	71.0	71.6	71.7
Prairie Ave. between Imperial Hwy. and 120th St.	70.9	71.3	71.3
Imperial Hwy. between Prairie Ave. and Doty Ave.	70.2	70.6	70.6

SOURCE: TAHA, 2020.

TABLE 3-17: CHANGE IN MOBILE SOURCE NOISE LEVELS

Roadway Segment	Estimated dBA, L_{eq} at 50 Feet	
	Opening Year with Project (2026) vs. Opening Year No Project (2026)	Existing (2020) vs. Opening Year With Project (2026)
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	0.0	2.1
Prairie Ave. between Lennox Blvd. and 112th St.	0.0	0.7
Prairie Ave. between 113th St. and Imperial Hwy.	0.1	0.7
Prairie Ave. between 112th St. and 113th St.	0.0	0.6
Imperial Hwy. between I-105 EB On-Ramp and Prairie Ave.	0.1	0.7
Prairie Ave. between Imperial Hwy. and 120th St.	0.0	0.4
Imperial Hwy. between Prairie Ave. and Doty Ave.	0.0	0.4

SOURCE: TAHA, 2020.

b) Less-Than-Significant Impact with Mitigation Incorporated

Construction. Construction activity can generate varying degrees of vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to damage at the highest levels.

The primary concern regarding construction vibration relates to building damage. Activities that can result in damage include demolition and site preparation in close proximity to sensitive structures. Typical vibration levels associated with relevant construction equipment are provided in **Table 3-18**. Importantly, construction would not require pile driving.

TABLE 3-18: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT

Equipment	Peak Particle Velocity at 25 feet (Inches/Second)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

SOURCE: FTA, *Transit Noise and Vibration Impact Assessment*, September 2018.

The City has not established vibration standards for construction activities. The Federal Transit Administration (FTA) has published guidance stating that engineered concrete and masonry buildings (e.g., typical commercial and multi-family residential buildings) can withstand peak particle velocity (PPV) vibration of levels of at least 0.3 inches per second without experiencing damage. Heavy-duty equipment operating within 12 feet of a structure would generate vibration levels that exceed 0.3 inches per second PPV. The nearest structure would be residences adjacent to the north of the project site. Construction equipment could operate within 12 feet of the building located directly north of the project site. In order to ensure the adjacent structure would not be irreparably damaged by construction-related vibration a qualified structural engineer shall survey the foundation of each building foundation its structural integrity before, during, and after construction, as stated in Mitigation Measure **N-5**. Therefore, with mitigation the proposed project would result in a less-than-significant impact related to building damage from construction vibration.

Regarding annoyance and disruption in terms of human response, land uses particularly sensitive to vibration annoyance during daytime construction hours include, but are not limited to, hospitals, schools, museums, concert halls, television studios, recording studios, auditoriums, theaters, and research facilities with sensitive equipment (e.g., microscopes). No uses particularly sensitive to vibration annoyance during daytime hours were identified in the immediate vicinity of the Project site. Therefore, impacts during daytime construction hours to groundborne vibration sensitive uses would be less than significant.

Operations. The proposed project would not include significant sources of vibration. Vehicle trips associated with the project would not generate perceptible vibration as rubber-tired vehicles rarely create ground-borne vibration problems unless there is a discontinuity or bump in the road that causes the vibration.[26] Therefore, the proposed project would not result in a significant impact related to operational vibration.

c) Less-Than-Significant Impact. The proposed project is not located within an airport land use plan area, but is located within two miles of the Hawthorne Municipal Airport. The project is not located with the Airport Influence Area and would not be subjected to

[26]FTA, *Transit Noise and Vibration Impact Assessment*, September 2018.

substantial noise levels from the airport.[27] Therefore, the proposed project impacts related to excessive aircraft noise would be less than significant.

MITGATION MEASURES

N-1 Power construction equipment (including combustion engines), fixed or mobile, shall be equipped with muffling devices consistent with manufacturers' standards. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.

N2 A temporary noise barrier shall be installed along the property line of the project site adjacent to the residences at 11207 Prairie Avenue from the demolition phase until the leveling and foundation phase is complete. The temporary noise barrier shall be 20 feet in height and capable of reducing noise levels by at least 10 dBA.

N-3 Noise and vibration construction activities whose specific location on the Project site may be flexible (e.g., operation of compressors and generators) shall be conducted as far away as possible from the nearest sensitive land uses, and natural and/or manmade barriers (e.g., intervening construction trailers) shall be used to screen propagation of noise from such activities towards these land uses. The construction contractor shall locate construction staging areas away from noise-sensitive uses.

N-4 A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.

N-5 Prior to issuance of a grading/shoring permit, a qualified structural engineer shall survey the existing foundation and structural integrity of the adjacent structure located to the north, subject to property owner granting access to conduct the survey and shall submit a pre-construction survey letter establishing baseline conditions at these buildings to the lead agency. At the conclusion of vibration causing activities, and prior to the issuance of any temporary or permanent certificate of occupancy for the proposed project building, the qualified structural engineer shall issue a follow-on letter describing damage, if any, to the adjacent structures. The letter shall identify recommendations for any repair and certify the completion of any repairs as necessary to confirm the integrity of the foundation and structure of the adjacent structures.

[27]Los Angeles County Airport Land Use Commission, *Airports and, Airport Influence Areas,* August 2018.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.14 POPULATION AND HOUSING - Would the project:				
a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☑	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would induce substantial population growth that would not have otherwise occurred as rapidly or in as great a magnitude. The proposed project includes the construction of three apartment buildings that would provide 440 dwelling units for approximately 1,258 new tenants.[28] The City recognizes the need for the construction of affordable housing in Goals 1 and 3 of the General Plan Housing Element.[29] The Housing Element includes a policy for encouraging the construction of mixed income housing developments that provide housing for a variety of income levels such as extremely low-income up through and including market rate; the proposed project is therefore compliant with the Housing Element. Based on the SCAG 2020-2045 RTP/SCS, the City's projected growth would be approximately 137,100 people in the year 2045.[30] The proposed project would be consistent with SCAG's 2020-2045 growth forecast and would not add growth beyond what was anticipated from buildout of the General Plan. Therefore, impacts would be less-than-significant.

b) **No Impact**. A significant impact would occur if the proposed project would displace substantial numbers of existing people or housing. The proposed project consists of the development of an apartment complex on a vacant project site that does not currently contain housing. The proposed project would not displace existing housing or require the construction of replacement housing. Therefore, no impact would occur.

[28] The rental unit mix for the Proposed Project has not been finalized. US Census data shows that in 2020, the average household size of a rental-occupied unit in the City of Inglewood was 2.86 persons per unit. This average was multiplied by the number of dwelling units under the Proposed Project to roughly estimate the total population that would be introduced to the project site.

[29] City of Inglewood, *2013-2021 Housing Element*, adopted January 28, 2014.

[30] SCAG, *2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction*, http://www.scag.ca.gov/Documents/2016DraftGrowthForecastByJurisdiction.pdf, accessed September 2022.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.15 PUBLIC SERVICES - Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☑	☐
ii) Police protection?	☐	☐	☑	☐
iii) Schools?	☐	☐	☑	☐
iv) Parks?	☐	☐	☑	☐
v) Other public facilities?	☐	☐	☑	☐

a.i) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in substantial adverse impacts such that fire protection services would not be able to adequately serve the proposed project, necessitating a new station or physical alteration of a fire station. The Los Angeles County Fire Department (LACFD) provides fire protection and paramedic services to residents and businesses within the City. Los Angeles County Fire Station No. 18 is located at 4518 Lennox Boulevard approximately 0.7-mile northeast of the project site, is the closest fire station to the project site. The project site is within 1.1 "road miles" of this fire station, which would ensure a maximum response time of five minutes or less. In addition, the proposed project would be constructed in compliance with the requirements of the City's Fire Code (Chapter 6 of the IMC), which requires that there is adequate fire flow serving the project site, fire prevention and suppression measures, fire access, and a sufficient number of hydrants.

As a residential project, the proposed project would increase the number of fire department calls to the project area. However, this increased demand is not anticipated to cause the LACFD to construct a new fire station to maintain its level of service, and the proposed project would continue to be adequately served by Fire Station No. 18. The project applicant would be required to submit project plans to LACFD and incorporate LACFD fire protection and suppression features that are appropriate for the proposed project. Compliance with the City's Fire Code and the inclusion of the LACFD fire prevention measures would ensure that operation of the proposed project would not cause the LACFD to expand the existing Fire Station 18, or any other fire stations within the City.

Project construction may generate traffic associated with the movement of construction equipment, removal of demolition and excavation materials, and construction worker trips. Flammable materials and liquids may also be present during construction. However, construction activities are temporary and would not involve the closure of an entire street. Emergency access would remain available along all surrounding streets. Therefore, impacts related to fire protection services would be less than significant.

a.ii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in substantial adverse impacts such that police and law enforcement services are unable to maintain acceptable performance objectives. The Inglewood Police Department (IPD) provides police protection services to residents and businesses within the City of Inglewood. IPD headquarters is located at One West Manchester Boulevard approximately 2.3 miles north of the project site.

The proposed project is anticipated to increase the number of IPD calls to the project area. However, the proposed project is not anticipated to cause IPD to construct a new police station or expand the existing IPD police headquarters to maintain its level of service. In addition, the proposed project plans would be submitted to the IPD Crime Prevention unit for review and appropriate on-site security features.

Project construction may generate traffic associated with the movement of construction equipment, removal of demolition and excavation materials, and construction worker trips. However, construction activities are temporary and would not involve the closure of an entire street. Emergency access would remain available along all surrounding streets. Therefore, less-than-significant impacts related to police protection services would occur.

a.iii) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would create a substantial employment or population growth, which could generate a demand for school facilities that would exceed the capacity of the school district, necessitating a new school or physical alteration of an existing school, the construction of which would cause a significant environmental impact. The proposed project is an apartment complex with 440 dwelling units. The unit mix for the proposed project is not yet finalized. In 2020, the City of Inglewood had an average of 2.86 occupants per rental unit, and therefore the Proposed Project is roughly estimated to introduce 1,258 persons to the project site. The number of families moving into these dwelling units could result in the increase of demand for school services. However, pursuant to Section 65995 of the Government Code, the applicant would be required to pay developer school impact fees to Inglewood Unified School District. Pursuant to Section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Therefore, impacts would be less than significant.

a.iv) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would exceed the capacity or capability of the local park system. The City's Parks, Recreation and Community Services Department is responsible for the provision, maintenance, and operation of public recreational and park facilities and services within the City. The nearest park to the project site is Center Park located approximately 0.4-mile northeast of the project site. The proposed apartment complex would result in approximately 1,258 new residents in the project area. However, the proposed project would incorporate on-site recreational spaces, including a swimming pool amenities center and a total of 14,000 square feet of courtyard open space, which future occupants would be reasonably expected to utilize. Thus, the proposed project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities that would potentially contribute to any adverse deterioration. Per Section 12-105.9 of the IMC, the proposed project would be required to pay a

development impact fee to pay for any additional park facilities and services required as a result of the proposed project. Therefore, impacts would be less than significant.

a.v) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would result in substantial employment or population growth that could generate a demand for other public facilities, including roads, transit, utilities, and libraries, which exceed the capacity available to serve the project site, necessitating new or physically altered public facilities, the construction of which would cause significant environmental impacts. Other public services that could be affected by the proposed project include public libraries. The City is served by the Inglewood Public Library system, the closest Inglewood Public Library is located at Crenshaw Imperial Branch Library, located at 11141 Crenshaw Boulevard approximately one mile east of the project site. The Inglewood Public Library System is financed by the City's General Fund, the majority of whose revenues come from property taxes, utility user taxes, sales and use taxes, and motor vehicle in-lieu taxes. As a result, the proposed project would contribute to the financing of library services through property taxes and utility user taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.16 RECREATION - Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☑	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☑	☐

a-b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project increased the use of existing park and recreational facilities so as to accelerate or induce their physical deterioration. The nearest park to the project site is Center Park located approximately 0.4-mile northeast of the project site. As discussed in Response to Checklist Question 3.15 a.iv, the proposed project would add approximately 489 new residents; however, the proposed project would include recreational amenities for use by future occupants, including a swimming pool and amenities center and a total of 14,000 courtyard open space. Additionally, per Section 9-106 of the IMC, the proposed project would be imposed a new dwelling unit construction tax, which would be deposited into the Park Fund to finance park and recreational facilities within the City. The proposed project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities that would cause adverse deterioration or acceleration of deterioration. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.17 TRANSPORTATION - Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☑	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☑	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d) Result in inadequate emergency access?	☐	☐	☐	☑

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The proposed project would not change roadway designations from those in the Circulation Element of City's General Plan and would be consistent with adopted plans and policies related to the circulation system. Major arterial roadways in the project area include Prairie Avenue, Imperial Highway, and Hawthorne Boulevard. Prairie Avenue is a north-south major arterial road that fronts the project site and provides three travel lanes in each direction and a left/right turn median, and on-street parking is generally prohibited on both sides of the roadway. Imperial Highway is an east-west major arterial road that provides three travel lanes in each direction and a left/right turn median, and on-street parking is generally prohibited on both sides of the roadway. Hawthorne Boulevard is a north-south major arterial road that provides three travel lanes in each direction, with on-street parking permitted on both sides of the roadway.

The proposed project would not conflict with policies supporting alternative transportation modes, and no changes to exiting bicycle or pedestrian facilities would occur. The project area is served by bus transit lines operated by Metro. Metro Lines 211, 212, and 312 runs via Prairie Avenue, while Lines 120 and 207 runs via Imperial Highway. The closest bike lane is a Los Angeles County maintained bike route that runs along Freeman Avenue starting from 111th Street, approximately 0.25-mile from the project site, to 104th Street. Additionally, the project site is located approximately 0.38-mile from the Metro C Line Hawthorne/Lennox Stations, which provides heavy rail connectivity to the greater Los Angeles region. Therefore, the Project would fulfill Goal Three of the City General Plan Housing Element, encourage the production of housing around transit. In addition, the Housing Element repeatedly emphasizes the importance of providing affordable housing options for City residents. The inclusion of affordable units in the apartment complex would fulfill Goal Three of the Housing Element, and in particular Policies 3.4, 3.5, and 3.7. As the proposed project would not change or alter existing streets and it would not impact other existing circulation infrastructure, such as bicycle lanes or bus stops, the Project would not conflict with the Circulation Element of the Inglewood General Plan.

The proposed project would also be consistent with the applicable regional transportation plan, which the SCAG 2020-2045 RTP/SCS. The SCAG 2020-2045 RTP/SCS includes a Livable Corridor strategy that encourages increasing housing density along key arterial corridors to make transit a more convenient and viable commute option. The proposed project would further this strategy and thus would not create a conflict.

The City of Inglewood is currently developing the Inglewood Sports and Entertainment District (ISED), located east of Prairie Avenue and south of Manchester Avenue, which would ultimately consist of the Forum (existing venue), the NFL Football Stadium (recently completed) and Performance Venue (recently completed) as part of the Hollywood Park project, and the Clippers Arena (proposed). These developments will transform the City into a major sports and entertainment center in the greater Los Angeles region and create special event traffic conditions. Special event traffic from large venues normally requires special traffic and access management during events that go beyond the normal traffic control devices at intersection crossings. Such plans have not yet been fully developed by the City of Inglewood, although the City is currently developing a Transportation Management and Operations Plan. The proposed project would not conflict with any program, plan, ordinance or policy addressing the circulation system, and impacts would be less than significant.

A Traffic Impact Study was prepared for the proposed project by Iteris in October 2022 and is included in Appendix C. The study evaluates the LOS impacts attributed to the proposed project at nine intersections during the weekday AM and PM peak-hour periods. Although Appendix G of CEQA no longer evaluates LOS impacts on projects, the proposed project would result in significant LOS impacts at three of the intersections without mitigation. The Traffic Impact Study's discussion of the proposed project's LOS impacts and recommended improvements are included below.

The following nine intersections were evaluated as part of the Traffic Impact Study:

- Hawthorne Boulevard / Lennox Boulevard
- Hawthorne Boulevard / Imperial Highway
- 1-105 Eastbound On-ramp / Imperial Highway
- Prairie Avenue / Lennox Boulevard
- Prairie Avenue / I-105 Ramps-112th Street
- Prairie Avenue / 113th Street
- Prairie Avenue / Imperial Highway
- Prairie Avenue / 120th Street
- Crenshaw Boulevard / Imperial Highway

Using the Los Angeles County Public Works' 1997 Traffic Impact Analysis (TIA) guidelines, LOS impacts intersection operating conditions were quantified using the Intersection Capacity Utilization (ICU) method. The concept of roadway LOS under the ICU methodology is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility (volume-to-capacity [V/C] ratio). A 10 percent adjustment to the clearance and loss time factor based on the critical phases of the signalized control were included in the traffic analysis. A facility is "at capacity" (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes, signal phasing, and approach lane configuration on each leg of the intersection.

The V/C ratio is based upon volumes by lane, signal phasing, and approach lane configuration with a capacity of 1,600 vehicles per lane for all through and turn lanes, and a capacity of 2,880 for dual turn lanes. A 10 percent adjustment to the clearance and loss time factor based on the critical phases of the signalized control was included in the traffic analysis. A facility with LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. The upper limit of LOS E is typically defined as the operating capacity of a roadway.

Traffic Thresholds. The City of Inglewood does not have established thresholds to measure the significance of traffic impacts. Significance of traffic impacts are assessed against the Los Angeles County Public Works' TIA guidelines; these consider a project to have a significant traffic impact if the change in volume-to-capacity (V/C) ratio relative to the No Project signalized intersection level of service (LOS) meets or exceeds the thresholds listed in **Table 3-19**.

TABLE 3-19: TRAFFIC THRESHOLDS

Intersection LOS in Pre-Project Conditions	V/C	Project V/C Increase
C	0.71 to 0.80	0.04 or more
D to F	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

SOURCE: Los Angeles County Department of Public Works, 1997.

Existing Intersection Level of Service (LOS). A level of service analysis was conducted to evaluate existing intersection operations during the a.m. and p.m. peak hours at the nine study intersections. **Table 3-20** summarizes the V/C ratios and LOS values for existing traffic conditions. As shown, three intersections along Prairie Avenue are currently operating at unsatisfactory levels of service (LOS E or worse). The Prairie Avenue/113th Street intersection, which provides access to the project site, is currently a stop-controlled intersection. Thus, the vehicle delays shown represent the highest stop-controlled approach, rather than the average delay of all vehicles approaching the intersection.

TABLE 3-20: INTERSECTION PERFORMANCE – EXISTING CONDITIONS (WEEKDAY)

Study Intersections		Control Type	AM Peak		PM Peak	
			V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS
1	Hawthorne Blvd./Lennox Blvd.	Signalized	N/A		0.806	D
2	Hawthorne Blvd./Imperial Hwy.	Signalized	0.717	C	0.802	D
3	I-105 EB On-ramp/Imperial Hwy. /a/	Signalized	32.3	C	28.8	C
4	Prairie Ave./Lennox Blvd.	Signalized	0.647	B	0.696	B
5	Prairie Ave./I-105 Ramps-112th St. /a/	Signalized	21.1	C	33.9	C
6	Prairie Ave./113th St.	Stop-Control	76.6	F	203.3	F
7	Prairie Ave./Imperial Hwy.	Signalized	0.934	F	0.871	D
8	Prairie Ave./120th St.	Signalized	N/A		0.924	E
9	Crenshaw Blvd./Imperial Hwy.	Signalized	0.805	D	0.852	D

Notes: V/C = Volume to Capacity Ratio, LOS = Level of Service.
/a/ Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
SOURCE: Iteris, *Prairie Station Traffic Impact Study, Draft Report,*

Project Trip Generation. Trip generation for the proposed project was derived from rates defined by *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers. Trip generation rates for the proposed project were calculated using the land use Multifamily Housing – Mid-Rise (ITE Code 221). The proposed project would generate an estimated 1,998 daily vehicle trips, including 164 vehicle trips during the AM peak-hour (37 inbound trips and 126 outbound trips) and 172 vehicle trips during the PM peak hour (105 inbound trips and 67 outbound trips). The project-related trips were distributed among the local roadway network to determine project-related impacts under "Existing With Project" and "Future With Project" conditions.

Existing with Project Traffic Conditions. Project generated traffic was added to existing traffic volumes to determine "Existing With Project" traffic conditions. **Table 3-21** summarizes traffic impacts under the "Existing With Project" traffic scenario. As shown, the proposed project is forecast to result in a significant impact at the Prairie Avenue/Imperial Highway intersection during the AM peak hour. The Prairie Avenue/113th Street intersection is also anticipated to experience large delay increases with the project, though no formal significance thresholds are used for unsignalized intersections.

TABLE 3-21: DETERMINATION OF PROJECT IMPACTS – EXISTING WITH PROJECT TRAFFIC CONDITIONS

Study Intersections		Peak Hour	Existing Conditions		Existing with Project		Change in V/C	Significant Impact?
			V/C	LO	V/C	LOS		
1	Hawthorne Blvd./Lennox Blvd.	AM	N/A	-	N/A	-	-	No
		PM	0.806	D	0.806	D	0.000	No
2	Hawthorne Blvd./Imperial Hwy.	AM	0.717	C	0.717	C	0.000	No
		PM	0.802	D	0.803	D	0.001	No
3	I-105 EB On-ramp/Imperial Hwy. /a/	AM	32.3	C	33.8	C	1.5	No
		PM	28.8	C	29.9	C	1.1	No
4	Prairie Ave./Lennox Blvd.	AM	0.647	B	0.650	C	0.003	No
		PM	0.696	B	0.701	C	0.005	No
5	Prairie Ave./I-105 Ramps-112th St. /a/	AM	21.1	C	22.9	C	1.8	No
		PM	33.9	C	44.4	D	10.5	No
6	Prairie Ave./113th St.	AM	76.6	F	315.6	F	239.0	No
		PM	203.3	F	29.9	F	26.6	No
7	Prairie Ave./Imperial Hwy.	AM	0.934	F	0.973	F	0.039	Yes
		PM	0.871	D	0.875	D	0.004	Yes
8	Prairie Ave./120th St.	AM	N/A	-	N/A	-	-	No
		PM	0.924	E	0.924	E	0.000	No
9	Crenshaw Blvd./Imperial Hwy.	AM	0.805	D	0.806	D	0.001	No
		PM	0.852	D	0.853	D	0.001	No

Notes: V/C = Volume to Capacity Ratio, LOS = Level of Service.
/a/Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
SOURCE: Iteris, *Prairie Station Traffic Impact Study, Draft Report,* October 2022.

Future Without Project Traffic Conditions. To determine project-related traffic impacts under "Future With Project" conditions, "Future Without Project" conditions were analyzed. "Future Without Project" conditions include ambient/background growth and future traffic conditions in the study area with area/related project trips, but without project traffic. The proposed project is anticipated to be completed by 2026 and, therefore, the future analysis year is 2026.

Ambient traffic growth is the traffic growth that will occur in the study area due to general employment growth, housing growth and growth in regional through trips in Southern California. An ambient growth rate of one percent per year in the study area was assumed based on discussions with City staff.

In addition to the application of the ambient traffic growth rate, traffic from related/area projects (approved and pending developments) was included as part of the year-2026 analysis. A list of cumulative projects within the region was provided by the City of Inglewood. Out of this list, it was determined that traffic from seven of these projects would affect traffic circulation within the project study area and are therefore included in this analysis as shown in **Table 3-22**.

TABLE 3-22: AREA AND RELATED PROJECTS

ID	Location	Land Use	Size/Description /a/
1	1050 S. Prairie Ave.	Hollywood Park Project	NFL stadium, 2,500 DU; 890 tsf retail; 780 tsf office; 120,000 tsf casino; 300-room hotel; and 4-acre civic site.
2	11111 S. Prairie Ave.	Hotel	120 rooms
3	Prairie Ave./Century Blvd.	Murphy Bowl Project	Arena; 71 tsf office; 63 tsf restaurant/retail/ ancillary uses; and 150 hotel rooms
4	1050 S. Prairie Ave.	Hollywood Park Phase II	5,750 tsf commercial
5	3700 102nd St.	Self-Storage Facility	79.415 tsf
6	3820 West 102nd St.	Hotel	300 rooms
7	4041 W. Century Blvd.	Hotel	145 rooms
8	4200 W. Century Blvd	Mixed-use (Hotel/Residential)	175 rooms; 129 du
9	11143 S. Prairie Ave.	Hotel	104 rooms
10	3846 W. Century Blvd.	Self-Storage Facility	335.246 tsf
11	3624 W. Century Blvd.	Hotel	150 rooms

/a/ du = dwelling unit, tsf = thousand square feet
SOURCE: Iteris, *Prairie Station Traffic Impact Study, Draft Report,* December 2020.

As shown in **Table 3-23**, without Project conditions, the large increases in vehicle trips anticipated with the development of the cumulative projects by opening year 2026 would cause the following intersections to operate at unsatisfactory levels of service (LOS E or worse):

- I-105 Eastbound On-ramp/Imperial Highway (PM peak hour);
- Prairie Avenue/Lennox Boulevard (PM peak hour);
- Prairie Avenue/I-105 Ramps-112th (PM peak hour);
- Prairie Avenue/113th Street (AM and PM peak hour);
- Prairie Avenue/Imperial Highway (AM and PM peak hour);
- Prairie Avenue/120th Street (PM peak hour); and
- Crenshaw Boulevard/Imperial Highway (PM peak hour).

Future With Project Traffic Conditions. "Future With Project" traffic conditions were derived by adding project trips to the "Future Without Project" traffic conditions. **Table 3-23** summarizes traffic impacts under the "Future With Project" traffic scenario.

TABLE 3-23: DETERMINATION OF PROJECT IMPACTS – OPENING YEAR 2026 WITH PROJECT TRAFFIC CONDITIONS

Study Intersections		Peak Hour	Opening Year 2026 Without Project /a/		Opening Year 2026 With Project		Change in V/C	Significant Impact?
			V/C	LOS	V/C	LOS		
1	Hawthorne Blvd./Lennox Blvd.	AM	N/A	-	N/A	-	-	No
		PM	0.878	D	0.878	D	0.000	No
2	Hawthorne Blvd./Imperial Hwy.	AM	0.751	C	0.751	C	0.000	No
		PM	0.842	D	0.844	D	0.002	No
3	I-105 EB On-ramp/Imperial Hwy. /b/	AM	50.0	D	54.9	D	4.9	No
		PM	107.	F	111.0	F	3.8	No
4	Prairie Ave./Lennox Blvd.	AM	0.769	C	0.773	C	0.004	No
		PM	0.912	E	0.915	D	0.003	No
5	Prairie Ave./I-105 Ramps-112th St. /b/	AM	24.5	C	25.7	C	1.2	No
		PM	56.8	E	68.0	E	11.2	Yes
6	Prairie Ave./113th St.	AM	186.3	F	>300	F	-	No
		PM	>300	F	>300	F	-	No
7	Prairie Ave./Imperial Hwy.	AM	1.057	F	1.096	F	0.039	Yes
		PM	0.964	E	0.969	E	0.005	No
8	Prairie Ave./120th St.	AM	N/A		N/A		-	No
		PM	0.986	E	0.987	E	0.001	No
9	Crenshaw Blvd./Imperial Hwy.	AM	0.855	D	0.856	D	0.001	No
		PM	0.912	E	0.913	E	0.001	No

/a/ V/C = Volume to Capacity Ratio, LOS = Level of Service.
/b/ Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.
SOURCE: Iteris, *Prairie Station Traffic Impact Study, Draft Report,* October 2022.

As shown above, the following intersections are forecast to be significantly impacted by the proposed project:

- I-105 Eastbound On-ramp/Imperial Highway;
- Prairie Avenue/I-105 Eastbound-Westbound Off-ramps; and
- Prairie Avenue/Imperial Highway.

Based on physical constraints, feasible infrastructure improvements are not recommended at these locations. Similar to existing conditions, the Prairie Avenue/113th Street intersection is also anticipated to experience large delay increases with the project, though no formal significance thresholds are used for unsignalized intersections.

Conclusion. Three intersections along Prairie Avenue are currently operating at unsatisfactory levels of service (LOS E or worse). The Prairie Avenue/113th Street intersection, which provides access to the project site, is currently a stop-controlled intersection. Thus, the vehicle delays shown represent the highest stop controlled approach, rather than the average delay of all vehicles approaching the intersection.

Based on the significant impact threshold criteria described, the following intersections are forecast to be significantly impacted by the proposed project in opening year 2026:

- I-105 Eastbound On- ramp/Imperial Highway;
- Prairie Avenue/I- 105 Eastbound- Westbound Off- ramps; and
- Prairie Avenue/Imperial Highway.

In order to improve traffic operations at Prairie Avenue/113th Street intersection, an installation of a traffic signal is recommended. Based on the a.m. peak hour volumes in opening year 2026, the intersection meets the minimum criteria, in MUTCD Warrant 3, for installation of a traffic signal. In addition, the following improvements should be considered:

- Prairie Avenue/113th Street intersection
  - Widen the eastbound 113th Street approach to add a dedicated right-turn lane;
  - Widen the southbound Prairie Avenue approach to add a dedicated right-turn lane.
- Intelligent Transportation Systems (ITS) funding contribution at other impacted intersections where physical improvements are not feasible.

b) Less-Than-Significant Impact. A significant impact would occur if the project was inconsistent with CEQA Guidelines Section 15064.3(b). SB 743 was enacted in 2013 to further the assessment of transportation impacts under CEQA, and in 2018 CEQA Guidelines were published that incorporate SB 743 by promulgating the use of VMT and VMT reductions as a significance threshold metric. CEQA Guidelines Section 15064.3(b) states that certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within 0.5 mile of an existing major transit stop or an existing stop along a high-quality transit corridor will have a less-than-significant impact on VMT.

The Traffic Impact Study prepared for the proposed project evaluated the VMT impacts attributed to the proposed project using the City of Inglewood's VMT Calculator Tool (Version 1). The study's results were evaluated against the VMT Threshold of Significance per City of Inglewood Transportation Impact Analysis Guidelines (TAG) criteria. The City of Inglewood has established VMT thresholds of significance against the City's TAG criteria. A residential project would be considered to have a significant traffic impact if the VMT per capita were over 15 percent below the existing residential VMT per capita for the Baseline Area in which the project is located. For the proposed project, the existing residential VMT per capita is 9.66.

Based on the proposed project's analysis results from the Calculator Tool, the following can be observed:

- The proposed project's trip generation would result in a net total of 1,754 daily vehicle trips.
- The proposed project would generate a net total of 16,355 daily VMT.
- The proposed project would result in a residential VMT per capita of 9.59.

The proposed project's residential VMT per capita is less than the significance threshold of 9.66, and therefore the proposed project would not cause a significant impact relative to VMT. Additionally, the proposed project is located approximately 0.38 mile from the Metro C Line Hawthorne/Lennox Station, which is considered a major transit stop. As

such, the project is located within a Transit Priority Area (TPA) as defined by SCAG's 2020-2045 RTP/SCS. Further, the proposed project consists of a Floor Area Ratio (FAR) of more than 0.75 and does not include an excessive amount of parking beyond that required by the City. Therefore, the proposed project would not have the potential to conflict with VMT reduction efforts of SB 743, and impacts would be less than significant.

c-d) **No Impact**. A significant impact would occur if the proposed project would substantially increase hazards due to a geometric design feature or incompatible uses, or if it resulted in inadequate emergency access. All access and circulation associated with the proposed project would be designed and constructed in conformance with all applicable City requirements. The proposed project would provide 670 parking spaces and loading access via the main entry driveway at the intersection of 113th Street and Prairie Avenue. There would be emergency vehicle access via Prairie Avenue and 113th Street, and via Prairie Avenue and the fire lane. The proposed project would not include the construction of any new roads or the modification of any existing roads that would result in an increase in hazards. The proposed project is also not anticipated to cause a significant traffic impact on any CMP arterial monitoring intersections and mainline freeway-monitoring locations. Furthermore, the project design would comply with the City's applicable emergency access requirements and Los Angeles County Fire Department (LACFD) requirements regarding fire emergency access. The proposed project design would also be reviewed by the Planning Division, the Building Safety Division, and the LACFD during the City's plan review process to ensure all applicable requirements are met. Therefore, no impact would occur.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.18 TRIBAL CULTURAL RESOURCES - Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☑	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☑	☐	☐

a) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Resources of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). The project site is currently vacant, and there are no historic resources on, adjacent to, or in proximity to the project site listed in the California Register of Historical Resources pursuant to in Section 15064.5. The City does not currently have a historic preservation ordinance. The City has one landmark listed under its historic preservation program as defined in Public Resources Code Section 5020.1(k), Centinela Springs[31], which is located approximately three miles north of the project site. 112 other sites, which are primarily clustered around the City's Downtown, have been found to be potentially eligible properties[32]. In compliance with Assembly Bill 52, Native American nations traditionally and culturally affiliated with the geographic area of the project site were notified of the proposed project. To ensure that any inadvertent discovery of tribal cultural resources encountered during ground-disturbing activities are properly documented, salvaged, and protected, the Kizh Nation recommended that mitigation measures be imposed on the proposed project. Therefore, with implementation of Mitigation Measures **TCR-1** through **TCR-3**, impacts related to the tribal cultural resources would be less than significant.

b) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code Section 5024.1(c). As discussed in Response to Checklist Question 3.18(a), Native American nations affiliated with the geographic area of the

[31]California Office of Historic Preservation, *California Historical Resources,* https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=19, Accessed April 2020.
[32]Los Angeles Conservancy, *Inglewood,* https://www.laconservancy.org/communities/inglewood, Accessed April 2020.

project site were notified of the proposed project, and the Kizh Nation recommended that mitigation measures be imposed on the proposed project to ensure that any inadvertent discovery of tribal cultural resources encountered during ground-disturbing activities are properly documented, salvaged, and protected. Therefore, with implementation of Mitigation Measures **TCR-1** through **TCR-3**, impacts related to the tribal cultural resources would be less than significant.

MITIGATION MEASURES

TCR-1 The project applicant shall be required to retain and compensate for the services of a Tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and is listed under the Native American Heritage Commission's Tribal Contact list for the area of the project location. The tribal monitor/consultant shall only be present on-site during the construction phases that involve ground disturbing activities. Ground disturbing activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The tribal monitor/consultant shall complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the tribal representatives and monitor/consultant have indicated that the site has a low potential for impacting Tribal Cultural Resources.

TCR-2 Upon discovery of any archaeological resources, construction activities shall cease in the immediate vicinity of the find until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist and Tribal monitor/consultant approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation shall coordinate with the landowner regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place.

If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Section 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.

TCR-3 Native American human remains are defined in Public Resources Code Section 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission and Public Resources Code Section 5097.98 shall be followed.

Upon discovery, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 150 feet and place an exclusion zone around the burial. The monitor/consultant(s) will then notify the tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the Native American Heritage Commission as mandated by state law who will then appoint a Most Likely Descendent (MLD).

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.19 UTILITIES AND SERVICE SYSTEMS - Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☑	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☑	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☑	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☑	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☑	☐

a) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would require or result in the relocation or construction of new utilities facilities or service systems, which would cause significant environmental effects. The Project would generate water, wastewater, and stormwater typical of multi-family housing uses and would comply with applicable federal, state, and local laws, statutes, and ordinances regarding disposal. Utility companies serving the Project site would include Golden State Water Company, Los Angeles County Sanitation District (LACSD) for wastewater services, the City of Inglewood for stormwater drainage management, Southern California Edison for electric services, Southern California Gas Company for natural gas facilities and Spectrum for telecommunication facilities.

As in-fill development, the Project would be served by existing utility infrastructure and would not result in the relocation of public utilities. Additional sewer laterals would be required to connect to existing sewer infrastructure and the Project Applicant would be required to pay connection fees pursuant to Section 10-91 of the IMC. As urban infill, the Project would generate a marginal net increase in demand for electric power, natural gas, and telecommunications facilities relative to regional demand, and as such the Project would have a less-than-significant impact.

b) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project would increase water usage such that the project site would not have enough water supplies during normal, dry and multiple dry years.

The City provides water to 86 percent of the residents and businesses in the City[33] and obtains its potable water supply from two sources:

1. Imported surface water purchased from the West Basin Municipal Water District through the Metropolitan Water District of Southern California (Metropolitan) pipe connections; and
2. Local groundwater produced from the West Coast Groundwater Basin via City wells.

The imported water is treated at Sanford M. Anderson Water Treatment Plant and groundwater supplies are blended prior to entering the City's water distribution system[34]. According to the Infiltration Testing, groundwater was not encountered in test borings and historic high groundwater levels were reported to be at least 50 feet below ground surface in the site vicinity. Golden State Water Company and Cal America Water also provide water to the City service population. According to the Inglewood 2015 Urban Water Management Plan (UWMP), the City can meet all normal year, single dry year, and multiple dry year water supply demands available through the Year 2040. With the inclusion of water supplies currently under development, potential water supply surpluses range from 5 percent to 110 percent of projected demands[35].

Additionally, prior to the issuance of the building permit, the applicant would be required to verify that the City's water system can accommodate the proposed project's fire flows and all potable water demand. The estimated water demand of the proposed project is not expected to exceed available supplies or the available capacity within the distribution infrastructure that would serve the project site. Adequate water supplies would be available to the proposed project, and new or expanded water facilities would not be required. Therefore, impacts would be less than significant.

c) **Less-Than-Significant Impact**. A significant impact would occur if the proposed project's water demand exceeded the capacity of the project site's wastewater treatment provider. The Los Angeles County Sanitation Districts (LACSD) manages the wastewater collection and treatment system within the City. Wastewater generated within the City is conveyed to the Joint Water Pollution Control Plant (JWPCP) in Carson via interceptor sewers. The JWPCP provides both primary and secondary treatment and has a total permitted capacity of 400 million gallons per day (MGD). JWPCP treats 260 MGD with a design capacity to process 400 MGD of wastewater.[36] It is therefore anticipated that the proposed project's wastewater demand would be met, and no new entitlements or resources would be required to meet the proposed project's expected wastewater needs. The JWPCP's current flow is far below capacity and given that the proposed project is a residential development on a 5.07-acre site, it is highly unlikely the proposed project would cause JWPCP's flow to rate to exceed capacity. Therefore, impacts would be less than significant.

[33]City of Inglewood, *Water Works,* https://www.cityofinglewood.org/463/Water-Works, accessed September 2022.

[34]*Ibid.*

[35]City of Inglewood, *2015 Urban Water Management Plan*, https://www.cityofinglewood.org/DocumentCenter/View/1061, August 2016.

[36]Los Angeles County Sanitation District, *Joint Water Pollution Control Plant (JWPCP),* https://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant, accessed September 2022.

In addition, the proposed project would be subject to Section 406 of the LACSD Wastewater Ordinance, which prohibits and restricts all persons discharging wastewater into the LACSD sewerage system to discharge wastewater that may violate any requirements or permits of LACSD, including those of Los Angeles Regional Water Quality Control Board (LARWQCB). The proposed project would also be subject to the LACSD Connection Fee Program. The Connection Free Program is authorized by the California Health and Safety Code Sections 5400 to 5474 to charge a fee for the privilege of connection to the LACSD's Sewerage System or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. The connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. The proposed project would not cause JWPCP to exceed wastewater treatment requirements of the LARWQCB. Thus, new or expanded wastewater treatment facilities would not be required, and impacts would be less than significant.

d-e) Less-Than-Significant Impact. A significant impact would occur if the proposed project would generate solid waste in excess of State or local standards, the capacity of local infrastructure, or State and local solid waste reduction goals; or if the proposed project would not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Solid waste generated within the City is disposed of at landfill facilities throughout Los Angeles County. While the Environmental Services Division of the City Department of Public Works provides waste collection services to single-family and some small multifamily developments, private haulers provide waste collection services for most multi-family residential developments within the City. Solid waste transported by both public and private haulers is recycled, reused, transformed at a waste-to energy facility, or disposed of at a landfill. Additionally, the Waste Management Act (AB 939) requires each California City and County to prepare, adopt, and submit to the California Department of Resources Recycling and Recovery (CalRecycle) a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction would meet AB 939's mandated diversion goals of 50 percent.

Waste Management services in the City of Inglewood dispose of solid waste at multiple landfill facilities located throughout Los Angeles County. **Table 3-24** below shows the applicable landfill facilities which could service the Proposed Project, the City of Inglewood solid waste actuals for the year 2019, and the anticipated remaining capacity of each landfill facility.

TABLE 3-24: SOLID WASTE DISPOSAL FACILITIES SERVICING THE CITY OF INGLEWOOD

Facility	City of Inglewood 2019 Disposal Actuals (in tons)	Facility Remaining Capacity (in tons)
Antelope Valley Public Landfill	28	17,911,225
Azusa Land Reclamation Co. Landfill	1,486	51,512,201
Chiquita Canyon Sanitary Landfill	2,291	60,408,000
El Sobrante Landfill	22,458	143,977,170
Frank R. Bowerman Sanitary LF	2,276	205,000,000
Lamb Canyon Sanitary Landfill	2	19,242,950
Lancaster Landfill and Recycling Center	0	14,514,648
Olinda Alpha Landfill	2,633	17,500,000
Prima Deshecha Landfill	39	134,300,000
Simi Valley Landfill & Recycling Center	354	82,954,873
Southeast Resource Recovery Facility /a/	10,683	-
Sunshine Canyon City/County Landfill		77,900,000

/a/ This is a large volume transfer/processing facility and is not a landfill.
SOURCE: CalRecycle, 2022.

A portion of solid waste generated by the proposed project would be recycled in accordance to Assembly Bill 939. The proposed project would not generate excess solid waste that would impair the City's attainment of solid waste diversion per Assembly Bill 939. The proposed project can be adequately served by the City's solid waste provider and would comply with regulations related to solid waste. Therefore, impacts would be less than significant.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.20 WILDFIRE - If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☑
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☑
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☑

a) **No Impact**. A significant impact would occur if the proposed project would substantially impair an adopted emergency response plan or emergency evacuation plan. The Board of Forestry and Fire Protection is a Governor-appointed body, whose mission is to lead California in developing policies and programs that serve the public interest in environmentally, economically and socially sustainable forest and rangeland management; and a fire protection system that protects and serves the people of the state One of its statutory responsibilities are to provide direction and guidance to the Department of California of Forestry and Fire Protection (CAL FIRE). CAL FIRE's mission emphasizes the management and protection of California's natural resources; a goal that is accomplished through ongoing assessment and study of the State's natural resources and an extensive CAL FIRE Resource Management Program. CAL FIRE maintains a list of cities that are considered Very High Fire Hazard Severity Zones (VHFHSZ).[37] The City of Inglewood, including the project site, is currently not on the VHFHSZ list. Additionally, CAL FIRE maintains a database containing Fire Hazard Severity Zones (FHSZ), which identifies State Responsibility Area and Local Responsibility Area (LRA). A search conducted found that the project site is not within a FHSZ. The nearest FHSZ is approximately 4.5 miles north of the project site, within the Kenneth Hahn State Park area. Furthermore, the proposed project would not affect or interfere with City's NHMP or evacuation routes, or emergency/disaster routes in the project area. Therefore, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan, and no impact would occur.

[37]California Department of Forestry and Fire Protection, *Cities for which CAL FIRE has made recommendations on Very High Fire Hazard Severity Zones (VHFHSZ),* https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/, accessed September 2022.

b) **No Impact**. A significant impact would occur if the proposed project would exacerbate wildfire risks, and thereby expose project occupants, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors. The City is a fully built-out urban environment with a relatively flat topography throughout. The project site and surrounding area is also relatively flat and located near the southern edge of the City that is urbanized and primarily developed with commercial and residential uses. The Hawthorne Municipal Airport hosts the closest climate monitoring station to the project site, which indicates that wind at and near the project site typically blows from a westerly direction most typically within a range of 8-13 miles per hour[38]. Because southern California is generally a windstorm susceptible region, much of this region encounters winds capable of spreading wildfire and wildfire pollutants. However, areas that are especially susceptible to exacerbate such fire risks are those that receive high gusts of wind and are within a VHFHSZ or FHSZ and has been a historically burn area. As discussed above, the City is not on the VHFHSZ list, and the project area is not within an FHSZ and is not within a historic burn area.[39] Thus, it is unlikely that the proposed project would expose project occupants to uncontrolled spread of a wildfire or the pollutant concentrations from wildfire. Furthermore, the City has the NHMP, which outlines procedures to mitigate natural hazard occurrences. Therefore, no impact would occur.

c) **No Impact**. A significant impact would occur if the proposed project required the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. The proposed project consists of the development of an apartment building within an urban area and would not require additional installation or maintenance of roads, fuel breaks, emergency water sources, or power lines. Existing utilities would adequately serve the proposed project. Thus, the proposed project would not require installation or maintenance of associated structures that may exacerbate fire risk or that may require in temporary or ongoing impacts to the environment. Furthermore, the proposed project would adhere to relevant building design codes, including the State and City fire codes. Therefore, no impact would occur.

d) **No Impact**. A significant impact would occur if the proposed project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The project site and surrounding area are located within an urban area surrounded primarily by commercial uses. There are no slopes or hills that would potentially expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, no impact would occur.

[38]Midwestern Regional Climate Center, *Wind Rose Information,* https://mrcc.illinois.edu/CLIMATE/Hourly/WindRose.jsp, accessed September 2022.

[39]California Department of Forestry and Fire Protection, *Cities for which CAL FIRE has made recommendations on Very High Fire Hazard Severity Zones (VHFHSZ),* https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/, accessed September 2022.

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
3.21 MANDATORY FINDINGS OF SIGNIFICANCE - Would the project:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☑	☐	☐
b) Does the project have impacts which are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☑	☐	☐
c) Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?	☐	☑	☐	☐

a) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project would cause the loss or destruction of individuals of a species or degrade a sensitive habitat. The preceding analyses conclude that no significant unmitigated impacts to the environment would occur. The proposed project is located within a highly urbanized area, and while currently vacant, the project site was previously developed with five different structures over the last century. The project site does not support sensitive species. In addition, the proposed project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The proposed project would have minimal potential to impact sensitive wildlife species and natural communities during construction activities. Biological impacts range from no impact to less than significant with mitigation incorporated. Any removal of trees on the project site necessary for construction is required to comply with the City's tree preservation ordinance (IMC, Chapter 12, Article 32) and obtain a tree removal permit prior to construction. The project site does not contain riparian habitat or other sensitive natural communities and does not contain wetlands. With the implementation of Mitigation Measure **BR-1**, the proposed project would adhere to the federal Migratory Bird Treaty Act (see Response to Checklist Question 3-4(d)).

The proposed project would not eliminate important examples of major periods of California history or prehistory since no historic resources are located on the project site and construction activities associated with the proposed project are not expected to disturb any undiscovered archaeological resources (See Section 3.5, Cultural Resources and Section 3.18, Tribal Cultural Resources).The proposed project would involve earthmoving activities which could potentially unearth or disturb prehistoric archaeological resources. Such actions could unearth, expose, or disturb subsurface

paleontological, archaeological, historical, or Native American resources that were not observable on the surface. However, with the implementation of Mitigation Measures **TCR-1** through **TCR-3**, potential impacts to paleontological or cultural resources that represent major periods of California history or prehistory would be reduced to less than significant.

b) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact would occur if the proposed project, in conjunction with related projects, would result in impacts that are less than significant when viewed separately but significant when viewed together. A list of related projects within the vicinity of the proposed project is provided in the Traffic Impact Study included as Appendix C. Although projects may be constructed in the vicinity of the proposed project, the impacts of each additional project will be evaluated and mitigated on a case by case basis; therefore, the cumulative impacts to which the proposed project would contribute would be less than significant. In addition, all potential impacts of the proposed project would be reduced to less-than-significant levels with implementation of the mitigation measures included in this Initial Study and compliance with existing regulations. None of these potential impacts are considered cumulatively considerable. Related projects would be subject to the same regulations. Therefore, with mitigation measures incorporated, the proposed project, in conjunction with related projects, would not result in significant cumulatively considerable impacts.

c) **Less-Than-Significant Impact with Mitigation Incorporated**. A significant impact may occur if the proposed project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. All potential impacts of the proposed project have been identified, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less-than-significant levels. Upon implementation of mitigation measures included in this Initial Study and compliance with existing regulations, the proposed project would not have the potential to result in substantial adverse impacts on human beings either directly or indirectly.

4.0 LIST OF PREPARERS AND SOURCES CONSULTED

This section also documents all the sources that contributed in the preparation of this IS/MND.

4.1 LEAD AGENCY

City of Inglewood
Economic and Community Development Department
Planning Division
One Manchester Boulevard
Inglewood, CA 90301

Contact: Marissa Fewell, Assistant Planner
(310) 412-5230

4.2 INITIAL STUDY PREPARERS

Terry A. Hayes Associates Inc.
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

Contact: Kevin Ferrier, Project Manager
Blaire Frei, Planner
Sam Silverman, Air Quality/Greenhouse Gas/Noise
Anders Sutherland, Air Quality/Greenhouse Gas
Kieran Bartholow, Noise
Natasha Mapp, Document Production

4.3 SOURCES CONSULTED

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Appendix A

Air Quality Calculations

Prairie Station Apartments Construction Phase 1 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Prairie Station Apartments Construction Phase 1
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	33.93200611456925, -118.34507686190574
County	Los Angeles-South Coast
City	Inglewood
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4553
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	185	Dwelling Unit	1.16	42,000	1,500	0.00	548	Building A
Enclosed Parking with Elevator	50.6	1000sqft	0.00	50,600	0.00	—	—	—
Parking Lot	100	Space	0.90	0.00	4,200	—	—	—

Other Asphalt Surfaces	0.84	Acre	0.84	0.00	2,000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.20	3.60	18.9	51.7	0.05	0.66	5.57	6.23	0.61	1.32	1.93	—	10,667	10,667	0.44	0.40	25.8	10,822
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.18	8.74	33.4	47.1	0.11	1.59	89.3	90.3	1.47	10.2	11.1	—	15,227	15,227	0.75	1.66	0.67	15,740
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.79	2.33	15.1	30.6	0.04	0.52	12.2	12.8	0.48	1.78	2.27	—	7,346	7,346	0.32	0.38	7.11	7,476
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	0.42	2.75	5.59	0.01	0.10	2.23	2.33	0.09	0.33	0.41	—	1,216	1,216	0.05	0.06	1.18	1,238
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.20	3.60	18.9	51.7	0.05	0.66	5.57	6.23	0.61	1.32	1.93	—	10,667	10,667	0.44	0.40	25.8	10,822
2025	3.97	3.40	17.2	49.2	0.05	0.57	5.57	6.14	0.52	1.32	1.84	—	10,528	10,528	0.44	0.40	23.7	10,682
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.18	3.57	33.4	47.1	0.11	1.59	89.3	90.3	1.47	10.2	11.1	—	15,227	15,227	0.75	1.66	0.67	15,740
2025	3.95	3.38	17.4	45.0	0.05	0.57	5.57	6.14	0.52	1.32	1.84	—	10,241	10,241	0.45	0.41	0.62	10,374
2026	1.12	8.74	8.01	12.5	0.02	0.33	0.69	1.02	0.30	0.17	0.47	—	2,648	2,648	0.11	0.12	0.09	2,687
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.79	2.33	15.1	30.6	0.04	0.52	12.2	12.8	0.48	1.78	2.27	—	7,346	7,346	0.32	0.38	7.11	7,476
2025	2.56	2.19	11.7	29.9	0.03	0.39	3.49	3.88	0.35	0.83	1.18	—	6,657	6,657	0.29	0.26	6.52	6,747
2026	0.12	1.21	0.93	1.52	< 0.005	0.02	0.11	0.13	0.02	0.03	0.04	—	348	348	0.01	0.02	0.23	354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.51	0.42	2.75	5.59	0.01	0.10	2.23	2.33	0.09	0.33	0.41	—	1,216	1,216	0.05	0.06	1.18	1,238
2025	0.47	0.40	2.13	5.45	0.01	0.07	0.64	0.71	0.06	0.15	0.22	—	1,102	1,102	0.05	0.04	1.08	1,117
2026	0.02	0.22	0.17	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	57.6	57.6	< 0.005	< 0.005	0.04	58.6

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	1.22	1.22	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	< 0.005	59.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.88	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.11	3.11	< 0.005	< 0.005	< 0.005	3.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.54
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.23	2.55	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	535	535	0.02	0.02	0.06	542
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.21	0.06	3.66	1.35	0.02	0.04	0.21	0.25	0.04	0.07	0.11	—	2,821	2,821	0.15	0.45	0.17	2,960
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	29.8	29.8	< 0.005	< 0.005	0.05	30.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	155	155	0.01	0.02	0.15	162
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.93	4.93	< 0.005	< 0.005	0.01	5.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.6	25.6	< 0.005	< 0.005	0.03	26.9

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.22	20.2	24.2	0.04	0.94	—	0.94	0.86	—	0.86	—	4,728	4,728	0.19	0.04	—	4,744
Dust From Material Movement	—	—	—	—	—	—	1.85	1.85	—	0.89	0.89	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	< 0.005	59.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.66	1.99	< 0.005	0.08	—	0.08	0.07	—	0.07	—	389	389	0.02	< 0.005	—	390
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.67	4.67	< 0.005	< 0.005	< 0.005	4.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.3	64.3	< 0.005	< 0.005	—	64.6
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.81
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.23	2.55	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	535	535	0.02	0.02	0.06	542
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.74	0.20	12.9	4.76	0.07	0.12	0.74	0.87	0.12	0.25	0.37	—	9,907	9,907	0.53	1.59	0.59	10,394
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	44.6	44.6	< 0.005	< 0.005	0.08	45.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	0.02	1.07	0.39	0.01	0.01	0.06	0.07	0.01	0.02	0.03	—	814	814	0.04	0.13	0.81	855
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.39	7.39	< 0.005	< 0.005	0.01	7.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	135	135	0.01	0.02	0.13	142

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.95	3.32	31.4	30.0	0.04	1.59	—	1.59	1.47	—	1.47	—	4,717	4,717	0.19	0.04	—	4,734

Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	< 0.005	59.6
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.86	0.82	< 0.005	0.04	—	0.04	0.04	—	0.04	—	129	129	0.01	< 0.005	—	130
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.63
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	21.4	21.4	< 0.005	< 0.005	—	21.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.23	2.55	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	535	535	0.02	0.02	0.06	542
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.9	14.9	< 0.005	< 0.005	0.03	15.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.46	2.46	< 0.005	< 0.005	< 0.005	2.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11	1.76	15.4	20.8	0.04	0.64	—	0.64	0.59	—	0.59	—	3,729	3,729	0.15	0.03	—	3,742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.11	1.76	15.4	20.8	0.04	0.64	—	0.64	0.59	—	0.59	—	3,729	3,729	0.15	0.03	—	3,742
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.13	0.95	8.30	11.2	0.02	0.34	—	0.34	0.32	—	0.32	—	2,007	2,007	0.08	0.02	—	2,014
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.51	2.04	< 0.005	0.06	—	0.06	0.06	—	0.06	—	332	332	0.01	< 0.005	—	333
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.99	1.79	1.91	30.2	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	5,648	5,648	0.23	0.19	22.3	5,732
Vendor	0.10	0.04	1.52	0.75	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,290	1,290	0.05	0.18	3.50	1,348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.98	1.77	2.27	25.5	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	5,353	5,353	0.24	0.20	0.58	5,418
Vendor	0.10	0.04	1.58	0.76	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,291	1,291	0.05	0.18	0.09	1,345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	0.95	1.21	14.4	0.00	0.00	0.18	0.18	0.00	0.00	0.00	—	2,923	2,923	0.13	0.11	5.17	2,964
Vendor	0.05	0.02	0.86	0.41	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	695	695	0.03	0.10	0.81	725
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.22	2.64	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	484	484	0.02	0.02	0.86	491
Vendor	0.01	< 0.005	0.16	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	115	115	< 0.005	0.02	0.13	120
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.64	14.0	20.7	0.04	0.55	—	0.55	0.51	—	0.51	—	3,729	3,729	0.15	0.03	—	3,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.64	14.0	20.7	0.04	0.55	—	0.55	0.51	—	0.51	—	3,729	3,729	0.15	0.03	—	3,741
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	1.02	8.72	12.9	0.02	0.35	—	0.35	0.32	—	0.32	—	2,320	2,320	0.09	0.02	—	2,328
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.59	2.35	< 0.005	0.06	—	0.06	0.06	—	0.06	—	384	384	0.02	< 0.005	—	385
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.91	1.72	1.73	27.8	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	5,531	5,531	0.23	0.19	20.2	5,613
Vendor	0.09	0.04	1.44	0.71	0.01	0.02	0.07	0.09	0.01	0.03	0.04	—	1,269	1,269	0.05	0.18	3.47	1,327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.90	1.70	1.92	23.6	0.00	0.00	0.33	0.33	0.00	0.00	0.00	—	5,242	5,242	0.24	0.20	0.52	5,308
Vendor	0.09	0.04	1.50	0.71	0.01	0.02	0.07	0.09	0.01	0.03	0.04	—	1,270	1,270	0.05	0.18	0.09	1,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	1.05	1.29	15.4	0.00	0.00	0.20	0.20	0.00	0.00	0.00	—	3,311	3,311	0.15	0.12	5.44	3,355
Vendor	0.06	0.02	0.94	0.44	0.01	0.01	0.04	0.06	0.01	0.02	0.02	—	790	790	0.03	0.11	0.94	825
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.24	2.81	0.00	0.00	0.04	0.04	0.00	0.00	0.00	—	548	548	0.02	0.02	0.90	555
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	131	131	0.01	0.02	0.16	137
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.66	0.88	< 0.005	0.03	—	0.03	0.03	—	0.03	—	133	133	0.01	< 0.005	—	134
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.17	0.19	2.36	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	524	524	0.02	0.02	0.05	531
Vendor	0.05	0.02	0.75	0.36	< 0.005	0.01	0.04	0.04	< 0.005	0.01	0.02	—	635	635	0.03	0.09	0.05	662
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.02	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	46.8	46.8	< 0.005	< 0.005	0.08	47.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	55.9	55.9	< 0.005	0.01	0.07	58.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.76	7.76	< 0.005	< 0.005	0.01	7.86
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.25	9.25	< 0.005	< 0.005	0.01	9.66
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.40	4.40	< 0.005	< 0.005	—	4.42
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.17	2.20	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	514	514	0.02	0.02	0.05	520
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.04	0.04	< 0.005	0.01	0.02	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	9.18	9.18	< 0.005	< 0.005	0.01	9.31
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.52	1.52	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	4.83	6.82	0.01	0.10	—	0.10	0.10	—	0.10	—	1,052	1,052	0.04	0.01	—	1,056
Architectural Coatings	—	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.66	0.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	144	144	0.01	< 0.005	—	145
Architectural Coatings	—	1.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.9	23.9	< 0.005	< 0.005	—	23.9
Architectural Coatings	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.17	2.20	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	514	514	0.02	0.02	0.05	520
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.04	0.04	< 0.005	0.01	0.02	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.32	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	71.4	71.4	< 0.005	< 0.005	0.11	72.4
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	85.4	85.4	< 0.005	0.01	0.10	89.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	11.8	11.8	< 0.005	< 0.005	0.02	12.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/8/2024	2/2/2024	5.00	20.0	—
Site Preparation	Site Preparation	2/5/2024	3/15/2024	5.00	30.0	—
Grading	Grading	3/18/2024	3/29/2024	5.00	10.0	—
Building Construction	Building Construction	4/1/2024	11/14/2025	5.00	425	—
Paving	Paving	11/17/2025	1/9/2026	5.00	40.0	—
Architectural Coating	Architectural Coating	1/12/2026	3/20/2026	5.00	50.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	8.00	423	0.48
Site Preparation	Excavators	Diesel	Average	3.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Site Preparation	Rubber Tired Loaders	Diesel	Average	3.00	8.00	150	0.36
Grading	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Grading	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Building Construction	Rubber Tired Loaders	Diesel	Average	3.00	8.00	150	0.36
Architectural Coating	Aerial Lifts	Diesel	Average	2.00	8.00	46.0	0.31
Architectural Coating	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	40.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	40.0	20.0	HHDT
Demolition	Onsite truck	1.00	16.0	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	40.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	140	20.0	HHDT
Site Preparation	Onsite truck	1.00	16.0	HHDT

Grading	—	—	—	—
Grading	Worker	40.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	1.00	16.0	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	400	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	40.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	40.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	20.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	40.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	20.0	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	85,050	28,350	0.00	26,437	4,548

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,781	—
Site Preparation	—	33,705	30.0	0.00	—
Grading	—	—	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.74

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	0.00	50%
Parking Lot	0.90	100%
Other Asphalt Surfaces	0.84	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.38	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	2	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	0	N/A
Wildfire	1	1	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	0	1	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	2	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	29.9
AQ-PM	76.3
AQ-DPM	95.3

Drinking Water	39.5
Lead Risk Housing	96.4
Pesticides	67.2
Toxic Releases	94.3
Traffic	91.2
Effect Indicators	—
CleanUp Sites	19.2
Groundwater	37.6
Haz Waste Facilities/Generators	5.03
Impaired Water Bodies	51.2
Solid Waste	9.67
Sensitive Population	—
Asthma	59.4
Cardio-vascular	60.2
Low Birth Weights	96.3
Socioeconomic Factor Indicators	—
Education	88.3
Housing	90.5
Linguistic	75.2
Poverty	90.3
Unemployment	74.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	14.44886437

Employed	47.36301809
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	53.56088798
Transportation	—
Auto Access	45.25856538
Active commuting	76.47889131
Social	—
2-parent households	16.91261388
Voting	12.57538817
Neighborhood	—
Alcohol availability	4.516874118
Park access	18.9272424
Retail density	42.409855
Supermarket access	94.25125112
Tree canopy	29.92429103
Housing	—
Homeownership	14.98780957
Housing habitability	1.475683306
Low-inc homeowner severe housing cost burden	3.054022841
Low-inc renter severe housing cost burden	4.042089054
Uncrowded housing	2.592069806
Health Outcomes	—
Insured adults	3.798280508
Arthritis	55.6
Asthma ER Admissions	26.7

High Blood Pressure	46.3
Cancer (excluding skin)	91.6
Asthma	7.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	19.2
Diagnosed Diabetes	8.5
Life Expectancy at Birth	85.3
Cognitively Disabled	54.2
Physically Disabled	85.5
Heart Attack ER Admissions	24.8
Mental Health Not Good	4.8
Chronic Kidney Disease	10.6
Obesity	6.0
Pedestrian Injuries	96.0
Physical Health Not Good	7.0
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	6.3
No Leisure Time for Physical Activity	9.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	35.2
Elderly	96.3
English Speaking	14.0
Foreign-born	85.2

Outdoor Workers	11.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	7.7
Traffic Density	95.8
Traffic Access	87.4
Other Indices	—
Hardship	94.7
Other Decision Support	—
2016 Voting	8.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0
Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Title	Co-Benefits Achieved
AH-2: Promote Affordable Housing in Transit-Rich Areas	Energy and Fuel Savings, Enhanced Pedestrian or Traffic Safety, Improved Air Quality, Improved Public Health, Social Equity, VMT Reductions

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use sizes from project description. Parking garage lot acreage set to zero.
Construction: Construction Phases	schedule provided by applicant
Construction: Off-Road Equipment	construction equipment inventory provided
Construction: Trips and VMT	project specific trips
Construction: On-Road Fugitive Dust	scaqmd rule 403 compliance
Construction: Architectural Coatings	no painting of interior parking structure
Construction: Paving	concrete parking garage

Prairie Station Apartment Construction Phase 2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Prairie Station Apartment Construction Phase 2
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	33.932135498004655, -118.34504379434058
County	Los Angeles-South Coast
City	Inglewood
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4553
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	255	Dwelling Unit	1.50	28,900	2,500	—	755	—
Enclosed Parking with Elevator	55.3	1000sqft	0.00	55,300	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.09	2.60	16.9	35.8	0.04	0.62	2.96	3.57	0.57	0.71	1.28	—	7,596	7,596	0.31	0.30	14.6	7,708
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.08	2.59	17.1	33.5	0.04	0.62	2.96	3.57	0.57	0.71	1.28	—	7,449	7,449	0.32	0.31	0.38	7,548
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.06	1.74	11.2	23.6	0.03	0.38	2.09	2.47	0.35	0.50	0.85	—	5,293	5,293	0.23	0.21	4.20	5,367
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38	0.32	2.04	4.30	0.01	0.07	0.38	0.45	0.06	0.09	0.15	—	876	876	0.04	0.04	0.70	889
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshol	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.09	2.60	16.9	35.8	0.04	0.62	2.96	3.57	0.57	0.71	1.28	—	7,596	7,596	0.31	0.30	14.6	7,708
2025	2.90	2.44	15.4	34.5	0.04	0.54	2.96	3.49	0.49	0.71	1.19	—	7,515	7,515	0.31	0.30	13.6	7,626
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.08	2.59	17.1	33.5	0.04	0.62	2.96	3.57	0.57	0.71	1.28	—	7,449	7,449	0.32	0.31	0.38	7,548
2025	2.89	2.43	15.6	32.4	0.04	0.54	2.96	3.49	0.49	0.71	1.19	—	7,372	7,372	0.32	0.31	0.35	7,471
2026	2.68	2.24	14.5	31.6	0.04	0.48	2.96	3.43	0.43	0.71	1.14	—	7,298	7,298	0.31	0.30	0.33	7,396
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.40	1.18	7.82	15.6	0.02	0.28	1.33	1.61	0.26	0.32	0.58	—	3,414	3,414	0.14	0.14	2.88	3,462
2025	2.06	1.74	11.2	23.6	0.03	0.38	2.09	2.47	0.35	0.50	0.85	—	5,293	5,293	0.23	0.21	4.20	5,367
2026	0.34	0.28	1.86	4.08	0.01	0.06	0.37	0.43	0.06	0.09	0.14	—	933	933	0.04	0.04	0.69	946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.26	0.21	1.43	2.84	< 0.005	0.05	0.24	0.29	0.05	0.06	0.11	—	565	565	0.02	0.02	0.48	573
2025	0.38	0.32	2.04	4.30	0.01	0.07	0.38	0.45	0.06	0.09	0.15	—	876	876	0.04	0.04	0.70	889
2026	0.06	0.05	0.34	0.74	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	—	154	154	0.01	0.01	0.11	157

3. Construction Emissions Details

3.1. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.66	14.4	20.0	0.03	0.60	—	0.60	0.55	—	0.55	—	3,481	3,481	0.14	0.03	—	3,493
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.99	1.66	14.4	20.0	0.03	0.60	—	0.60	0.55	—	0.55	—	3,481	3,481	0.14	0.03	—	3,493
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.58	9.12	0.02	0.27	—	0.27	0.25	—	0.25	—	1,587	1,587	0.06	0.01	—	1,593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.20	1.66	< 0.005	0.05	—	0.05	0.05	—	0.05	—	263	263	0.01	< 0.005	—	264
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.90	0.96	15.1	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,824	2,824	0.12	0.09	11.1	2,866
Vendor	0.10	0.04	1.52	0.75	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,290	1,290	0.05	0.18	3.50	1,348
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.99	0.88	1.13	12.8	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,676	2,676	0.12	0.10	0.29	2,709
Vendor	0.10	0.04	1.58	0.76	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,291	1,291	0.05	0.18	0.09	1,345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.51	6.12	0.00	0.00	0.07	0.07	0.00	0.00	0.00	—	1,238	1,238	0.06	0.05	2.19	1,256
Vendor	0.05	0.02	0.73	0.34	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	589	589	0.02	0.08	0.69	614
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.12	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	205	205	0.01	0.01	0.36	208
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	97.4	97.4	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.85	1.55	13.1	19.9	0.03	0.52	—	0.52	0.48	—	0.48	—	3,481	3,481	0.14	0.03	—	3,493
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.55	13.1	19.9	0.03	0.52	—	0.52	0.48	—	0.48	—	3,481	3,481	0.14	0.03	—	3,493
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.32	1.11	9.35	14.2	0.02	0.37	—	0.37	0.34	—	0.34	—	2,486	2,486	0.10	0.02	—	2,495
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.71	2.60	< 0.005	0.07	—	0.07	0.06	—	0.06	—	412	412	0.02	< 0.005	—	413
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.96	0.86	0.87	13.9	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,765	2,765	0.12	0.09	10.1	2,807
Vendor	0.09	0.04	1.44	0.71	0.01	0.02	0.07	0.09	0.01	0.03	0.04	—	1,269	1,269	0.05	0.18	3.47	1,327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.95	0.85	0.96	11.8	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,621	2,621	0.12	0.10	0.26	2,654

Vendor	0.09	0.04	1.50	0.71	0.01	0.02	0.07	0.09	0.01	0.03	0.04	—	1,270	1,270	0.05	0.18	0.09	1,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.60	0.74	8.85	0.00	0.00	0.12	0.12	0.00	0.00	0.00	—	1,900	1,900	0.09	0.07	3.12	1,925
Vendor	0.06	0.03	1.08	0.50	0.01	0.01	0.05	0.06	0.01	0.02	0.03	—	907	907	0.04	0.13	1.07	947
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.14	1.62	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	315	315	0.01	0.01	0.52	319
Vendor	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	150	150	0.01	0.02	0.18	157
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	1.48	12.2	19.9	0.03	0.46	—	0.46	0.42	—	0.42	—	3,482	3,482	0.14	0.03	—	3,494
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.55	2.53	< 0.005	0.06	—	0.06	0.05	—	0.05	—	443	443	0.02	< 0.005	—	444

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	73.3	73.3	< 0.005	< 0.005	—	73.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.73	0.87	11.0	0.00	0.00	0.16	0.16	0.00	0.00	0.00	—	2,569	2,569	0.12	0.09	0.24	2,600
Vendor	0.09	0.04	1.44	0.68	0.01	0.02	0.07	0.09	0.01	0.03	0.04	—	1,248	1,248	0.05	0.18	0.09	1,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.12	1.47	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	332	332	0.01	0.01	0.50	336
Vendor	0.01	< 0.005	0.18	0.09	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	159	159	0.01	0.02	0.18	166
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	54.9	54.9	< 0.005	< 0.005	0.08	55.6
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	26.3	26.3	< 0.005	< 0.005	0.03	27.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	5/13/2024	3/6/2026	5.00	475	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Building Construction	Rubber Tired Loaders	Diesel	Average	3.00	8.00	150	0.36

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Building Construction	—	—	—	—
Building Construction	Worker	200	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	40.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.38	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	5	1	1	4

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	2	1
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	5	1	1	4

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

6.4.1. Temperature and Extreme Heat

User Selected Measures	Co-Benefits Achieved	Exposure Reduction	Sensitivity Reduction	Adaptive Capacity Increase
D-3: Install Drought Resistant Landscaping	Water Conservation	—	1.00	1.00

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	29.9
AQ-PM	76.3
AQ-DPM	95.3
Drinking Water	39.5
Lead Risk Housing	96.4
Pesticides	67.2
Toxic Releases	94.3
Traffic	91.2
Effect Indicators	—
CleanUp Sites	19.2
Groundwater	37.6
Haz Waste Facilities/Generators	5.03
Impaired Water Bodies	51.2
Solid Waste	9.67
Sensitive Population	—
Asthma	59.4
Cardio-vascular	60.2
Low Birth Weights	96.3
Socioeconomic Factor Indicators	—
Education	88.3
Housing	90.5
Linguistic	75.2
Poverty	90.3
Unemployment	74.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	14.44886437
Employed	47.36301809
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	53.56088798
Transportation	—
Auto Access	45.25856538
Active commuting	76.47889131
Social	—
2-parent households	16.91261388
Voting	12.57538817
Neighborhood	—
Alcohol availability	4.516874118
Park access	18.9272424
Retail density	42.409855
Supermarket access	94.25125112
Tree canopy	29.92429103
Housing	—
Homeownership	14.98780957
Housing habitability	1.475683306
Low-inc homeowner severe housing cost burden	3.054022841
Low-inc renter severe housing cost burden	4.042089054

Uncrowded housing	2.592069806
Health Outcomes	—
Insured adults	3.798280508
Arthritis	55.6
Asthma ER Admissions	26.7
High Blood Pressure	46.3
Cancer (excluding skin)	91.6
Asthma	7.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	19.2
Diagnosed Diabetes	8.5
Life Expectancy at Birth	85.3
Cognitively Disabled	54.2
Physically Disabled	85.5
Heart Attack ER Admissions	24.8
Mental Health Not Good	4.8
Chronic Kidney Disease	10.6
Obesity	6.0
Pedestrian Injuries	96.0
Physical Health Not Good	7.0
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	6.3
No Leisure Time for Physical Activity	9.5
Climate Change Exposures	—
Wildfire Risk	0.0

SLR Inundation Area	0.0
Children	35.2
Elderly	96.3
English Speaking	14.0
Foreign-born	85.2
Outdoor Workers	11.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	7.7
Traffic Density	95.8
Traffic Access	87.4
Other Indices	—
Hardship	94.7
Other Decision Support	—
2016 Voting	8.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0
Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Land use from site plan (building B/C combined)
Construction: Construction Phases	Building B/C construction
Construction: Off-Road Equipment	equipment inventory provided by applicant
Construction: Trips and VMT	construction trips from project description

Prairie Station Apartments Operations Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Prairie Station Apartments Operations
Lead Agency	City of Inglewood
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	33.93223877003112, -118.34545340081294
County	Los Angeles-South Coast
City	Inglewood
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4553
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	440	Dwelling Unit	3.33	499,000	5,000	0.00	1,302	—
Enclosed Parking with Elevator	141	1000sqft	0.00	140,500	0.00	—	—	—
Parking Lot	100	Space	0.90	0.00	2,000	—	—	—

Other Asphalt Surfaces	0.84	Acre	0.84	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-14*	Provide Electric Vehicle Charging Infrastructure
Transportation	T-34*	Provide Bike Parking
Energy	E-1	Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards
Energy	E-2	Require Energy Efficient Appliances
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes
Waste	S-4*	Recycle Demolished Construction Material

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.65	20.8	4.44	84.5	0.12	0.18	4.41	4.59	0.18	0.76	0.94	207	15,418	15,624	21.6	0.42	40.5	16,330
Mit.	9.65	20.8	4.44	84.5	0.12	0.18	4.41	4.59	0.18	0.76	0.94	200	15,306	15,506	20.9	0.40	40.5	16,188
% Reduced	—	—	—	—	—	—	—	—	—	—	—	3%	1%	1%	3%	4%	—	1%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.21	17.5	4.52	48.8	0.12	0.16	4.41	4.57	0.16	0.76	0.92	207	14,754	14,961	21.6	0.44	4.53	15,636
Mit.	6.21	17.5	4.52	48.8	0.12	0.16	4.41	4.57	0.16	0.76	0.92	200	14,643	14,843	20.9	0.42	4.53	15,495
% Reduced	—	—	—	—	—	—	—	—	—	—	—	3%	1%	1%	3%	4%	—	1%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.50	19.7	4.75	71.5	0.12	0.17	4.41	4.58	0.17	0.76	0.93	207	14,971	15,178	21.6	0.45	19.5	15,870
Mit.	8.50	19.7	4.75	71.5	0.12	0.17	4.41	4.58	0.17	0.76	0.93	200	14,860	15,060	20.9	0.43	19.5	15,729
% Reduced	—	—	—	—	—	—	—	—	—	—	—	3%	1%	1%	3%	4%	—	1%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	3.59	0.87	13.0	0.02	0.03	0.81	0.84	0.03	0.14	0.17	34.2	2,479	2,513	3.58	0.07	3.23	2,627
Mit.	1.55	3.59	0.87	13.0	0.02	0.03	0.81	0.84	0.03	0.14	0.17	33.1	2,460	2,493	3.46	0.07	3.23	2,604
% Reduced	—	—	—	—	—	—	—	—	—	—	—	3%	1%	1%	3%	4%	—	1%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.08	5.59	2.91	52.9	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,599	11,599	0.49	0.31	36.9	11,739
Area	3.42	15.1	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,621	3,621	0.33	0.03	—	3,637
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242

Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	9.65	20.8	4.44	84.5	0.12	0.18	4.41	4.59	0.18	0.76	0.94	207	15,418	15,624	21.6	0.42	40.5	16,330
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.56	3.29	48.3	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,027	11,027	0.51	0.33	0.96	11,140
Area	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,621	3,621	0.33	0.03	—	3,637
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	6.21	17.5	4.52	48.8	0.12	0.16	4.41	4.57	0.16	0.76	0.92	207	14,754	14,961	21.6	0.44	4.53	15,636
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.01	5.51	3.32	49.7	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,181	11,181	0.51	0.34	15.9	11,310
Area	2.34	14.1	0.20	21.3	< 0.005	0.01	—	0.01	0.02	—	0.02	—	62.9	62.9	< 0.005	0.01	—	64.7
Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,621	3,621	0.33	0.03	—	3,637
Water	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	8.50	19.7	4.75	71.5	0.12	0.17	4.41	4.58	0.17	0.76	0.93	207	14,971	15,178	21.6	0.45	19.5	15,870
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.10	1.01	0.61	9.07	0.02	0.01	0.81	0.82	0.01	0.14	0.15	—	1,851	1,851	0.08	0.06	2.64	1,872
Area	0.43	2.58	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7
Energy	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	599	599	0.06	< 0.005	—	602
Water	—	—	—	—	—	—	—	—	—	—	—	5.20	17.6	22.8	0.54	0.01	—	40.0
Waste	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59

Total	1.55	3.59	0.87	13.0	0.02	0.03	0.81	0.84	0.03	0.14	0.17	34.2	2,479	2,513	3.58	0.07	3.23	2,627

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.08	5.59	2.91	52.9	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,599	11,599	0.49	0.31	36.9	11,739
Area	3.42	15.1	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,532	3,532	0.33	0.03	—	3,548
Water	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	9.65	20.8	4.44	84.5	0.12	0.18	4.41	4.59	0.18	0.76	0.94	200	15,306	15,506	20.9	0.40	40.5	16,188
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.06	5.56	3.29	48.3	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,027	11,027	0.51	0.33	0.96	11,140
Area	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,532	3,532	0.33	0.03	—	3,548
Water	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	6.21	17.5	4.52	48.8	0.12	0.16	4.41	4.57	0.16	0.76	0.92	200	14,643	14,843	20.9	0.42	4.53	15,495
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.01	5.51	3.32	49.7	0.11	0.06	4.41	4.47	0.06	0.76	0.82	—	11,181	11,181	0.51	0.34	15.9	11,310
Area	2.34	14.1	0.20	21.3	< 0.005	0.01	—	0.01	0.02	—	0.02	—	62.9	62.9	< 0.005	0.01	—	64.7

Energy	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	3,532	3,532	0.33	0.03	—	3,548
Water	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Waste	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	8.50	19.7	4.75	71.5	0.12	0.17	4.41	4.58	0.17	0.76	0.93	200	14,860	15,060	20.9	0.43	19.5	15,729
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.10	1.01	0.61	9.07	0.02	0.01	0.81	0.82	0.01	0.14	0.15	—	1,851	1,851	0.08	0.06	2.64	1,872
Area	0.43	2.58	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7
Energy	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	585	585	0.05	< 0.005	—	587
Water	—	—	—	—	—	—	—	—	—	—	—	4.08	13.8	17.9	0.42	0.01	—	31.4
Waste	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59
Total	1.55	3.59	0.87	13.0	0.02	0.03	0.81	0.84	0.03	0.14	0.17	33.1	2,460	2,493	3.46	0.07	3.23	2,604

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,530	1,530	0.15	0.02	—	1,539
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	492	492	0.05	0.01	—	495
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	< 0.005	< 0.005	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,054	2,054	0.20	0.02	—	2,066
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,530	1,530	0.15	0.02	—	1,539
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	492	492	0.05	0.01	—	495
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	< 0.005	< 0.005	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,054	2,054	0.20	0.02	—	2,066
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	253	253	0.02	< 0.005	—	255

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	81.4	81.4	0.01	< 0.005	—	81.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.39	5.39	< 0.005	< 0.005	—	5.42
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	340	340	0.03	< 0.005	—	342

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,442	1,442	0.14	0.02	—	1,450
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	492	492	0.05	0.01	—	495
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	< 0.005	< 0.005	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,966	1,966	0.19	0.02	—	1,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,442	1,442	0.14	0.02	—	1,450
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	492	492	0.05	0.01	—	495
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	32.6	32.6	< 0.005	< 0.005	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,966	1,966	0.19	0.02	—	1,977
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	239	239	0.02	< 0.005	—	240
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	81.4	81.4	0.01	< 0.005	—	81.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.39	5.39	< 0.005	< 0.005	—	5.42
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	325	325	0.03	< 0.005	—	327

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.14	0.07	1.23	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,566	1,566	0.14	< 0.005	—	1,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	259	259	0.02	< 0.005	—	260

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	—	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.42	3.22	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Total	3.42	15.1	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.40	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7
Total	0.43	2.58	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	3.42	3.22	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Total	3.42	15.1	0.29	31.1	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.9	91.9	< 0.005	0.01	—	94.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	0.43	0.40	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7
Total	0.43	2.58	0.04	3.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.7

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.14	0.14	< 0.005	< 0.005	—	0.14
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.14	0.14	< 0.005	< 0.005	—	0.14
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	31.4	106	138	3.23	0.08	—	242
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	5.20	17.6	22.8	0.54	0.01	—	40.0
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	—	0.02
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.20	17.6	22.8	0.54	0.01	—	40.0

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.06	0.06	< 0.005	< 0.005	—	0.06
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.06	0.06	< 0.005	< 0.005	—	0.06
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	24.7	83.4	108	2.54	0.06	—	190
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	4.08	13.8	17.9	0.42	0.01	—	31.4

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.08	13.8	17.9	0.42	0.01	—	31.4

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	613
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	29.0	0.00	29.0	2.90	0.00	—	102

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.57	3.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.59	0.59

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,754	1,754	1,754	640,210	16,355	16,355	16,355	5,969,575

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	1,754	1,754	1,754	640,210	16,355	16,355	16,355	5,969,575

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1010475	336,825	214,161	71,387	4,548

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,612,967	346	0.0330	0.0040	4,887,011
Enclosed Parking with Elevator	518,646	346	0.0330	0.0040	0.00
Parking Lot	34,343	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,519,807	346	0.0330	0.0040	4,887,011
Enclosed Parking with Elevator	518,646	346	0.0330	0.0040	0.00
Parking Lot	34,343	346	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	16,400,472	85,706
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	28,049
Other Asphalt Surfaces	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	12,874,371	45,037
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	11,782
Other Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	110	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	110	0.00
Enclosed Parking with Elevator	0.00	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.38	annual days of extreme heat
Extreme Precipitation	4.70	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	2	1	2	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	5	2	1	5

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	2	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	2	1	2	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	5	2	1	5

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	29.9
AQ-PM	76.3
AQ-DPM	95.3
Drinking Water	39.5
Lead Risk Housing	96.4
Pesticides	67.2
Toxic Releases	94.3
Traffic	91.2
Effect Indicators	—
CleanUp Sites	19.2
Groundwater	37.6
Haz Waste Facilities/Generators	5.03
Impaired Water Bodies	51.2
Solid Waste	9.67
Sensitive Population	—
Asthma	59.4
Cardio-vascular	60.2

Low Birth Weights	96.3
Socioeconomic Factor Indicators	—
Education	88.3
Housing	90.5
Linguistic	75.2
Poverty	90.3
Unemployment	74.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	14.44886437
Employed	47.36301809
Median HI	—
Education	—
Bachelor's or higher	4.157577313
High school enrollment	100
Preschool enrollment	53.56088798
Transportation	—
Auto Access	45.25856538
Active commuting	76.47889131
Social	—
2-parent households	16.91261388
Voting	12.57538817
Neighborhood	—
Alcohol availability	4.516874118

Park access	18.9272424
Retail density	42.409855
Supermarket access	94.25125112
Tree canopy	29.92429103
Housing	—
Homeownership	14.98780957
Housing habitability	1.475683306
Low-inc homeowner severe housing cost burden	3.054022841
Low-inc renter severe housing cost burden	4.042089054
Uncrowded housing	2.592069806
Health Outcomes	—
Insured adults	3.798280508
Arthritis	55.6
Asthma ER Admissions	26.7
High Blood Pressure	46.3
Cancer (excluding skin)	91.6
Asthma	7.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	19.2
Diagnosed Diabetes	8.5
Life Expectancy at Birth	85.3
Cognitively Disabled	54.2
Physically Disabled	85.5
Heart Attack ER Admissions	24.8
Mental Health Not Good	4.8
Chronic Kidney Disease	10.6
Obesity	6.0

Pedestrian Injuries	96.0
Physical Health Not Good	7.0
Stroke	15.1
Health Risk Behaviors	—
Binge Drinking	73.8
Current Smoker	6.3
No Leisure Time for Physical Activity	9.5
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	35.2
Elderly	96.3
English Speaking	14.0
Foreign-born	85.2
Outdoor Workers	11.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	7.7
Traffic Density	95.8
Traffic Access	87.4
Other Indices	—
Hardship	94.7
Other Decision Support	—
2016 Voting	8.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	94.0

Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Title	Co-Benefits Achieved
AH-2: Promote Affordable Housing in Transit-Rich Areas	—

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses from project description; includes building A, B, and C
Operations: Hearths	No fireplaces included in project design
Operations: Fleet Mix	Residential Trips only = no heavy-duty truck or bus trips.

Appendix B

Noise and Vibration

Appendix B

Noise and Vibration

Noise Formulas

Noise Distance Attenuation

Hard Site

Equation: Ni = No - 20 X (log Di/Do)

Di = distance to receptor (Di>Do)

Ni = attenuated noise level of interest

Do = reference distance

No = reference noise level

Source: (Bolt, Beranek, and Newman, 1971)

Summation of Noise Levels

Equation: Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Automatic Sum

=10*LOG(SUM(10^(UserRange/10)))

Ns = Noise Level Sum
N1 = Noise Level 1
N2 = Noise Level 2
N3 = Noise Level 3
N4 = Noise Level 4

Source: California Department of Transportation, *Technical Noise Supplement* , 2013

Construction Noise Analysis

Phased Construction Noise Levels	
Construction Equipment	**Noise Level at 50 feet (dBA)**
Demolition	
Concrete Saw	82.6
Dozer	77.7
Excavator	76.7
Demolition Combined	**84.6**
Excavation & Shoring	
Excavator	76.7
Grader	81.00
Dozer	77.70
Loaders	75.1
Site Preparation Combined	**84.2**
Leveling & Foundation	
Crawler Tractor	80
Backhoe	73.6
Dozer	77.7
Loaders	75.1
Grading Combined	**83.3**
Podium 1 Construction	
Rough Terrain Forklift	79.4
Generator	77.6
Loaders	75.1
Welder	70
Crane	72.6
Building Construction Combined	**83.1**
Private Driveway Paving	
Pavers	74.2
Compactor (Ground) (Paving Equipment in AQ)	76.2
Rollers	73
Paving Combined	**79.4**
Podium 2 and 3 Construction	
Rough Terrain Forklift	79.4
Generator	77.6
Loaders	75.1
Welder	70
Crane	72.6
Building Construction Combined	**83.1**
Architectural Coating	
Loader	75.1
Aerial Lift	67.7
Air Compressor	73.7
Architectural Coating Combined	**77.9**

Source: FHWA, Roadway Construction Noise Model, 2008.

On-Site Construction Noise: Resulting Noise Level Increases - Unmitigated				
Sensitive Receptor	**Distance (feet)**	**Reference Noise Level (dBA)**	**Intervening Building /a/**	**Max Construction Noise (dBA, Leq)**
Residences adjacent to the north	15	84.6	0	95.1
Residences to the east	100	84.6	0	78.6
La Quinta Inn and Suite	100	84.6	0	78.6
Residences to the northeast	100	84.6	0	78.6
Residences to the north	130	84.6	0	76.3
Crystal Inn Suites and Spa LAX	140	84.6	0	75.7
Residences to the northwest	200	84.6	0	72.6
Residences to the east	200	84.6	0	72.6
Residences to the north	220	84.6	0	71.7
Residences to the northeast	300	84.6	4.5	64.5
Anand Care Center	350	84.6	4.5	63.2
Hollypark Motel to the southeast	360	84.6	4.5	63.0
Welcome Inn Motel to the north	415	84.6	6	60.2
Residences to the northeast	450	84.6	4.5	61.0

/a/ Includes a 4.5 dB reduction for first row of intervening buildings and 1.5 dB for each subsequent row.

On-Site Construction Noise: Resulting Noise Level Increases - Mitigated					
Sensitive Receptor	Distance (feet)	Attenuation /a/	Intervening Building /b/	Reference Noise Level (dBA)	Max Construction Noise (dBA, Leq)
Residences adjacent to the north	15	13	0	71.6	82.1
Residences to the east	100	3	0	81.6	75.6
La Quinta Inn and Suite	100	3	0	81.6	75.6
Residences to the northeast	100	3	0	81.6	75.6
Residences to the north	130	3	0	81.6	73.3
Crystal Inn Suites and Spa LAX	140	3	0	81.6	72.7
Residences to the northwest	200	3	0	81.6	69.6
Residences to the east	200	3	0	81.6	69.6
Residences to the north	220	3	0	81.6	68.7
Residences to the northeast	300	3	4.5	77.1	61.5
Anand Care Center	350	3	4.5	77.1	60.2
Hollypark Motel to the southeast	360	3	4.5	77.1	60.0
Welcome Inn Motel to the north	415	3	6	75.6	57.2
Residences to the northeast	450	3	4.5	77.1	58.0

/a/ Includes 3 dBA reduction for mufflers and a 10 dB reduction for a temporary noise barrier
/b/ Includes a 4.5 dB reduction for first row of intervening buildings and 1.5 dB for each subsequent row.

Operational Noise Analysis

HVAC Noise

Sensitive Receptor	Distance (feet) /a/	Reference Noise Level (dBA)	Parapet Wall (-10 dBA)	HVAC Noise (dBA, Leq)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)
Residences adjacent to the north	55	60	50	49.2	69.6	69.6

/a/ distance is the sloped distance from the location of the suite to ground level noise

Pool Deck Noise

Sensitive Receptor	Distance (feet)	Reference Noise Level (dBA) /a/	Pool Deck Noise (dBA, Leq)	Existing Ambient (dBA, Leq)	New Ambient (dBA, Leq)
Residences adjacent to the north	140	76	42.6	69.6	69.6

/a/ Combined noise level of 10 people speaking at 66 dBA at three feet

Vibration PPV Attenuation

Equation: PPVequip = PPVref x (25/D)^1.5
PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance
PPV (ref) is the reference vibration level in in/sec at 25 feet from Table 12-2
D is the distance from the equipment to the receiver.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

Vibration VdB Attenuation

Equation: Lv(D) = Lv(25 ft) – 30log(D/25)
D = Distance (feet)
Lv(D) = Vibration Level

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

Traffic Noise Model Runs

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	11 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/11/2022 3:25:15 PM
CASE:	Prairie Avenue_Existing	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	0	0	---	71.5	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	0	0	---	70.2	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	0	0	---	70.9	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	0	0	---	71.0	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	0	0	---	72.3	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	0	0	---	72.0	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	0	0	---	63.4	0.0	---	---	Sound Level

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	13 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/13/2022 5:13:05 PM
CASE:	Prairie Avenue_FutureNoProject	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	1	1	---	72.1	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	2	1	---	70.6	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	3	1	---	71.3	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	4	1	---	71.6	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	5	1	---	72.9	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	6	1	---	72.7	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	7	1	---	65.5	0.0	---	---	Sound Level

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	13 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/13/2022 5:14:31 PM
CASE:	Prairie Avenue_FutureWithProject	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	1	1	---	72.2	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	2	1	---	70.6	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	3	1	---	71.3	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	4	1	---	71.7	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	5	1	---	72.9	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	6	1	---	72.7	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	7	1	---	65.5	0.0	---	---	Sound Level

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	13 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/13/2022 5:19:22 PM
CASE:	Prairie Avenue_HaulTruck_112-113	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	1	1	---	71.5	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	2	1	---	70.2	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	3	1	---	70.9	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	4	1	---	71.1	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	5	1	---	72.5	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	6	1	---	72.0	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	7	1	---	63.4	0.0	---	---	Sound Level

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	13 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/13/2022 5:22:03 PM
CASE:	Prairie Avenue_HaulTruck_113-Imperial	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	1	1	---	71.7	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	2	1	---	70.2	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	3	1	---	70.9	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	4	1	---	71.1	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	5	1	---	72.3	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	6	1	---	72.0	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	7	1	---	63.4	0.0	---	---	Sound Level

REPORT:	**Results: Sound Levels - No Barrier Objects**		
TNM VERSION	3.1.7970.37608	REPORT DATE:	13 October 2022
CALCULATED WITH:	3.1.7970.37608	CALCULATION DATE:	10/13/2022 5:23:48 PM
CASE:	Prairie Avenue_HaulTruck_Imperial-105	ORGANIZATION:	
UNITS:	English	ANALYSIS BY:	kbartholow
DEFAULT GROUND TYPE:	Pavement	PROJECT/CONTRACT	
ATMOSPHERICS:	68°F, 50%	Average pavement type shall be used unless a state highway agency substantiates the use of a different type with approval FHWA.	
PAVEMENT TYPE(S) USED:	Average		

Receiver				Modeled Traffic Noise Levels				
				LAeq		Increase over Existing		
Name	No.	Nb. R.R.	Existing LAeq	Calc.	Absolute Criterion	Calc.	Relative Criterion	Type of Impact
			dBA	dBA	dBA	dBA	dBA	
Prairie between 113th St. and Imperial Hwy.	1	1	---	71.5	0.0	---	---	Sound Level
Imperial Hwy. between Prairie Ave and Doty Ave.	2	1	---	70.2	0.0	---	---	Sound Level
Prairie Ave. between Imperial Hwy. and 120th St.	3	1	---	70.9	0.0	---	---	Sound Level
Imperial Hwy. between i-105 EB on-ramp and Prairie Ave.	4	1	---	71.2	0.0	---	---	Sound Level
Prairie Ave. between 112th St. and 113th St.	5	1	---	72.3	0.0	---	---	Sound Level
Prairie Ave. between Lennox Blvd. and 112th St.	6	1	---	72.0	0.0	---	---	Sound Level
Lennox Blvd. between Hawthorne Blvd. and Prairie Ave.	7	1	---	63.4	0.0	---	---	Sound Level

Noise Monitoring Reports

Site 1 (1146 Orange Avenue)



Prairie Station Apts_1

11/12/2020

Information Panel

Name	Prairie Station Apts_1
Start Time	11/9/2020 3:31:32 PM
Stop Time	11/9/2020 3:47:23 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	
Run Time	00:15:02

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	61.7 dB	Lmax	1	70.1 dB
Lmin	1	55.3 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

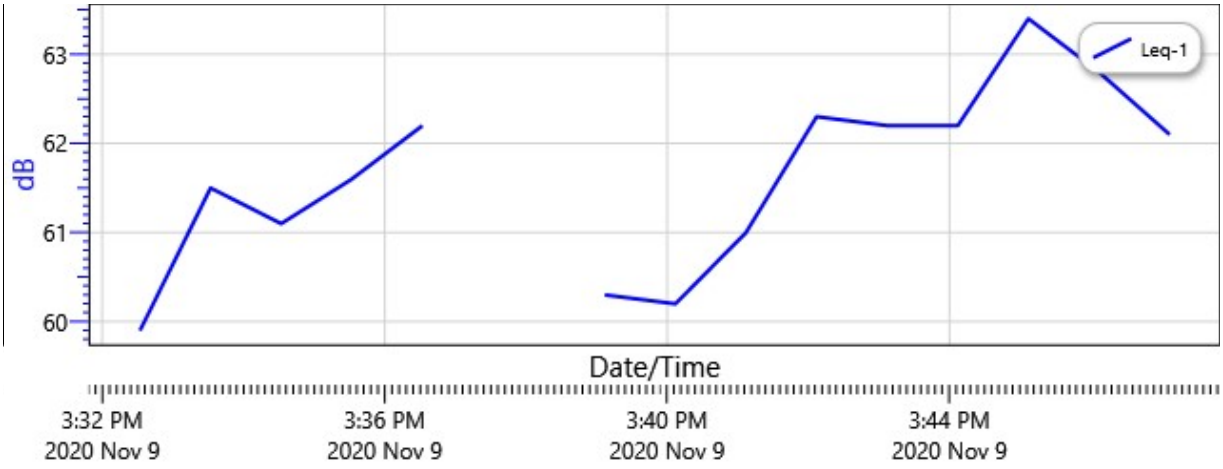
Logged Data Table

Date/Time	Leq-1
11/9/2020 3:32:32 PM	59.9
3:33:32 PM	61.5
3:34:32 PM	61.1
3:35:32 PM	61.6
3:36:32 PM	62.2
3:39:07 PM	60.3
3:40:07 PM	60.2
3:41:07 PM	61
3:42:07 PM	62.3
3:43:07 PM	62.2
3:44:07 PM	62.2
3:45:07 PM	63.4
3:46:07 PM	62.8

3:47:07 PM	62.1

Logged Data Chart

Prairie Station Apts_1: Logged Data Chart



Noise Measurement Report Form

Project: Prairie 57 Apt 15/MND Contract No (s): N/A

Date: 11/20/2020 Day of Week: Mon Time: 2:31

Monitoring Site Number: 1 Monitoring Site Address:

Measurement Taken By: Blaire

Approximate Wind Speed: 5-7 (mph) [km/hr] Approximate Wind Direction: From the southwest

Approximate distance of Sound Level Meter from Receptor Location: 15 ft

Approximate distance of Sound Level Meter from Project Site: 100 ft

Receptor Land Use (Check One) ☑ Residential / Institutional ☐ Commercial / Recreational

Sound Level Meter: Make and Model: Serial Number:

Meter Setting ☑ A-Weighted Sound Level (SLOW) ☐ C-Weighted Sound Level (FAST) for Impacts

Duration of Measurement: 15 min

Check the measurement purpose:

☑ Baseline condition ☐ Ongoing construction ☐ Major change ☐ Complaint response

Measurement Results:

Measurement Type	Measured Level	Noise Criteria Threshold	Exceedance
Calibration		n/a	n/a
L_{eq}	62.0		
L_{max}			
L_{dn}			
CNEL			

Field Notes:

1. I-105 offramp + freeway is primary source of ambient noise
2. intermittant dog barking
3. Paused at 5 min 46 sec for paramedic truck honking continuously Resumed @ 2:38 pm
4. Car moved from park in front of meter @ 2:44

Site 2 (113th Street)



Prairie Station Apts_2

11/12/2020

Information Panel

Name	Prairie Station Apts_2
Start Time	11/9/2020 2:54:52 PM
Stop Time	11/9/2020 3:09:52 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	
Run Time	00:15:00

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	62.6 dB	Lmax	1	71.5 dB
Lmin	1	59.1 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

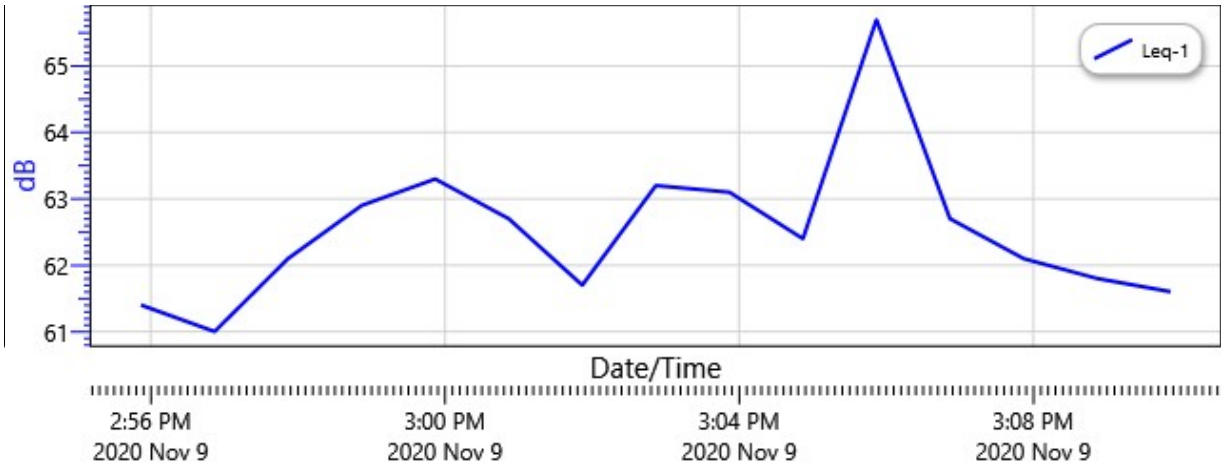
Logged Data Table

Date/Time	Leq-1
11/9/2020 2:55:52 PM	61.4
2:56:52 PM	61
2:57:52 PM	62.1
2:58:52 PM	62.9
2:59:52 PM	63.3
3:00:52 PM	62.7
3:01:52 PM	61.7
3:02:52 PM	63.2
3:03:52 PM	63.1
3:04:52 PM	62.4
3:05:52 PM	65.7
3:06:52 PM	62.7
3:07:52 PM	62.1

3:08:52 PM	61.8
3:09:52 PM	61.6

Logged Data Chart

Prairie Station Apts_2: Logged Data Chart



Noise Measurement Report Form

Project: Prairie St Apts IS/MND Contract No (s): N/A

Date: 11/10/2020 Day of Week: Mon Time: 1:55pm

Monitoring Site Number: 2 Monitoring Site Address: _____

Measurement Taken By: Blaire

Approximate Wind Speed: 5-7 (mph) [km/hr] Approximate Wind Direction: From the southwest

Approximate distance of Sound Level Meter from Receptor Location: _____

Approximate distance of Sound Level Meter from Project Site: Off

Receptor Land Use (Check One) ☐ Residential / Institutional ☐ Commercial / Recreational

Sound Level Meter: Make and Model: _____ Serial Number: _____

Meter Setting ☑ A-Weighted Sound Level (SLOW) ☐ C-Weighted Sound Level (FAST) for Impacts During of Measurement: _____

Check the measurement purpose:

☑ Baseline condition ☐ Ongoing construction ☐ Major change ☐ Complaint response

Measurement Results:

Measurement Type	Measured Level	Noise Criteria Threshold	Exceedance
Calibration		n/a	n/a
L_{eq}	62.7		
L_{max}			
L_{dn}			
CNEL			

Field Notes:

1. I-105 is primary source of ambient noise
2.
3.
4.

Site 3 (11222 Prairie Avenue)



Prairie Station Apts_3

11/12/2020

Information Panel

Name	Prairie Station Apts_3
Start Time	11/9/2020 2:10:57 PM
Stop Time	11/9/2020 2:25:57 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	
Run Time	00:15:00

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	69.6 dB	Lmax	1	86.9 dB
Lmin	1	60 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

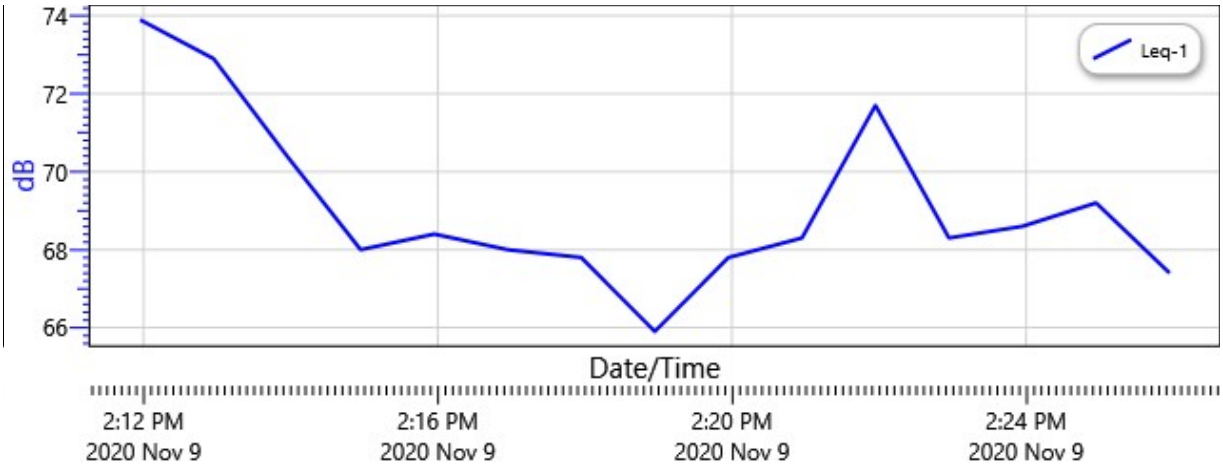
Logged Data Table

Date/Time	Leq-1
11/9/2020 2:11:57 PM	73.9
2:12:57 PM	72.9
2:13:57 PM	70.4
2:14:57 PM	68
2:15:57 PM	68.4
2:16:57 PM	68
2:17:57 PM	67.8
2:18:57 PM	65.9
2:19:57 PM	67.8
2:20:57 PM	68.3
2:21:57 PM	71.7
2:22:57 PM	68.3
2:23:57 PM	68.6

2:24:57 PM	69.2
2:25:57 PM	67.4

Logged Data Chart

Prairie Station Apts_3: Logged Data Chart



Noise Measurement Report Form

Project: Prairie St Apt 15/MND Contract No (s): N/A

Date: 11/10/20 Day of Week: Mon Time: 1:41

Monitoring Site Number: 3 Monitoring Site Address: _____

Measurement Taken By: _____

Approximate Wind Speed: 5-7 mph [km/hr] Approximate Wind Direction: From the ~~west~~ southwest

Approximate distance of Sound Level Meter from Receptor Location: 15 ft

Approximate distance of Sound Level Meter from Project Site: 50ft

Receptor Land Use (Check One) ☐ Residential / Institutional ☑ Commercial / Recreational

Sound Level Meter: Make and Model: _____ Serial Number: _____

Meter Setting ☒ A-Weighted Sound Level (SLOW) ☐ C-Weighted Sound Level (FAST) for Impacts

During of Measurement: 15 min

Check the measurement purpose:

☑ Baseline condition ☐ Ongoing construction ☐ Major change ☐ Complaint response

Measurement Results:

Measurement Type	Measured Level	Noise Criteria Threshold	Exceedance
Calibration		n/a	n/a
L_{eq}	69.7		
L_{max}			
L_{dn}			
CNEL			

Field Notes:

1. 1:12 pm: Street sweeping truck
2. Prairie is a maj street corridor; mix of passenger, semi, and heavy freight vehicles typical of such corridors.
3. Set up approx 50ft south of geolocation to avoid concrete wall.
4. Primary source of ambient noise: Prairie Ave traffic, car wash located behind the ~~recep~~ meter, and intermittant plane landings.

Site 4 (3910 113th Street)



Prairie Station Apts_4

11/12/2020

Information Panel

Name	Prairie Station Apts_4
Start Time	11/9/2020 1:48:50 PM
Stop Time	11/9/2020 2:03:50 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	
Run Time	00:15:00

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	57.5 dB	Lmax	1	69.8 dB
Lmin	1	50.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

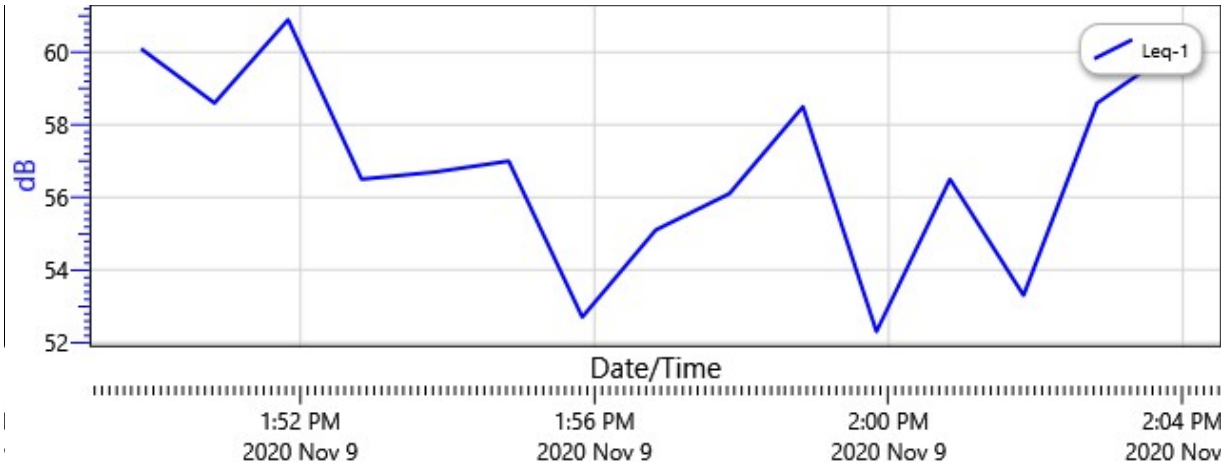
Logged Data Table

Date/Time	Leq-1
11/9/2020 1:49:50 PM	60.1
1:50:50 PM	58.6
1:51:50 PM	60.9
1:52:50 PM	56.5
1:53:50 PM	56.7
1:54:50 PM	57
1:55:50 PM	52.7
1:56:50 PM	55.1
1:57:50 PM	56.1
1:58:50 PM	58.5
1:59:50 PM	52.3
2:00:50 PM	56.5
2:01:50 PM	53.3

2:02:50 PM	58.6
2:03:50 PM	60

Logged Data Chart

Prairie Station Apts_4: Logged Data Chart



Noise Measurement Report Form

Project: Prairie St Apartments Contract No (s): N/A

Date: 11/10 Day of Week: Mon Time: 12:49

Monitoring Site Number: 4 Monitoring Site Address: 3908 113th Street

Measurement Taken By: Blaire

Approximate Wind Speed: 2-3 (mph) [km/hr] Approximate Wind Direction: From the West

Approximate distance of Sound Level Meter from Receptor Location: 15ft

Approximate distance of Sound Level Meter from Project Site:

Receptor Land Use (Check One) ☑ Residential / Institutional ☐ Commercial / Recreational

Sound Level Meter: Make and Model: Serial Number:

Meter Setting ☑ A-Weighted Sound Level (SLOW) ☐ C-Weighted Sound Level (FAST) for Impacts

During of Measurement: 15 minutes

Check the measurement purpose:

☑ Baseline condition ☐ Ongoing construction ☐ Major change ☐ Complaint response

Measurement Results:

Measurement Type	Measured Level	Noise Criteria Threshold	Exceedance
Calibration		n/a	n/a
L_{eq}	57.6		
L_{max}			
L_{dn}			
CNEL			

Field Notes:

1. Plane landed @ 12:51 pm
2. Prairie Ave & airplanes are ~~primary~~ loudest source of ambient noise. Prairie Ave is primary ambient noise source.
3. Intermittent 25 mph car travel on 113th Street
4. 1:00 pm: Post truck drives by & parks. No pause.
   1:02 pm: Plane landing

Site 5 (3921 Imperial Highway)



Prairie Station Apts_5

11/12/2020

Information Panel

Name	Prairie Station Apts_5
Start Time	11/9/2020 2:32:16 PM
Stop Time	11/9/2020 2:47:16 PM
Device Name	BGS100001
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	
Run Time	00:15:00

Summary Data Panel

Description	Meter	Value	Description	Meter	Value
Leq	1	75.9 dB	Lmax	1	99.7 dB
Lmin	1	57.8 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF
Exchange Rate	2	3 dB	Weighting	2	A
Response	2	SLOW			

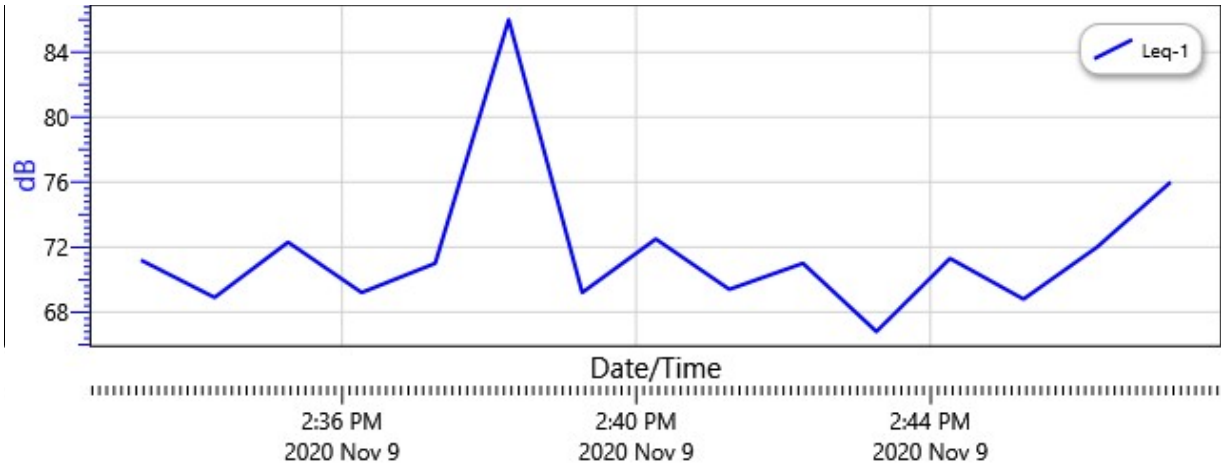
Logged Data Table

Date/Time	Leq-1
11/9/2020 2:33:16 PM	71.2
2:34:16 PM	68.9
2:35:16 PM	72.3
2:36:16 PM	69.2
2:37:16 PM	71
2:38:16 PM	86
2:39:16 PM	69.2
2:40:16 PM	72.5
2:41:16 PM	69.4
2:42:16 PM	71
2:43:16 PM	66.8
2:44:16 PM	71.3
2:45:16 PM	68.8

2:46:16 PM	72
2:47:16 PM	76

Logged Data Chart

Prairie Station Apts_5: Logged Data Chart



Noise Measurement Report Form

Project: Prairie St Apt IS/MND Contract No (s): N/A

Date: 11/10/2020 Day of Week: Mon Time: 1:32

Monitoring Site Number: 5 Monitoring Site Address: _____

Measurement Taken By: Blaire

Approximate Wind Speed: 5-7 (mph) [km/hr] Approximate Wind Direction: From the Southwest

Approximate distance of Sound Level Meter from Receptor Location: 70ft

Approximate distance of Sound Level Meter from Project Site: 200ft

Receptor Land Use (Check One) ☐ Residential / Institutional ☑ Commercial / Recreational

Sound Level Meter: Make and Model: _____ Serial Number: _____

Meter Setting ☑ A-Weighted Sound Level (SLOW) ☐ C-Weighted Sound Level (FAST) for Impacts

Duration of Measurement: 15 min

Check the measurement purpose:

☐ Baseline condition ☐ Ongoing construction ☐ Major change ☐ Complaint response

Measurement Results:

Measurement Type	Measured Level	Noise Criteria Threshold	Exceedance
Calibration		n/a	n/a
L_{eq}	75.9		
L_{max}			
L_{dn}			
CNEL			

Field Notes:

1. Imperial is major corridor & soundscape reflects it. Mix of passenger, semi-~~bat~~ heavy truck vehicles.
2. ~~Siren~~ Paramedic truck w/ siren quickly passed @ 1:38. No time to pause meter.
3. _____
4. _____

Appendix C

Traffic Impact Study

Prairie Station
Traffic Impact Study
Draft Report

October 12, 2022

Submitted to:



10995 | Prepared by **Iteris, Inc.**

Innovating Through Informatics™

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1.0 INTRODUCTION

This report summarizes the results of a traffic analysis for the proposed Prairie Station residential project located at 11227-11498 Prairie Avenue (northwest corner of the Prairie Avenue/113th Street intersection) in the City of Inglewood. This report provides detailed information concerning the methodology, findings and conclusions of the traffic analysis. The traffic analysis evaluates the potential impact of project trips on existing traffic conditions and on future traffic conditions.

1.1 Project Description

The project site is located at 11227-11498 Prairie Avenue in the City of Inglewood. The majority of the site is vacant with the exception of a car leasing facility. The proposed project would consist of 440 multi-family residential units, configured in three separate buildings. Access to the onsite parking would be provided along 113th Street. The proposed project site would provide a total of 670 parking spaces. **Figure 1** illustrates the proposed project site plan.

1.2 Study Area

The proposed study area for analysis includes the following nine (9) intersections in the vicinity of the project site:

1. Hawthorne Boulevard/Lennox Boulevard;
2. Hawthorne Boulevard/Imperial Highway;
3. I-105 Eastbound On-ramp/Imperial Highway;
4. Prairie Avenue/Lennox Boulevard;
5. Prairie Avenue/I- 105 Ramps – 112th Street;
6. Prairie Avenue/113th Street;
7. Prairie Avenue/Imperial Highway;
8. Prairie Avenue/120th Street; and
9. Crenshaw Boulevard/Imperial Highway.

The study intersections for analysis were selected based on the expected distribution of project-generated trips, which typically utilize higher capacity roadways. The proposed study intersections are located in three jurisdictions: City of Inglewood, City of Hawthorne and Lennox (an unincorporated area in Los Angeles County). The project site location and proposed study intersections are shown in **Figure 2**.

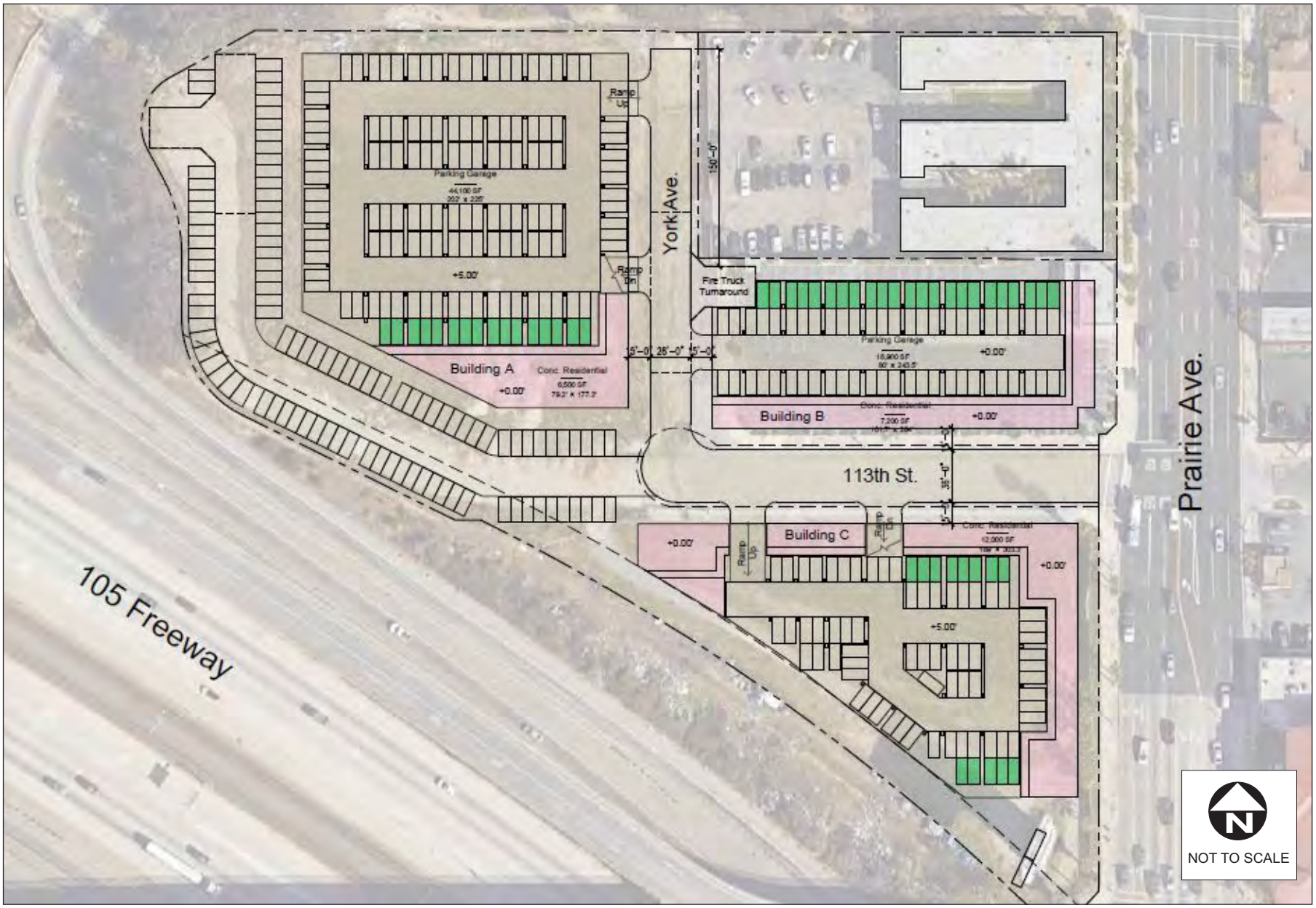
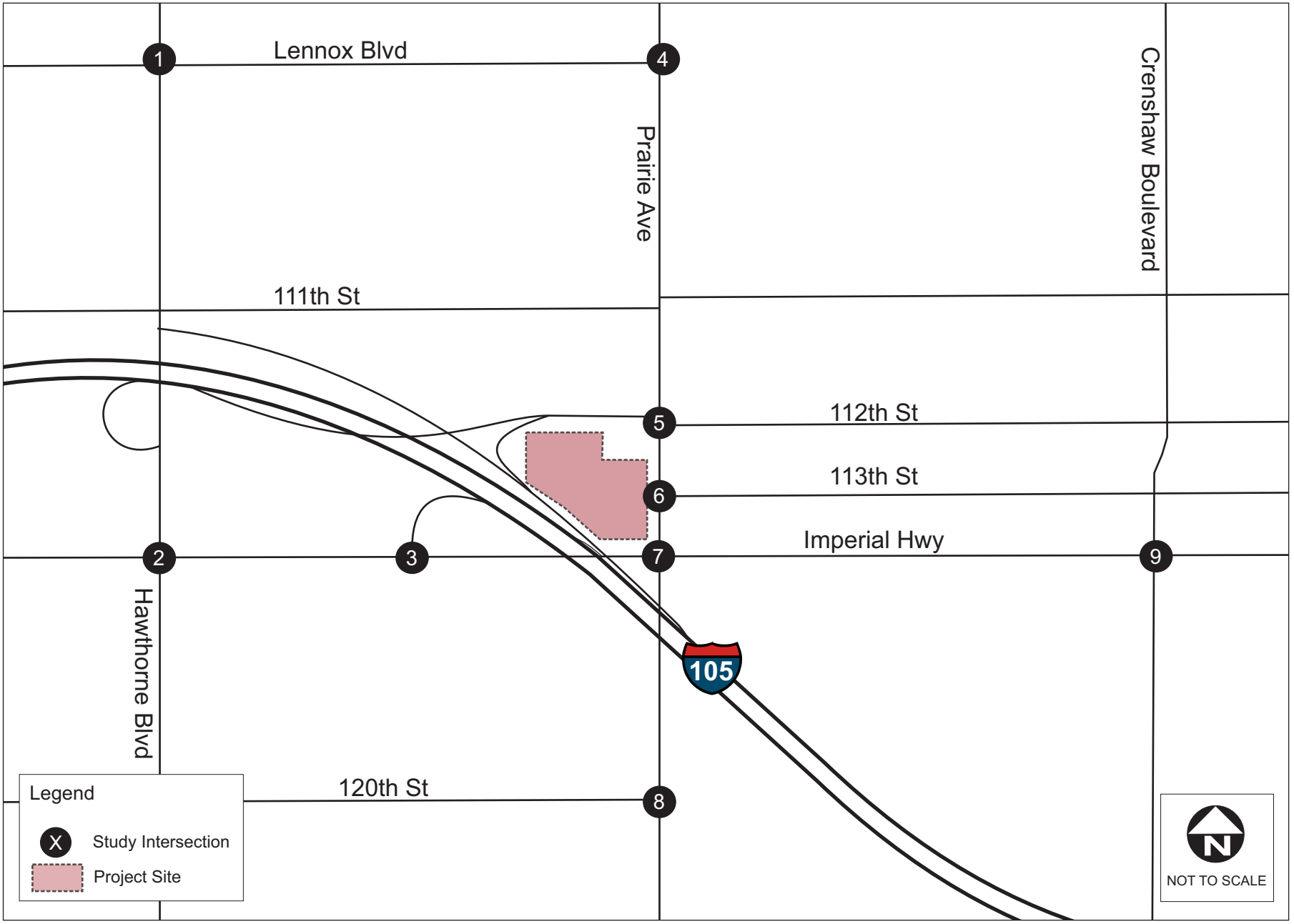


Figure 1
Project Site Plan



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Figure 2
Project Location and Study Intersections

1.3 Study Periods

Traffic operations were evaluated for each of the following scenarios during the weekday a.m. (7:00 – 9:00) and p.m. (4:00 – 6:00) peak hours:

- Existing Conditions;
- Existing Plus Project Conditions;
- Opening Year 2026 Without Project Conditions; and
- Opening Year 2026 With Project Conditions.

Based on information provided by the project applicant, the projected opening year for the proposed project is 2026. The study area and study periods were confirmed with City staff.

2.0 ENVIRONMENTAL SETTING

This section presents an overview of the existing roadway network within the study area and the methodology used to determine existing traffic volumes.

2.1 Roadway Configurations

The existing configurations of the significant roadways within the study area are described below:

- ***Prairie Avenue*** is a six-lane divided roadway, oriented in a north-south direction, providing access to the project site. On-street parking is provided in some parts of the study area, with peak period restrictions. The roadway's speed limit in the study area is established as 40 mph.

- ***Hawthorne Boulevard*** is a six-lane divided roadway, running in a north-south orientation, providing access to I-105. Within the study area, Hawthorne Boulevard includes a bike lane and on-street parking on both sides. The roadway's speed limit is established as 35 mph.

- ***Crenshaw Boulevard*** is a six-lane divided roadway, running in a north-south orientation, providing access to I-105. Within the study area, Crenshaw Boulevard includes on-street parking in some locations, with peak period restrictions. The speed limit along Crenshaw Boulevard is established as 40 mph.

- ***Imperial Highway*** is a six-lane divided roadway, running in an east-west orientation. West of Prairie Avenue, access to the I-105 eastbound and westbound on-ramps is provided. Within the study area, on-street parking is provided on both sides with peak period restrictions. The roadway's speed limit is established as 40 mph.

- ***Lennox Boulevard*** is a four-lane undivided roadway, running in an east-west orientation, with mostly residential frontage. Within the study area, Lennox Boulevard includes on-street parking on both sides. The roadway's speed limit is established as 30 mph.

Figure 3 shows the existing intersection lane configurations.

2.2 Existing Traffic Volumes

Existing traffic volumes at the nine intersections were acquired from multiple sources, due to the inability to collect new traffic data during typical conditions, given the Covid-19 pandemic. Traffic volumes were based on 2018 or 2019 counts conducted during the a.m. peak period and p.m. peak period. The traffic impact analysis is based on the highest single hour of traffic during each time period at each location. Traffic counts were collected while schools were still in session, avoiding any holiday-related shifts in traffic patterns. At the Prairie Avenue/113th Street intersection (#6), traffic counts were not available. Thus, traffic volumes were estimated based on the approach and departure volumes from adjacent intersections along Prairie Avenue. In addition, at the following two study intersections, a.m. peak hour data was not available, therefore traffic operations are evaluated during the p.m. peak hour only:

- #1 – Hawthorne Boulevard/Lennox Boulevard; and
- #8 – Prairie Avenue/120th Street.

Detailed vehicle turning movement data are included in **Appendix A**. The 2018 or 2019 historical counts were then increased by an annual growth rate of 1% in order to develop a 2020-equivalent volume set for use in this analysis. **Figure 4** shows the existing peak hour volumes at the study intersections.

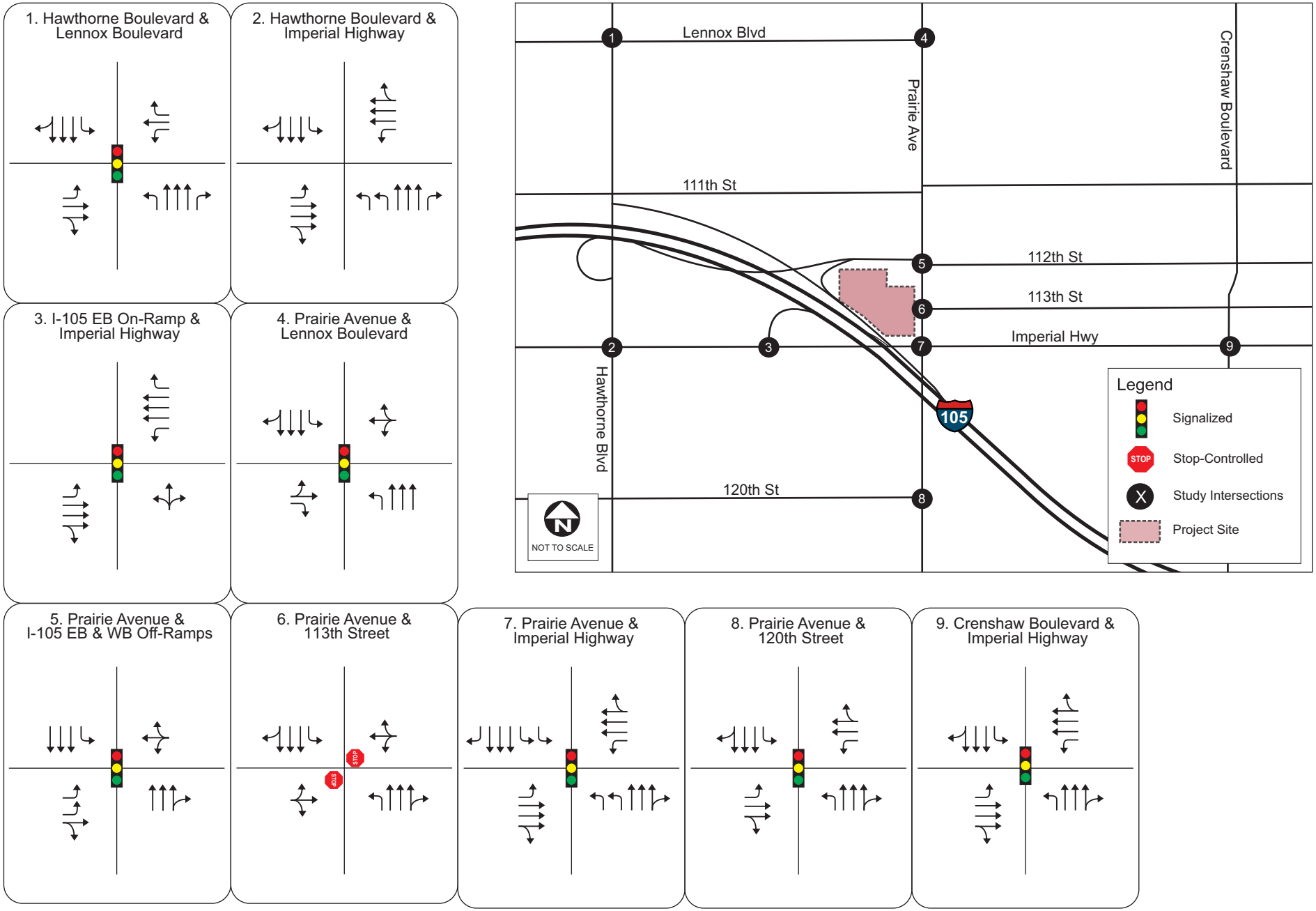
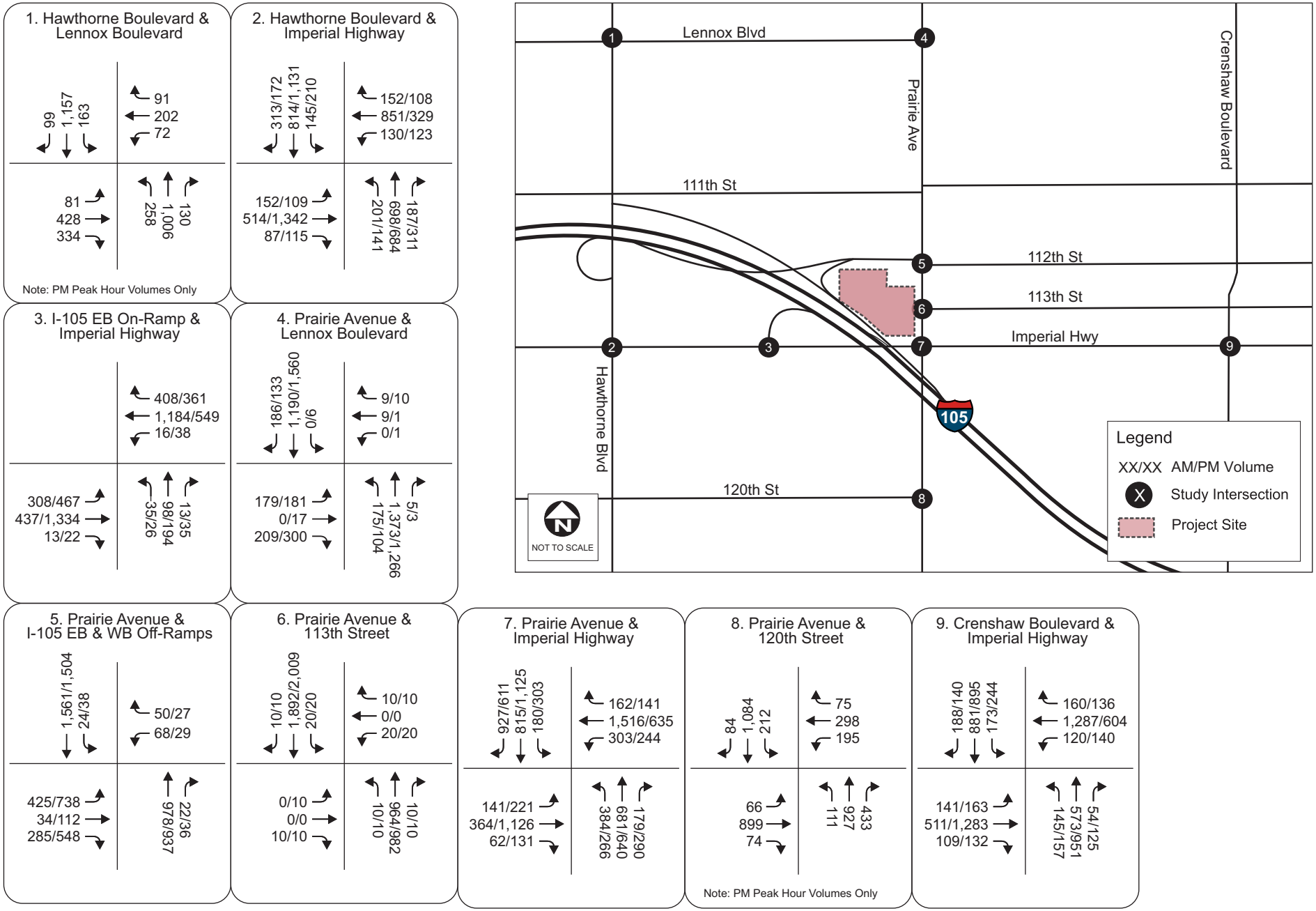


Figure 3
Existing Intersection Lane Configurations



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Figure 4
Existing Peak Hour Intersection Volumes

3.0 TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

Intersections are typically considered to represent the most critical locations for traffic flow bottlenecks and general congestion on roadways. Conflicting traffic movements are created at intersections since the right-of-way must be shared by opposing traffic streams. For purposes of this study, intersection level of service (LOS) is measured to determine the peak hour operating conditions at the study intersections.

In this report, analysis of traffic operations was mostly conducted according to the traffic impact analysis guidelines used by all jurisdictions covering the study area. The City of Inglewood, City of Hawthorne and Lennox use the Los Angeles County Public Works' 1997 Traffic Impact Analysis guidelines. Utilizing the existing guidelines, intersection operating conditions were quantified using the Intersection Capacity Utilization (ICU) method. The ICU methodology is used for signalized intersections. Volume-to-capacity (V/C) ratios and corresponding level of service (LOS) were calculated at study intersections during the weekday a.m. and p.m. peak hours. **Table 1** presents a brief description of each level of service letter grade, as well as the range of V/C ratios associated with each grade for signalized intersections.

Table 1: Intersection Level of Service Definitions – ICU Methodology

Level Of Service	Description	Intersection Volume to Capacity (V/C) Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0.00-0.60
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.60-0.70
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.70-0.80
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.80-0.90
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.90-1.00
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.00

For intersections operated under Caltrans' jurisdiction, traffic operations analysis was conducted utilizing the Highway Capacity Manual methodology. HCM methodology defines LOS by the average vehicle delay experienced by all vehicles traveling through the intersection. Iteris used the Level of Service (LOS) parameters and criteria specified in the Traffic Impact Analysis Preparation Guide as outlined by Caltrans' guidelines[1]. **Table 2** presents a brief description of each level of service letter grade, as well as the range of HCM average intersection delay associated with each grade for signalized intersections.

Table 2: Intersection Level of Service Definitions – HCM Methodology

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and ≤ 55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80

Source: Highway Capacity Manual 2000, Transportation Research Board, Washington, D.C., 2000.

[1] Source: *http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf*

3.1 Thresholds of Significance

Intersections operating at LOS "D" or better are deemed to be operating at acceptable conditions by all jurisdictions covering the study area: City of Inglewood, City of Hawthorne, Los Angeles County and Caltrans. Furthermore, per the Los Angeles County Public Works traffic impact review guidelines, a project's traffic impact is evaluated based on ICU and is considered significant if the change in V/C ratio relative to the "without project" signalized intersection level of service (LOS) meets or exceeds the thresholds listed in **Table 3**.

Table 3: Intersection Significant Impact Criteria

Intersection LOS in Pre-Project Conditions	V/C	Project V/C Increase
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E / F	0.91 or more	0.01 or more

A project impact is considered significant at a Caltrans facility if the project traffic results in a worsening of the level of service from LOS D or better to LOS E or F. In addition, a project impact is considered significant if a Caltrans facility is currently operating at LOS E or F and the project traffic results in an increase in average vehicle delay.

4.0 EXISTING CONDITIONS

A level of service analysis was conducted to evaluate existing intersection operations during the a.m. and p.m. peak hours at the study intersections. **Table 4** summarizes the existing LOS at the study intersections. LOS calculation sheets are provided in **Appendix B**.

Table 4: Existing Intersection Peak Hour Level of Service

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS
1	Hawthorne Blvd/Lennox Blvd	signalized	N/A		0.806	D
2	Hawthorne Blvd/Imperial Hwy	signalized	0.717	C	0.802	D
3	I-105 EB On-ramp/Imperial Hwy*	signalized	32.3	C	28.8	C
4	Prairie Ave/Lennox Blvd	signalized	0.647	B	0.696	B
5	Prairie Ave/I-105 Ramps-112th St*	signalized	21.1	C	33.9	C
6	Prairie Ave/113th St	stop-control	**76.6**	**F**	**203.3**	**F**
7	Prairie Ave/Imperial Hwy	signalized	**0.934**	**F**	0.871	D
8	Prairie Ave/120th St	signalized	N/A		**0.924**	**E**
9	Crenshaw Blvd/Imperial Hwy	signalized	0.805	D	0.852	D

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.
*Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

As shown in **Table 4**, three intersections along Prairie Avenue are currently operating at unsatisfactory levels of service (LOS E or worse). The Prairie Avenue/113th Street intersection, which provides access to the project site, is currently a stop-controlled intersection. Thus, the vehicle delays shown represent the highest stop-controlled approach, rather than the average delay of all vehicles approaching the intersection.

5.0 PROPOSED PROJECT TRAFFIC

The first step in analyzing the traffic conditions with the project is to estimate the number of new trips expected to be generated by the proposed project. The proposed project consists of 440 multi-family residential units. The majority of the site is vacant with the exception of a car leasing facility. Access to the onsite parking would be provided along 113th Street. This section describes the methodology used to determine project trip generation and the distribution of project traffic within the study area. The "With Project" conditions were analyzed based on an estimate of the number of new trips generated by the project. Trip generation rates for the proposed project were calculated based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. The land use for the proposed project was identified as Multifamily Housing – Mid-Rise (ITE Code 221).

5.1 Project Trip Generation

The number of trips forecast to be generated by the proposed development was calculated by multiplying the trip generation rate by the proposed number of units in the project. The result of this calculation is shown in **Table 5**.

Table 5: Project Trip Generation

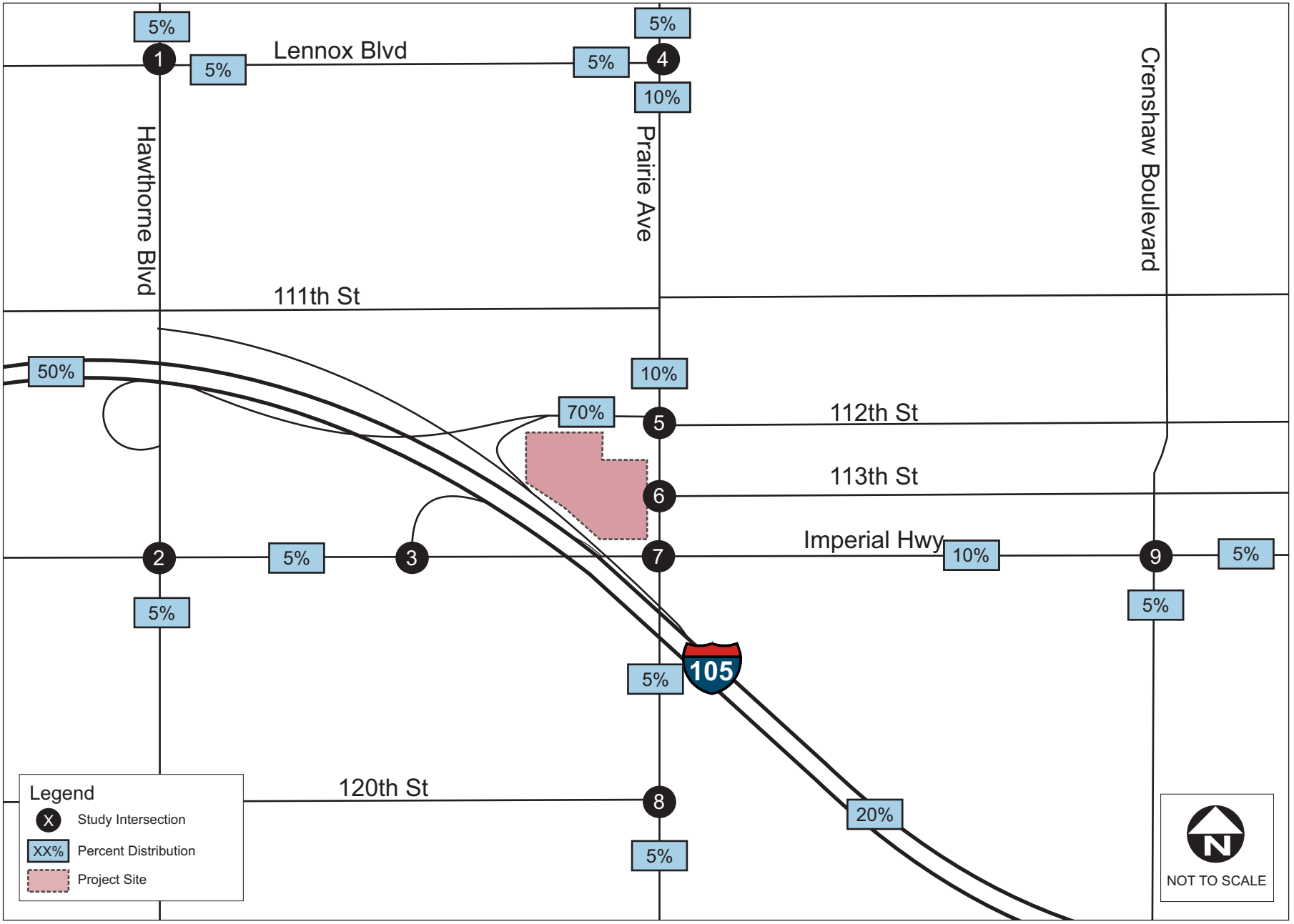
Land Use (ITE Code)	Size	Trip Generation Rates							Trip Generation						
		AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
Multifamily Housing - Mid-Rise (221)	440 units	23%	77%	0.37	61%	39%	0.39	4.54	37	126	163	105	67	172	1,998
								Total	**37**	**126**	**163**	**105**	**67**	**172**	**1,998**

Source: *ITE Trip Generation Manual, 11th Edition*.

As shown, the project is expected to generate a total of 163 a.m. peak hour trips, 172 p.m. peak hour trips, and 1,998 daily trips.

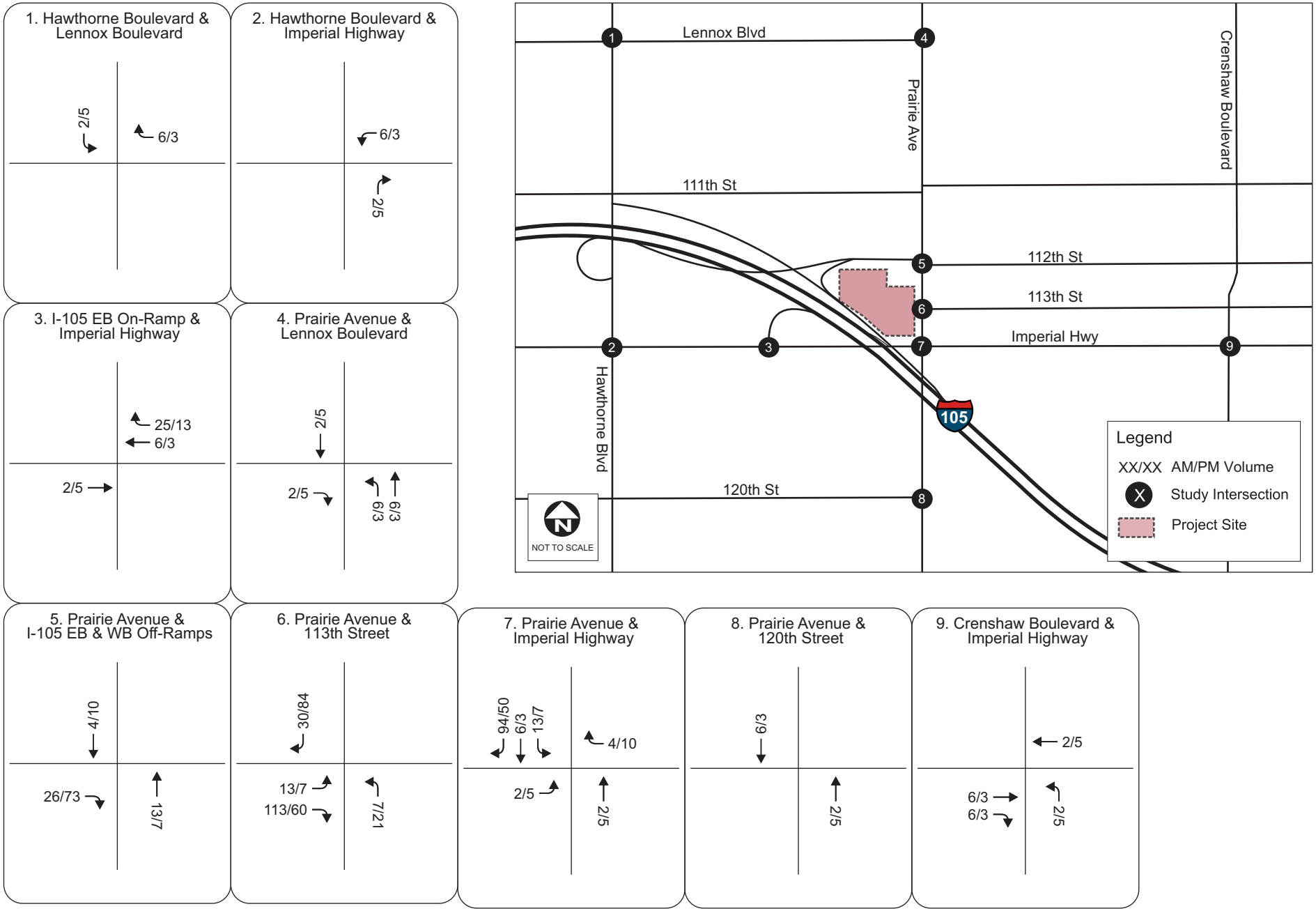
5.2 Project Trip Distribution and Assignment

Trip distribution assumptions are used to determine the origin and destination of new vehicle trips associated with the project. The project trip distribution is shown in **Figure 5**. The new trips generated by the project are then assigned to the surrounding roadway system based on the distribution patterns to estimate the project-related peak-hour traffic at each of the study intersections. **Figure 6** illustrates the proposed project trip assignment onto the roadway network during the a.m. and p.m. peak hours.



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Figure 5
Project Trip Distribution



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Figure 6
Proposed Project Trip Assignment

6.0 EXISTING PLUS PROJECT CONDITIONS

Existing plus project conditions were developed by adding trips generated by the proposed project to existing volumes. **Figure 7** illustrates the existing plus project traffic volumes at the study intersections.

6.1 Existing Plus Project Intersection Levels of Service

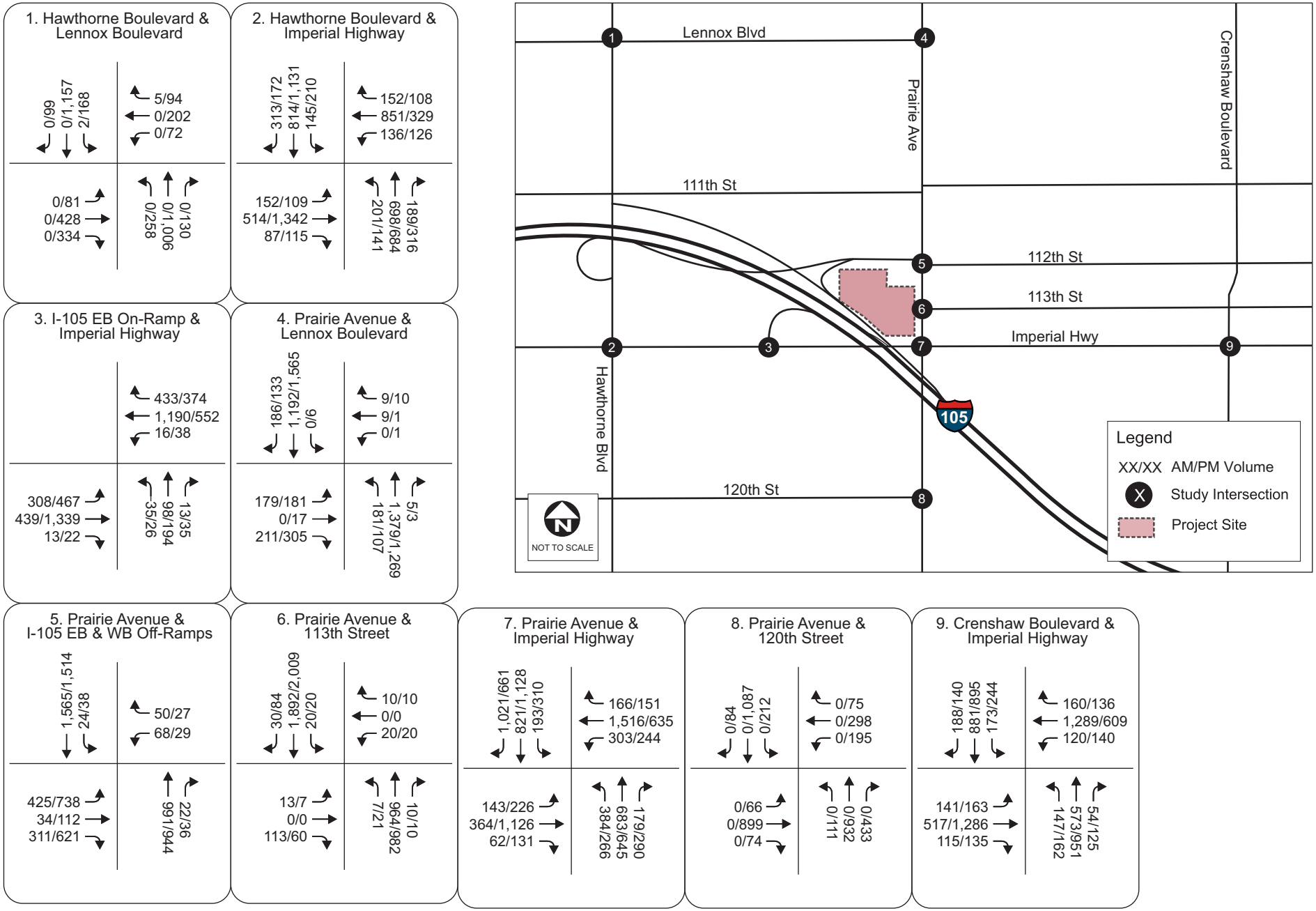
A level of service analysis was conducted to evaluate existing plus project intersection operations during the a.m. and p.m. peak hours at the study intersections. **Table 6** summarizes the existing plus project level of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

Table 6: Existing Plus Project Intersection Peak Hour LOS

Intersection		Existing Conditions				Existing Plus Project Conditions				Change in V/C or Delay		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS			
1	Hawthorne Blvd/ Lennox Blvd	N/A		0.806	D	N/A		0.806	D	-	0.000	No
2	Hawthorne Blvd/ Imperial Hwy	0.717	C	0.802	D	0.717	C	0.803	D	0.000	0.001	No
3	I-105 EB On-ramp/ Imperial Hwy*	32.3	C	28.8	C	33.8	C	29.9	C	1.5	1.1	No
4	Prairie Ave/ Lennox Blvd	0.647	B	0.696	B	0.650	C	0.701	C	0.003	0.005	No
5	Prairie Ave/ I-105 Ramps-112th St*	21.1	C	33.9	C	22.9	C	44.4	D	1.8	10.5	No
6	Prairie Ave/ 113th St	**76.6**	**F**	**203.3**	**F**	**315.6**	**F**	**229.9**	**F**	239.0	26.6	No
7	Prairie Ave/ Imperial Hwy	**0.934**	**F**	0.871	D	**0.973**	**F**	0.875	D	0.039	0.004	Yes
8	Prairie Ave/ 120th St	N/A		**0.924**	**E**	N/A		**0.924**	**E**	-	0.000	No
9	Crenshaw Blvd/ Imperial Hwy	0.805	D	0.852	D	0.806	D	0.853	D	0.001	0.001	No

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.
*Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

As shown in **Table 6**, based on the thresholds of significance, the proposed project is forecast to result in a significant impact at the Prairie Avenue/Imperial Highway intersection (during the a.m. peak hour). The Prairie Avenue/113th Street intersection (project access intersection) is also anticipated to experience large delay increases with the project, though no formal significance thresholds are used for unsignalized intersections.



City of Inglewood
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Traffic Impact Study

Figure 7
Existing Plus Project Peak Hour Intersection Volumes

7.0 OPENING YEAR 2026 WITHOUT PROJECT CONDITIONS

The project opening year is 2026. Therefore, this section analyzes opening year 2026 traffic conditions without the proposed project. Opening year 2026 without project traffic volumes were developed by considering traffic increases due to ambient growth and specific, planned or approved development projects in the study area, without consideration of the proposed project.

7.1 Ambient Growth

Ambient traffic growth is the traffic growth that will occur in the study area due to general employment growth, housing growth and growth in regional through trips in Southern California. An ambient growth rate of one percent (1%) per year in the study area was assumed based on discussions with City staff.

7.2 Cumulative Project Growth

Cumulative project traffic growth is growth due to specific, known development projects in the area surrounding the study locations that may affect traffic circulation. A list of cumulative projects within the region was provided by the City of Inglewood. Out of this list, it was determined that traffic from eleven (11) of these projects would affect traffic circulation within the project study area, and are therefore included in this analysis as shown in **Table 7**. Detailed trip generation data for these cumulative projects within the vicinity of the project site is provided in **Appendix D**. Trip distribution for the cumulative projects were assigned depending on the type of development, residential or non-residential, and location with respect to freeways and major arterials.

Table 7: Cumulative Projects

	Location	Land Use	Size/Description
1	1050 South Prairie Ave	Hollywood Park Project	2,500 du; 890 tsf retail; 780 tsf office; 120,000 tsf casino; 300-room hotel; 4 acre civic site.
2	11111 South Prairie Ave	Hotel	120 rooms
3	Prairie Ave/Century Blvd	Murphy Bowl Project	Arena; 71 tsf office; 63 tsf restaurant/retail/ancillary uses; 150 hotel rooms
4	1050 South Prairie Ave	Hollywood Park Phase II	5,750 tsf commercial
5	3700 West 102nd St	Self Storage Facility	79.415 tsf
6	3820 West 102nd St	Hotel	300 rooms
7	4041 West Century Blvd	Hotel	145 rooms
8	4200 West Century Blvd	Mixed-use (Hotel/Residential)	175 rooms 129 du
9	11143 South Prairie Ave	Hotel	104 rooms
10	3846 West Century Blvd	Self Storage Facility	335.246 tsf
11	3624 West Century Blvd	Hotel	150 rooms

Note: du = dwelling unit, tsf = thousand square feet

7.3 Opening Year 2026 Without Project Intersection Levels of Service

A level of service analysis was conducted to evaluate opening year 2026 without project intersection operations during the a.m. and p.m. peak hours. Opening year 2026 without project peak hour volumes at the study intersections are provided in **Appendix C**. **Table 8** summarizes the opening year 2026 without project levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

Table 8: Opening Year 2026 Without Project Intersection Peak Hour LOS

Intersection		Control Type	AM Peak Hour		PM Peak Hour	
			V/C or Delay (sec)	LOS	V/C or Delay (sec)	LOS
1	Hawthorne Blvd/Lennox Blvd	signalized	N/A		0.878	D
2	Hawthorne Blvd/Imperial Hwy	signalized	0.751	C	0.842	D
3	I-105 EB On-ramp/Imperial Hwy*	signalized	50.0	D	**107.2**	**F**
4	Prairie Ave/Lennox Blvd	signalized	0.769	C	**0.912**	**E**
5	Prairie Ave/I-105 Ramps-112th St*	signalized	24.5	C	**56.8**	**E**
6	Prairie Ave/113th St	stop-control	**186.3**	**F**	**> 300**	**F**
7	Prairie Ave/Imperial Hwy	signalized	**1.057**	**F**	**0.964**	**E**
8	Prairie Ave/120th St	signalized	N/A		**0.986**	**E**
9	Crenshaw Blvd/Imperial Hwy	signalized	0.855	D	**0.912**	**E**

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.
*Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

As shown in **Table 8**, with the large increases in vehicle trips anticipated with the development of the cumulative projects by opening year 2026, the following intersections are forecast to operate at unsatisfactory levels of service (LOS E or worse):

- I-105 Eastbound On-ramp/Imperial Highway (p.m. peak hour);
- Prairie Avenue/Lennox Boulevard (p.m. peak hour);
- Prairie Avenue/I-105 Ramps-112th
- Prairie Avenue/113th Street (a.m. and p.m. peak hour);
- Prairie Avenue/Imperial Highway (a.m. and p.m. peak hour);
- Prairie Avenue/120th Street (p.m. peak hour); and
- Crenshaw Boulevard/Imperial Highway (p.m. peak hour).

8.0 OPENING YEAR 2026 WITH PROJECT CONDITIONS

Opening year 2026 with project conditions were developed by adding trips generated by the proposed project to opening year 2026 without project volumes. Opening year 2026 with project traffic volumes at the study intersections are provided in **Appendix C**.

8.1 Opening Year 2026 With Project Intersection Levels of Service

A level of service analysis was conducted to evaluate year 2026 with project intersection operations during the a.m. and p.m. peak hours. **Table 9** summarizes the opening year 2026 with project levels of service at the study intersections. Level of service calculation worksheets are included in **Appendix B**.

Table 9: Opening Year 2026 With Project Intersection Peak Hour LOS

Intersection		Opening Year 2026 Without Project				Opening Year 2026 With Project				Change in V/C or Delay		Significant Impact?
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour	PM Peak Hour	
		V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS	V/C or Delay	LOS			
1	Hawthorne Blvd/ Lennox Blvd	N/A		0.878	D	N/A		0.878	D	-	0.000	No
2	Hawthorne Blvd/ Imperial Hwy	0.751	C	0.842	D	0.751	C	0.844	D	0.000	0.002	No
3	I-105 EB On-ramp/ Imperial Hwy*	50.0	D	**107.2**	**F**	54.9	D	**111.0**	**F**	4.9	3.8	Yes
4	Prairie Ave/ Lennox Blvd	0.769	C	**0.912**	**E**	0.773	C	**0.915**	**E**	0.004	0.003	No
5	Prairie Ave/ I-105 Ramps-112th St*	24.5	C	**56.8**	**E**	25.7	C	**68.0**	**E**	1.2	11.2	Yes
6	Prairie Ave/ 113th St	**186.3**	**F**	**> 300**	**F**	**> 300**	**F**	**> 300**	**F**	-	-	No
7	Prairie Ave/ Imperial Hwy	**1.057**	**F**	**0.964**	**E**	**1.096**	**F**	**0.969**	**E**	0.039	0.005	Yes
8	Prairie Ave/ 120th St	N/A		**0.986**	**E**	N/A		**0.987**	**E**	-!	0.001	No
9	Crenshaw Blvd/ Imperial Hwy	0.855	D	**0.912**	**E**	0.856	D	**0.913**	**E**	0.001	0.001	No

Notes:
V/C = Volume to Capacity Ratio, LOS = Level of Service.
*Caltrans intersection, utilizing HCM delay-based methodology to evaluate intersection operations.

As shown in **Table 9**, based on the threshold criteria described, the proposed project is forecast to exceed the threshold at the following intersections:

- I-105 Eastbound On-ramp/Imperial Highway;
- Prairie Avenue/I-105 Eastbound-Westbound Off-ramps; and
- Prairie Avenue/Imperial Highway.

Based on physical constraints, feasible infrastructure improvements are not recommended at these locations. Similar to existing conditions, the Prairie Avenue/113th Street intersection (project access intersection) is also anticipated to experience large delay increases with the project, though no formal significance thresholds are used for unsignalized intersections.

8.2 Potential Improvements

In order to improve traffic operations at Prairie Avenue/113th Street intersection, an installation of a traffic signal is recommended. A Manual on Uniform Traffic Control Devices (MUTCD) signal warrant assessment was performed to determine the adequacy of installing a new traffic signal. MUTCD Warrant 3 (Peak Hour) is applicable for this study. Warrant 3 describes 100 vehicles per hour as the lower threshold volume for a minor-street approach with one lane (i.e., 113th Street). At this minor street lower threshold, 1,800 vehicles per hour is the lower threshold for the total of the two major street approaches (i.e., northbound and southbound Prairie Avenue). In opening year 2026, peak hour volumes at the Prairie Avenue/113th Street intersection are forecast as follows:

- Minor Street (113th Street) approach: 137 a.m. peak hour and 89 p.m. peak hour trips
- Major Street (Prairie Avenue) approaches: 3,441 a.m. peak hour and 4,083 p.m. peak hour trips

Thus, based on the a.m. peak hour volumes, the intersection meets the minimum criteria, in Warrant 3, for installation of a traffic signal. It is noted that the CA MUTCD guidelines state “the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” Warrant applicability was based on the location and configuration of the intersection as well as available data.

In addition, the following improvements should be considered:

- Prairie Avenue/113th Street intersection
    - Widen the eastbound 113th Street approach to add a dedicated right-turn lane;
    - Widen the southbound Prairie Avenue approach to add a dedicated right-turn lane.
- Intelligent Transportation Systems (ITS) funding contribution at other impacted intersections where physical improvements are not feasible.

9.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) TRANSPORTATION ANALYSIS

California Environmental Quality Act (CEQA) analysis for determining potential significant transportation impacts uses a metric of Vehicle Miles Traveled (VMT). VMT is an area-wide performance measure which helps compare the overall performance of a project or project alternatives and is also used as a metric to ultimately assess the transportation environmental impacts of a project.

The City of Inglewood is the lead agency, and has established the following efficiency-based thresholds of significance (for use in this project):

- Residential Projects - The project's residential VMT per capita would not be over 15% below the existing residential VMT per capita for the Baseline Area in which the project is located or > 9.66.

Analysis of VMT is based on the results from the City of Inglewood's VMT Calculator Tool (Version 1). The proposed project land use along with the existing land use were input into the tool. The results of the VMT Calculator Tool analysis show the following:

- The proposed project would generate a net total of 16,355 daily VMT
- The proposed project would result in a residential VMT/capita of 9.59

Based on the VMT analysis, utilizing the City's VMT Calculator Tool, the project is not forecast to exceed the residential VMT threshold of significance. Thus, the proposed project would result in a less than significant CEQA transportation impact. Further, since the proposed project does not cause a significant impact using the efficiency-based impact threshold (residential VMT per capita), the proposed project would not cause a cumulative significant impact relative to VMT. The detailed VMT analysis is provided in **Appendix E**.

10.0 SPECIAL EVENT ANALYSIS

This section includes a qualitative assessment of the special events at the City's multiple large event venues, as they relate to the Prairie Station project study area. The City of Inglewood is in the process of becoming a major sports and entertainment center in the greater Los Angeles region. The Inglewood Sports and Entertainment District (ISED), located east of Prairie Avenue and south of Manchester Avenue, would ultimately consist of four major venues:

- The Forum (existing venue);
- NFL Football Stadium as part of the Hollywood Park project (recently completed);
- Performance Arena as part of the Hollywood Park project (recently completed); and
- Proposed Inglewood Basketball and Entertainment Center (Clippers Arena).

The City is currently developing a Transportation Management and Operations Plan for these venues that may have simultaneous events. Special event traffic from large venues normally requires special traffic and access management during events that go beyond the normal traffic control devices at intersection crossings. Such plans have not yet been fully developed by the City of Inglewood and can therefore not be analyzed in relation to the Prairie Station project.

Event patrons and employees may use various travel modes to access the Hollywood Park development area. Metro's regional transit system including the new Crenshaw/LAX line will allow for transfers/connections to the local bus routes or event shuttle buses to the event venues. In addition, the City of Inglewood initiated an environmental study in July 2018 for a proposed automated people mover system (APM) to transport riders from the Metro's Crenshaw/LAX Line Downtown Inglewood station to Downtown Inglewood, the Forum, NFL Stadium/Inglewood Sports and Entertainment District, and the proposed Inglewood Basketball and Entertainment Center (Clippers Arena).

Event patrons traveling by car will likely utilize the regional freeway system (I-405, I-105, and I-110 Freeways) and major arterials (such as Manchester Boulevard, Prairie Avenue, Century Boulevard, Crenshaw Boulevard, La Brea Avenue, Centinela Avenue, and Florence Avenue) to access the venues' parking facilities. Approximately 20 percent of the inbound and outbound event traffic is estimated to potentially travel along Prairie Avenue in the vicinity of the project site, accessing I-105 and cities/locations south of I-105. This estimate is based on the approximate trip distribution of inbound and outbound traffic to the special event venues as described in the *Hollywood Park Stadium Alternative Project Traffic Impact Analysis* (Linscott Law & Greenspan, February 2015). However, more recent travel pattern information may be available, given that the NFL Stadium began hosting games (with fan attendance allowed) in Fall 2021.

Given the number of venues, there is the possibility that multiple events occur simultaneously. Due to frequency of venue use, some event combinations are more likely to occur than others. Scenarios with the largest combined traffic volumes would include an NFL game at the stadium, as a result of the stadium having the largest seating capacity of the four venues. However, the majority of NFL games are held on

Sunday afternoon or evening, outside of typical weekday peak commuting periods.

11.0 CONCLUSIONS

The project site is located at 11227-11498 Prairie Avenue in the City of Inglewood. The majority of the site is vacant with the exception of a car leasing facility. The proposed project would consist of 440 multi-family residential units, configured in three separate buildings. The proposed project is expected to generate a total of 163 a.m. peak hour trips, 172 p.m. peak hour trips, and 1,998 daily trips.

Three intersections along Prairie Avenue are currently operating at unsatisfactory levels of service (LOS E or worse). The Prairie Avenue/113th Street intersection, which provides access to the project site, is currently a stop-controlled intersection. Thus, the vehicle delays shown represent the highest stop-controlled approach, rather than the average delay of all vehicles approaching the intersection.

Based on the threshold criteria described, the proposed project is forecast to exceed the threshold at the following intersections:

- I-105 Eastbound On-ramp/Imperial Highway;
- Prairie Avenue/I-105 Eastbound-Westbound Off-ramps; and
- Prairie Avenue/Imperial Highway.

In order to improve traffic operations at Prairie Avenue/113th Street intersection, an installation of a traffic signal is recommended. Based on the a.m. peak hour volumes in opening year 2026, the intersection meets the minimum criteria, in MUTCD Warrant 3, for installation of a traffic signal.

Based on the VMT analysis, utilizing the City's VMT Calculator Tool, the project is not forecast to exceed the residential VMT threshold of significance. Thus, the proposed project would result in a less than significant CEQA transportation impact.

iteris

Prairie Station
Traffic Impact Study
Technical Appendix

Submitted to:



10995 | Prepared by **Iteris, Inc.**

Innovating Through Informatics™

APPENDIX A – EXISTING TRAFFIC COUNTS

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

T418

DATE: Fri, Apr 27, 18

LOCATION: Inglewood
NORTH & SOUTH: Hawthorne
EAST & WEST: Lennox

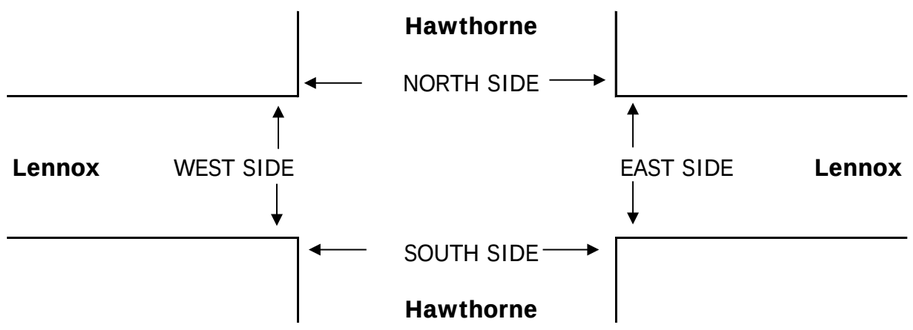
PROJECT #: IBEC
LOCATION #: 77
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

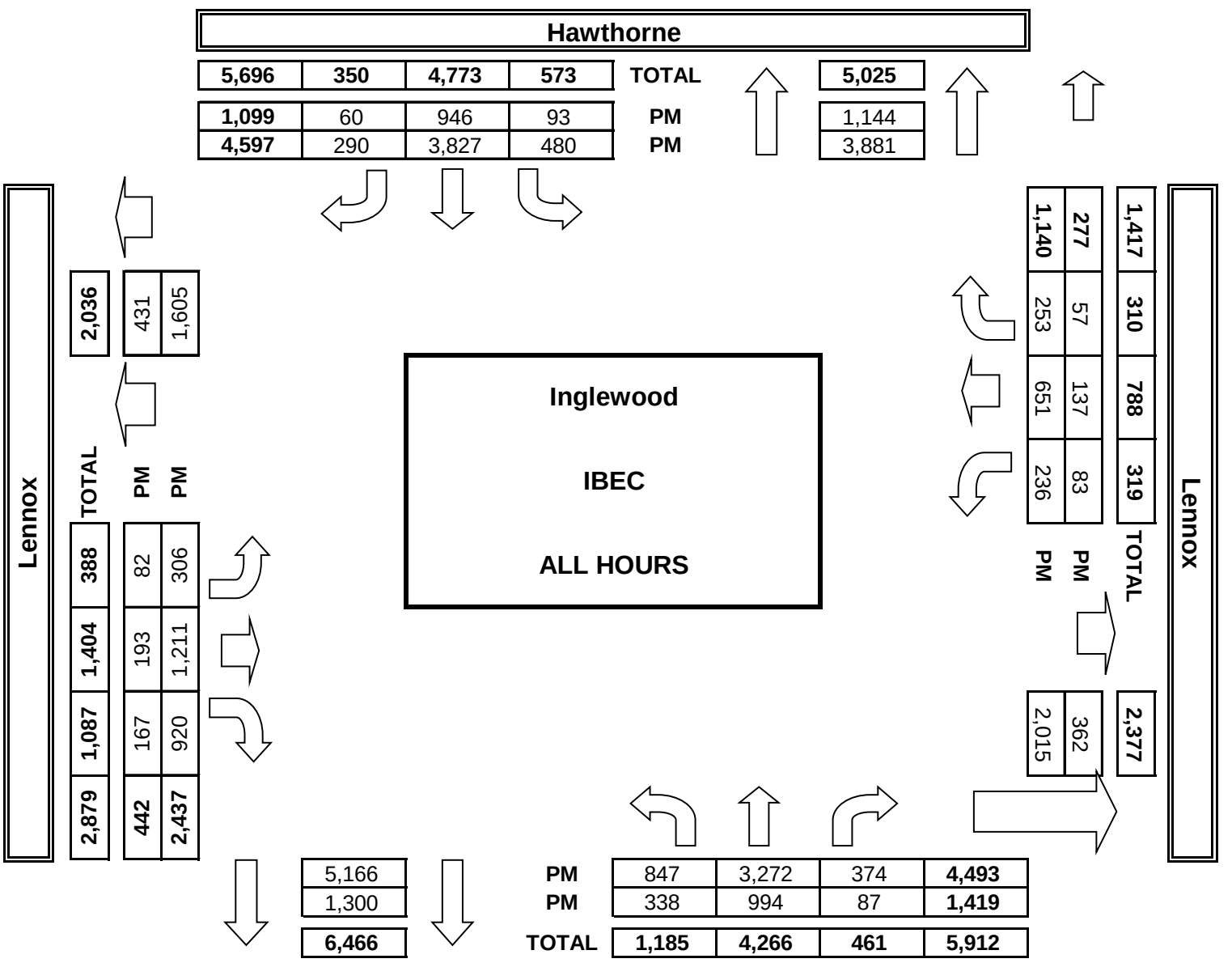
		NORTHBOUND Hawthorne			SOUTHBOUND Hawthorne			EASTBOUND Lennox			WESTBOUND Lennox				U-TURNS				
	LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
PM	4:00 PM	54	200	27	30	274	14	23	95	43	13	45	19	837	10	5	0	0	15
	4:15 PM	57	240	28	35	308	28	17	68	84	16	38	14	933	9	1	0	0	10
	4:30 PM	48	253	23	43	333	13	32	101	81	16	47	18	1,008	9	8	0	0	17
	4:45 PM	64	265	27	37	279	15	22	98	63	18	48	25	961	18	1	0	0	19
	5:00 PM	54	213	28	31	285	19	26	110	89	19	39	28	941	13	4	0	0	17
	5:15 PM	67	264	40	48	263	26	18	100	108	16	47	13	1,010	18	5	0	0	23
	5:30 PM	58	252	34	30	305	23	17	120	68	17	57	29	1,010	13	3	0	0	16
	5:45 PM	74	257	25	51	281	29	18	90	62	19	55	19	980	21	3	0	0	24
	6:00 PM	65	231	31	34	258	23	25	103	73	19	53	20	935	12	1	0	0	13
	6:15 PM	68	225	26	32	247	22	31	78	56	18	59	14	876	12	5	0	0	17
	6:30 PM	49	233	25	24	279	14	24	62	57	14	46	15	842	17	5	0	0	22
	6:45 PM	82	234	22	28	248	16	17	53	50	17	31	11	809	17	2	0	0	19
	7:00 PM	56	213	17	33	251	25	16	70	43	17	55	12	808	9	3	0	0	12
	7:15 PM	51	192	21	24	216	23	20	63	43	17	31	16	717	5	4	0	0	9
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	847	3,272	374	480	3,827	290	306	1,211	920	236	651	253	12,667	183	50	0	0	233
	APPROACH %	19%	73%	8%	10%	83%	6%	13%	50%	38%	21%	57%	22%						
	APP/DEPART	4,493	/	3,881	4,597	/	5,166	2,437	/	2,015	1,140	/	1,605	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	253	986	127	160	1,134	97	79	420	327	71	198	89	3,941					
	APPROACH %	19%	72%	9%	12%	82%	7%	10%	51%	40%	20%	55%	25%						
	PEAK HR FACTOR		0.920			0.963			0.914			0.869		0.975					
	APP/DEPART	1,366	/	1,169	1,391	/	1,597	826	/	692	358	/	483	0					
PM	9:30 PM	65	168	12	20	134	6	12	35	28	17	24	7	528	13	4	0	0	17
	9:45 PM	40	124	4	11	125	9	13	34	36	8	31	11	446	13	2	0	0	15
	10:00 PM	53	138	10	16	138	11	9	27	26	14	18	9	469	19	0	0	0	19
	10:15 PM	49	143	13	8	144	10	11	16	18	10	18	7	447	24	0	0	0	24
	10:30 PM	43	107	13	8	92	6	10	26	15	12	12	7	351	13	2	0	0	15
	10:45 PM	37	123	14	8	104	9	9	18	15	6	8	6	357	8	0	0	0	8
	11:00 PM	22	99	11	15	101	5	7	22	14	6	9	5	316	6	3	0	0	9
	11:15 PM	29	92	10	7	108	4	11	15	15	10	17	5	323	8	0	0	0	8
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	338	994	87	93	946	60	82	193	167	83	137	57	3,237	104	11	0	0	115
	APPROACH %	24%	70%	6%	8%	86%	5%	19%	44%	38%	30%	49%	21%						
	APP/DEPART	1,419	/	1,144	1,099	/	1,300	442	/	362	277	/	431	0					
	BEGIN PEAK HR		9:30 PM																
	VOLUMES	207	573	39	55	541	36	45	112	108	49	91	34	1,890					
	APPROACH %	25%	70%	5%	9%	86%	6%	17%	42%	41%	28%	52%	20%						
	PEAK HR FACTOR		0.836			0.958			0.798			0.870		0.895					
	APP/DEPART	819	/	658	632	/	767	265	/	200	174	/	265	0					

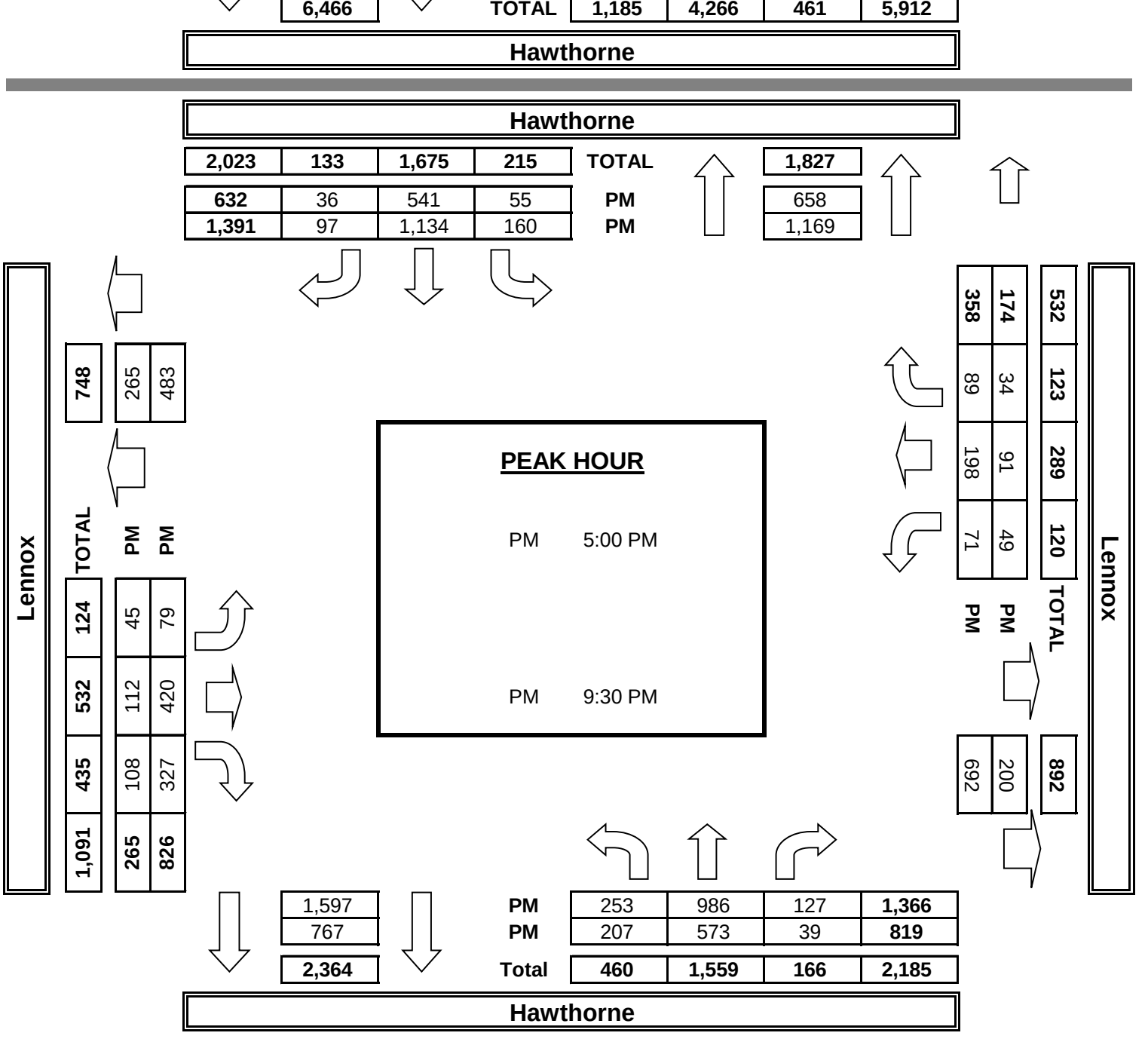


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
PM	4:00 PM	21	33	9	12	75	18	32	8	11	69	3	1	1	1	6
	4:15 PM	9	26	17	8	60	8	24	14	6	52	1	2	3	2	8
	4:30 PM	13	13	11	13	50	13	13	11	13	50	0	0	0	0	0
	4:45 PM	14	17	14	19	64	13	17	12	10	52	1	0	2	9	12
	5:00 PM	22	12	7	15	56	21	9	6	14	50	1	3	1	1	6
	5:15 PM	26	13	12	30	81	25	12	10	29	76	1	1	2	1	5
	5:30 PM	21	17	6	16	60	20	15	5	15	55	1	2	1	1	5
	5:45 PM	18	10	6	20	54	18	8	5	18	49	0	2	1	2	5
	6:00 PM	15	13	13	15	56	12	12	12	12	48	3	1	1	3	8
	6:15 PM	18	22	8	19	67	16	22	7	18	63	2	0	1	1	4
	6:30 PM	5	27	6	17	55	2	24	5	15	46	3	3	1	2	9
	6:45 PM	4	21	9	18	52	3	21	7	17	48	1	0	2	1	4
	7:00 PM	10	8	10	17	45	8	8	9	16	41	2	0	1	1	4
	7:15 PM	12	14	12	13	51	12	14	12	12	50	0	0	0	1	1
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	208	246	140	232	826	189	231	123	206	749	19	15	17	26	77
	AM BEGIN PEAK HR	5:00 PM					84	44	26	76	230					
PM	9:30 PM	1	4	1	6	12	1	3	1	4	9	0	1	0	2	3
	9:45 PM	2	6	3	6	17	2	5	1	6	14	0	1	2	0	3
	10:00 PM	8	4	8	7	27	6	3	8	7	24	2	1	0	0	3
	10:15 PM	3	7	8	6	24	1	5	7	4	17	2	2	1	2	7
	10:30 PM	0	3	3	2	8	0	1	2	1	4	0	2	1	1	4
	10:45 PM	3	3	1	7	14	2	1	0	4	7	1	2	1	3	7
	11:00 PM	4	2	4	4	14	4	2	2	4	12	0	0	2	0	2
	11:15 PM	1	3	3	6	13	1	3	1	6	11	0	0	2	0	2
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	22	32	31	44	129	17	23	22	36	98	5	9	9	8	31
	PM BEGIN PEAK HR	9:30 PM					10	16	17	21	64					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

T218

DATE: Thu, Apr 12, 18

LOCATION: Inglewood
NORTH & SOUTH: Hawthorne
EAST & WEST: Imperial

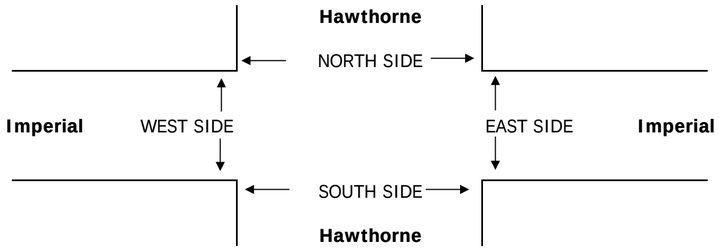
PROJECT #: TOD
LOCATION #: 74
CONTROL: SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

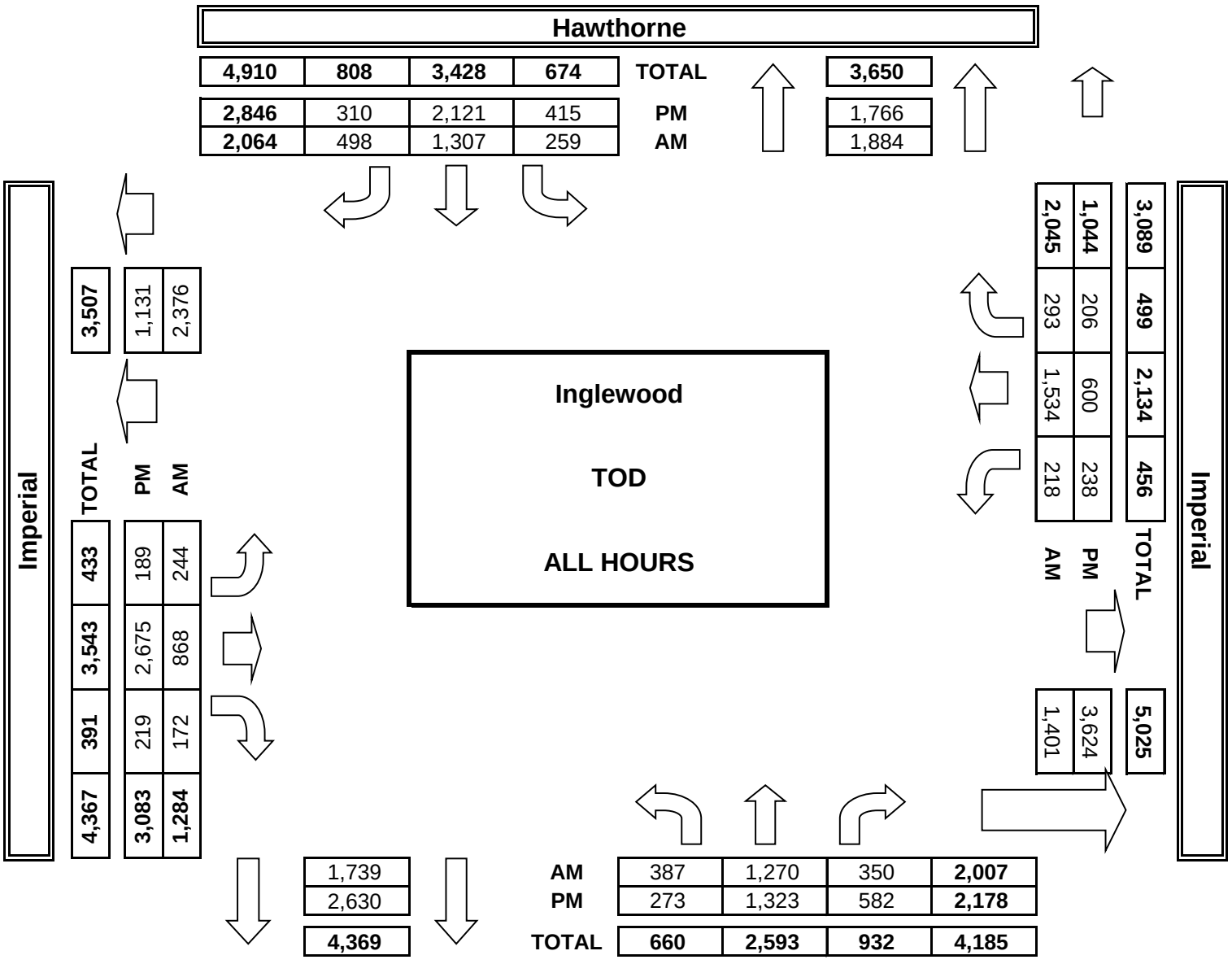
		NORTHBOUND Hawthorne			SOUTHBOUND Hawthorne			EASTBOUND Imperial			WESTBOUND Imperial				U-TURNS				
	LANES:	NL 2	NT 3	NR 1	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	38	153	33	17	114	32	30	88	16	14	218	24	777	6	3	0	0	9
	7:15 AM	52	134	31	32	145	87	23	94	19	14	177	41	849	6	12	0	0	18
	7:30 AM	57	165	42	31	181	110	40	100	16	29	193	40	1,004	3	11	0	0	14
	7:45 AM	46	194	43	34	244	87	39	141	19	33	259	46	1,185	7	6	0	0	13
	8:00 AM	45	160	39	43	184	67	40	146	29	28	187	30	998	2	13	0	0	15
	8:15 AM	49	165	59	34	189	43	30	117	21	37	195	33	972	9	9	0	0	18
	8:30 AM	63	140	57	38	111	37	17	98	25	30	163	42	821	4	12	0	0	16
	8:45 AM	37	159	46	30	139	35	25	84	27	33	142	37	794	6	11	0	1	18
	VOLUMES	387	1,270	350	259	1,307	498	244	868	172	218	1,534	293	7,400	43	77	0	1	121
	APPROACH %	19%	63%	17%	13%	63%	24%	19%	68%	13%	11%	75%	14%						
	APP/DEPART	2,007	/	1,884	2,064	/	1,739	1,284	/	1,401	2,045	/	2,376	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	197	684	183	142	798	307	149	504	85	127	834	149	4,159					
	APPROACH %	19%	64%	17%	11%	64%	25%	20%	68%	12%	11%	75%	13%						
	PEAK HR FACTOR		0.940			0.854			0.858			0.821		0.877					
	APP/DEPART	1,064	/	1,021	1,247	/	1,031	738	/	790	1,110	/	1,317	0					
PM	4:00 PM	37	162	65	64	230	41	22	354	36	26	74	27	1,138	5	7	0	0	12
	4:15 PM	30	173	65	51	281	30	15	334	20	29	72	27	1,127	4	6	0	0	10
	4:30 PM	34	168	70	43	229	38	23	348	22	29	64	27	1,095	6	6	0	0	12
	4:45 PM	34	149	77	51	272	32	22	323	28	33	67	19	1,107	7	9	0	0	16
	5:00 PM	28	156	69	56	261	44	30	354	24	32	77	22	1,153	6	4	0	0	10
	5:15 PM	28	144	89	47	327	52	28	320	29	33	79	24	1,200	5	5	0	0	10
	5:30 PM	39	187	85	54	281	30	23	307	30	22	98	34	1,190	10	4	0	0	14
	5:45 PM	43	184	62	49	240	43	26	335	30	34	69	26	1,141	9	7	0	0	16
	VOLUMES	273	1,323	582	415	2,121	310	189	2,675	219	238	600	206	9,151	52	48	0	0	100
	APPROACH %	13%	61%	27%	15%	75%	11%	6%	87%	7%	23%	57%	20%						
	APP/DEPART	2,178	/	1,766	2,846	/	2,630	3,083	/	3,624	1,044	/	1,131	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	138	671	305	206	1,109	169	107	1,316	113	121	323	106	4,684					
	APPROACH %	12%	60%	27%	14%	75%	11%	7%	86%	7%	22%	59%	19%						
	PEAK HR FACTOR		0.895			0.871			0.941			0.893		0.976					
	APP/DEPART	1,114	/	904	1,484	/	1,373	1,536	/	1,807	550	/	600	0					

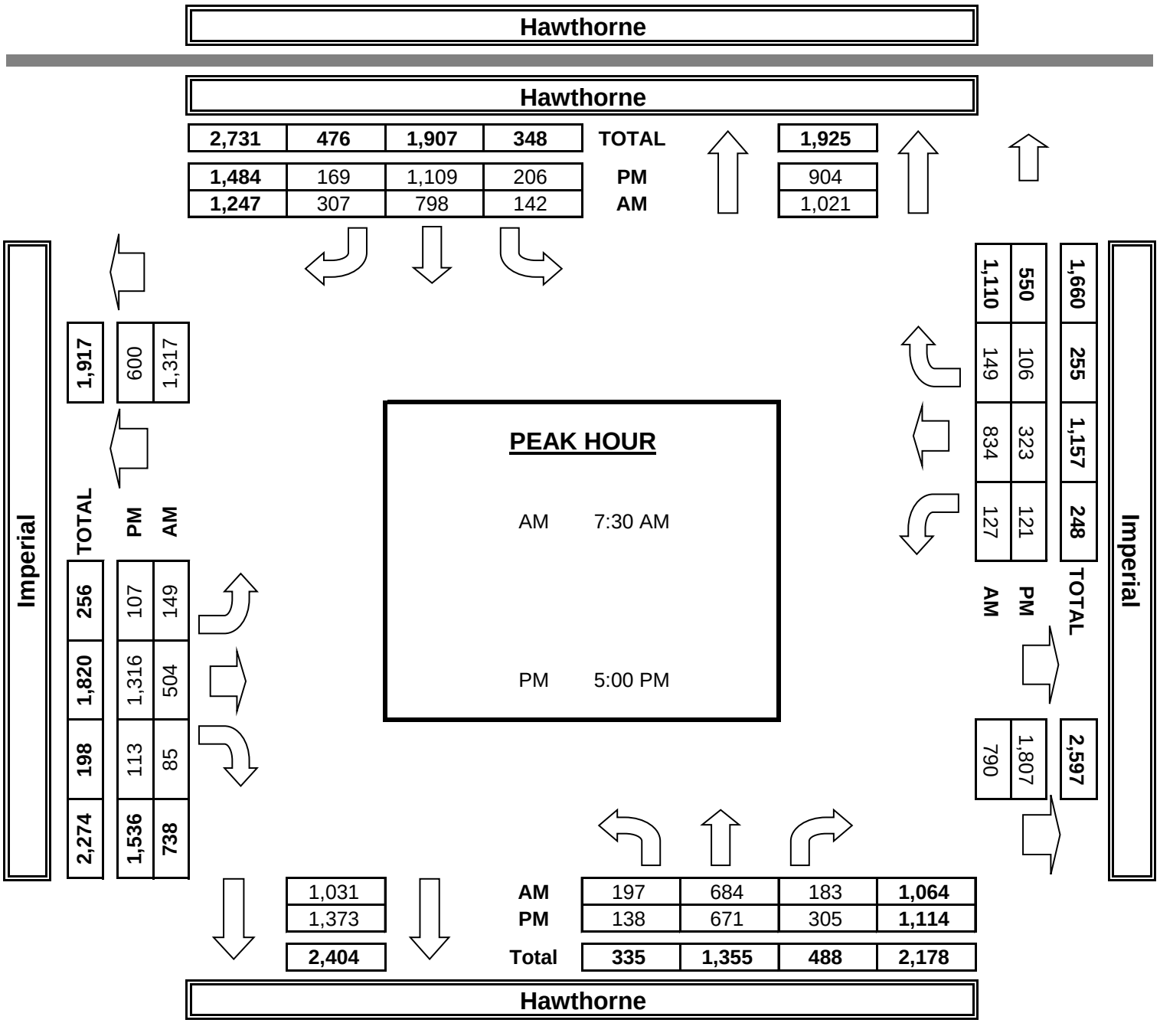


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	5	10	14	6	35	4	10	14	6	34	1	0	0	0	1
	7:15 AM	6	3	9	5	23	4	3	9	3	19	2	0	0	2	4
	7:30 AM	13	3	13	18	47	10	1	11	11	33	3	2	2	7	14
	7:45 AM	6	8	17	9	40	6	7	17	8	38	0	1	0	1	2
	8:00 AM	7	11	12	4	34	7	11	12	3	33	0	0	0	1	1
	8:15 AM	14	4	14	14	46	11	4	14	12	41	3	0	0	2	5
	8:30 AM	12	6	14	19	51	12	6	14	17	49	0	0	0	2	2
	8:45 AM	7	2	11	16	36	7	2	10	12	31	0	0	1	4	5
	TOTAL	70	47	104	91	312	61	44	101	72	278	9	3	3	19	34
	AM BEGIN PEAK HR			7:30 AM			34	23	54	34	145					
PM	4:00 PM	16	7	19	16	58	13	6	14	14	47	3	1	5	2	11
	4:15 PM	9	6	15	24	54	8	6	13	21	48	1	0	2	3	6
	4:30 PM	11	12	18	14	55	9	10	13	10	42	2	2	5	4	13
	4:45 PM	9	7	17	12	45	7	6	15	6	34	2	1	2	6	11
	5:00 PM	16	9	18	10	53	14	8	17	6	45	2	1	1	4	8
	5:15 PM	12	12	22	27	73	11	12	18	25	66	1	0	4	2	7
	5:30 PM	18	10	23	16	67	16	10	18	14	58	2	0	5	2	9
	5:45 PM	15	11	17	13	56	14	9	11	9	43	1	2	6	4	13
	TOTAL	106	74	149	132	461	92	67	119	105	383	14	7	30	27	78
	PM BEGIN PEAK HR			5:00 PM			55	39	64	54	212					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, May 31, 18

LOCATION: Inglewood
NORTH & SOUTH: I-105 EB Rapms
EAST & WEST: Imperial

PROJECT #: IBEC
LOCATION #: 58
CONTROL: SIGNAL

NOTES:

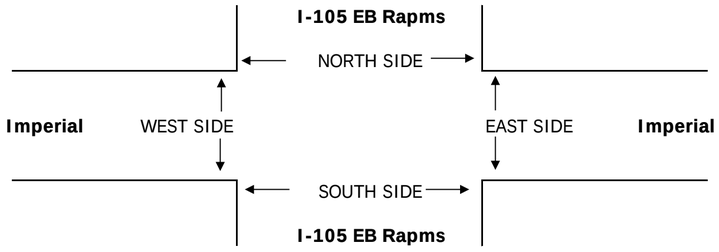
AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

		NORTHBOUND I-105 EB Rapms			SOUTHBOUND I-105 EB Rapms			EASTBOUND Imperial			WESTBOUND Imperial			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
AM	7:00 AM	8	34	4	0	0	0	67	85	2	3	248	81	532
	7:15 AM	6	32	4	0	0	0	80	85	2	1	268	109	587
	7:30 AM	9	27	5	0	0	0	72	110	4	3	301	111	642
	7:45 AM	11	16	2	0	0	0	76	114	1	6	325	107	658
	8:00 AM	8	21	2	0	0	0	74	119	6	6	267	73	576
	8:15 AM	7	22	6	0	0	0	75	141	3	6	218	88	566
	8:30 AM	7	19	0	0	0	0	81	138	4	6	220	81	556
	8:45 AM	7	17	4	0	0	0	64	90	5	4	202	75	468
	VOLUMES	63	188	27	0	0	0	589	882	27	35	2,049	725	4,585
	APPROACH %	23%	68%	10%	0%	0%	0%	39%	59%	2%	1%	73%	26%	
	APP/DEPART	278	/	1,502	0	/	56	1,498	/	915	2,809	/	2,112	0
	BEGIN PEAK HR		7:15 AM											
	VOLUMES	34	96	13	0	0	0	302	428	13	16	1,161	400	2,463
	APPROACH %	24%	67%	9%	0%	0%	0%	41%	58%	2%	1%	74%	25%	
	PEAK HR FACTOR		0.851			0.000			0.933			0.900		0.936
	APP/DEPART	143	/	798	0	/	28	743	/	442	1,577	/	1,195	0
PM	4:00 PM	3	65	9	0	0	0	115	311	10	8	109	84	714
	4:15 PM	3	52	8	0	0	0	124	351	4	8	132	86	768
	4:30 PM	8	31	9	0	0	0	98	356	2	9	145	108	766
	4:45 PM	5	43	9	0	0	0	123	294	9	11	120	77	691
	5:00 PM	9	64	8	0	0	0	113	307	7	9	141	83	741
	5:15 PM	4	59	11	0	0	0	123	318	9	12	112	70	718
	5:30 PM	9	61	5	0	0	0	109	331	5	3	136	85	744
	5:45 PM	3	23	6	0	0	0	99	356	9	12	121	57	686
	VOLUMES	44	398	65	0	0	0	904	2,624	55	72	1,016	650	5,828
	APPROACH %	9%	79%	13%	0%	0%	0%	25%	73%	2%	4%	58%	37%	
	APP/DEPART	507	/	1,952	0	/	112	3,583	/	2,704	1,738	/	1,060	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	25	190	34	0	0	0	458	1,308	22	37	538	354	2,966
	APPROACH %	10%	76%	14%	0%	0%	0%	26%	73%	1%	4%	58%	38%	
	PEAK HR FACTOR		0.769			0.000			0.933			0.886		0.965
	APP/DEPART	249	/	1,002	0	/	52	1,788	/	1,349	929	/	563	0

U-TURNS

NB	SB	EB	WB	TTL
0	0	0	2	2
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	1	1
0	0	0	1	1
0	0	0	2	2
0	0	0	0	0
0	0	0	6	6
0	0	0	2	2
0	0	0	1	1
0	0	0	1	1
0	0	0	2	2
0	0	0	3	3
0	0	0	3	3
0	0	0	1	1
0	0	0	2	2
0	0	0	15	15



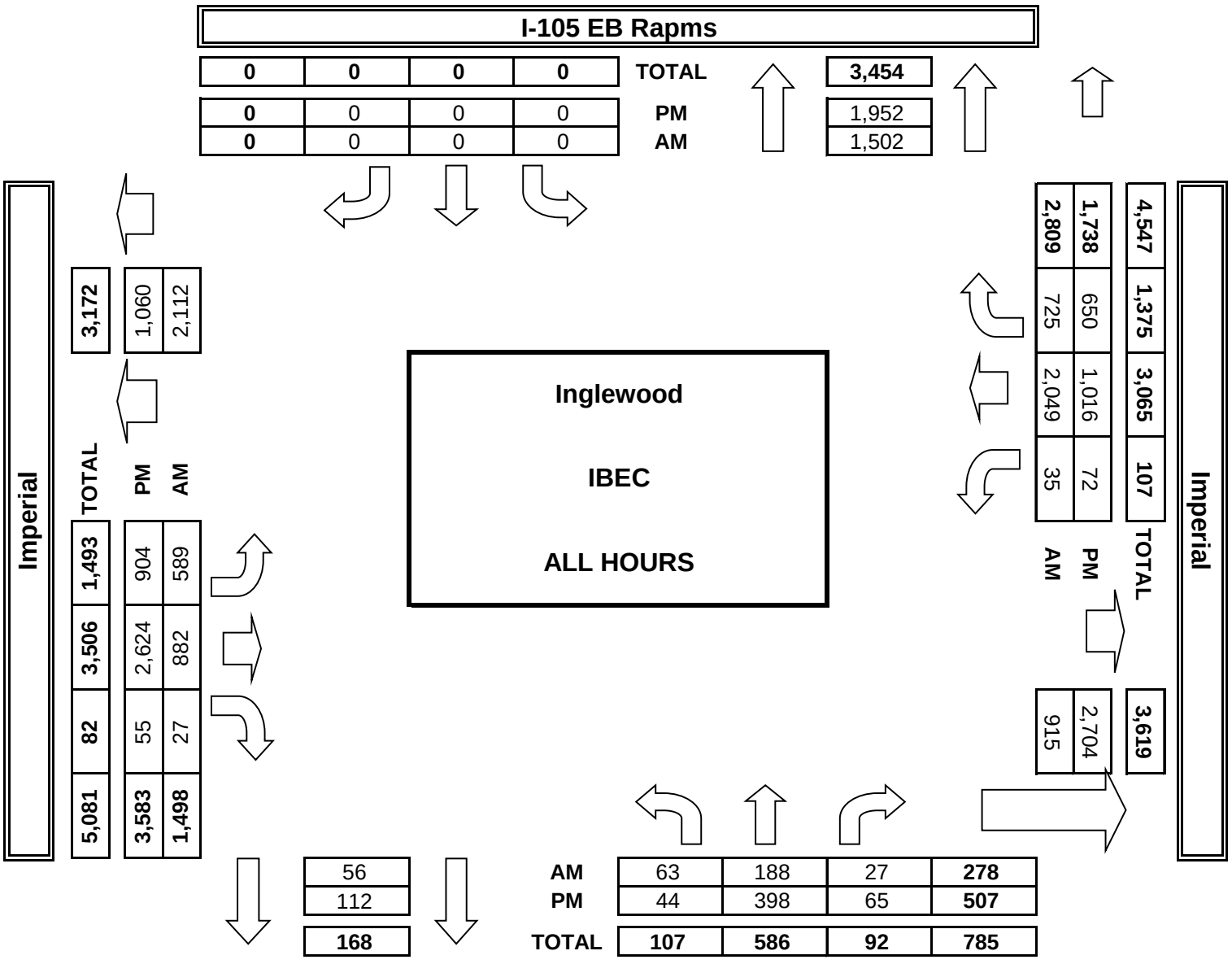
		PEDESTRIAN + BIKE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	7:00 AM	0	0	0	1	1
	7:15 AM	1	0	0	0	1
	7:30 AM	5	0	0	1	6
	7:45 AM	2	0	0	1	3
	8:00 AM	1	0	0	0	1
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	0	0	0
	8:45 AM	1	0	0	1	2
	TOTAL	10	0	0	4	14
	AM BEGIN PEAK HR	7:15 AM				
PM	4:00 PM	3	0	0	0	3
	4:15 PM	0	0	0	2	2
	4:30 PM	1	2	0	3	6
	4:45 PM	0	1	0	2	3
	5:00 PM	1	0	0	1	2
	5:15 PM	4	0	0	3	7
	5:30 PM	4	0	0	0	4
	5:45 PM	2	0	0	1	3
	TOTAL	15	3	0	12	30
	PM BEGIN PEAK HR	4:15 PM				

	PEDESTRIAN CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
AM	0	0	0	1	1
	1	0	0	0	1
	3	0	0	1	4
	2	0	0	1	3
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	1	1
	6	0	0	4	10
	6	0	0	2	8
PM	2	0	0	0	2
	0	0	0	1	1
	1	0	0	3	4
	0	0	0	2	2
	0	0	0	1	1
	2	0	0	2	4
	4	0	0	0	4
	2	0	0	1	3
	11	0	0	10	21
	1	0	0	7	8

	BICYCLE CROSSINGS				
	NS	SS	ES	WS	TOTAL
AM	0	0	0	0	0
	0	0	0	0	0
	2	0	0	0	2
	0	0	0	0	0
	1	0	0	0	1
	0	0	0	0	0
	0	0	0	0	0
	1	0	0	0	1
	4	0	0	0	4
PM	1	0	0	0	1
	0	0	0	1	1
	0	2	0	0	2
	0	1	0	0	1
	1	0	0	0	1
	2	0	0	1	3
	0	0	0	0	0
	0	0	0	0	0
	4	3	0	2	9

AimTD LLC

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 26, 18

LOCATION: Inglewood
NORTH & SOUTH: Prairie
EAST & WEST: Lennox

PROJECT #: IBEC
LOCATION #: 45
CONTROL: SIGNAL

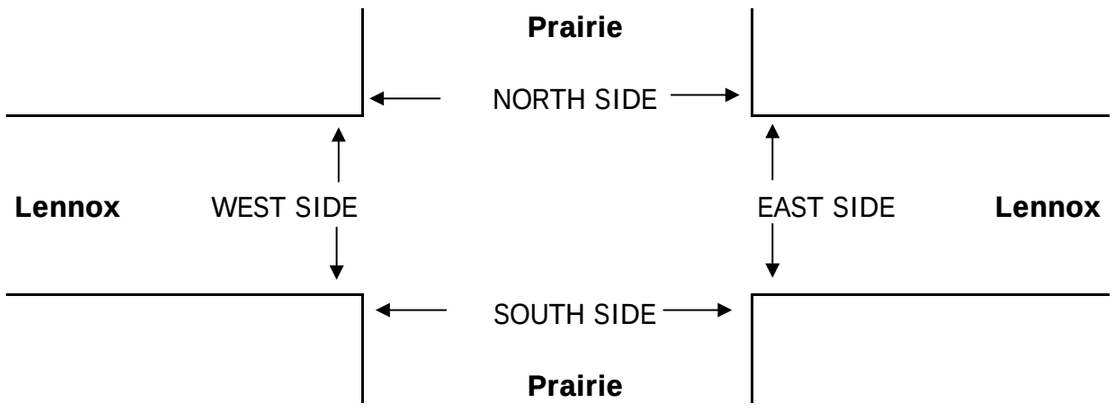
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

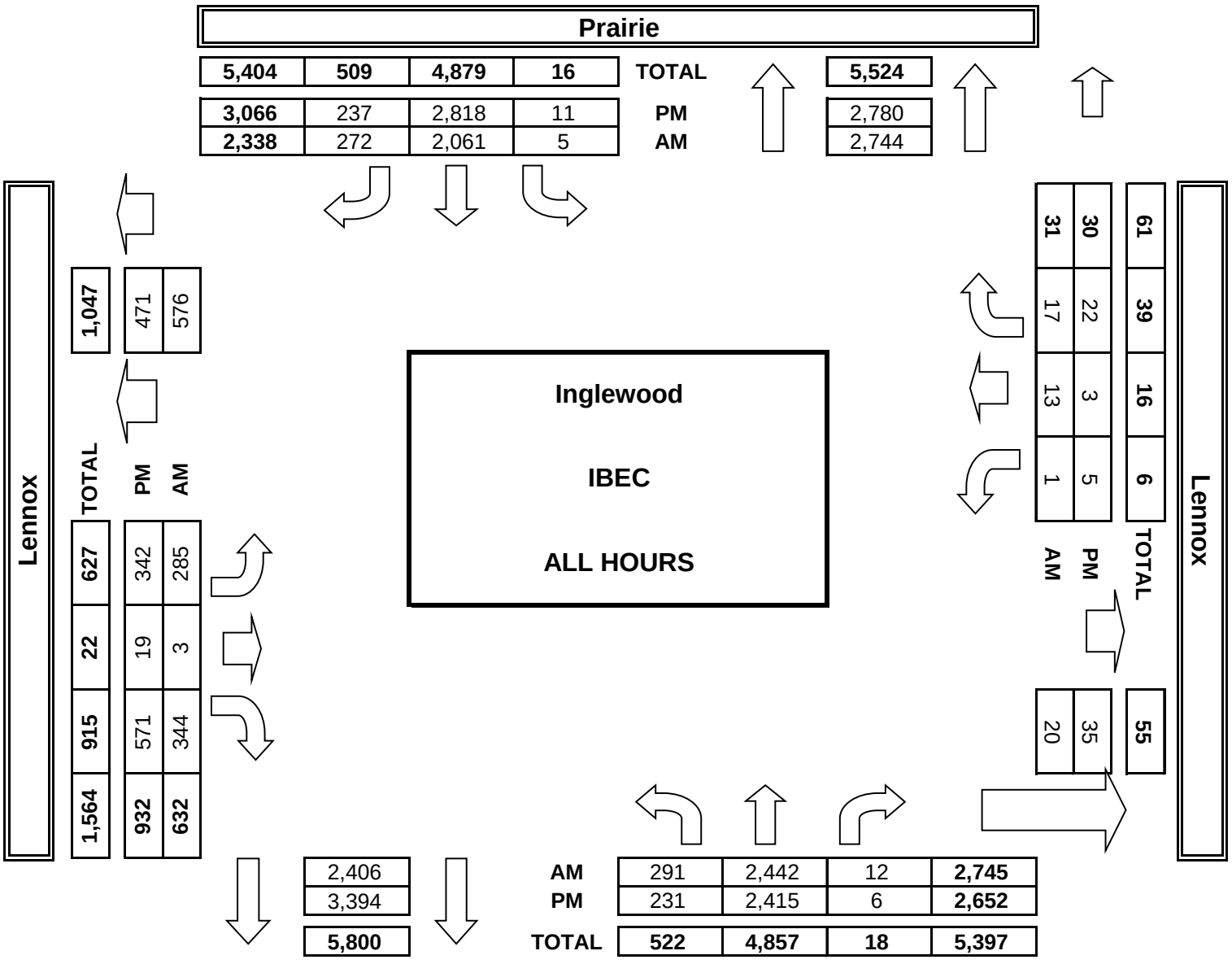
		NORTHBOUND Prairie			SOUTHBOUND Prairie			EASTBOUND Lennox			WESTBOUND Lennox				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	38	235	0	1	217	45	30	0	24	0	2	2	594	0	0	0	0	0
	7:15 AM	46	341	3	0	274	41	36	0	35	0	1	3	780	0	0	0	0	0
	7:30 AM	40	336	0	0	337	55	38	0	40	0	4	1	851	0	0	0	0	0
	7:45 AM	39	349	2	0	294	51	62	0	64	0	3	2	866	0	0	0	0	0
	8:00 AM	47	320	0	0	262	35	39	0	66	0	1	3	773	0	0	0	0	0
	8:15 AM	24	283	1	0	265	16	41	1	59	0	1	4	695	0	0	0	0	0
	8:30 AM	27	299	0	3	202	13	20	0	34	1	1	1	601	0	0	0	0	0
	8:45 AM	30	279	6	1	210	16	19	2	22	0	0	1	586	0	0	0	0	0
	VOLUMES	291	2,442	12	5	2,061	272	285	3	344	1	13	17	5,746	0	0	0	0	0
	APPROACH %	11%	89%	0%	0%	88%	12%	45%	0%	54%	3%	42%	55%						
	APP/DEPART	2,745	/	2,744	2,338	/	2,406	632	/	20	31	/	576	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	172	1,346	5	0	1,167	182	175	0	205	0	9	9	3,270					
	APPROACH %	11%	88%	0%	0%	87%	13%	46%	0%	54%	0%	50%	50%						
	PEAK HR FACTOR		0.976			0.860			0.754			0.900		0.944					
	APP/DEPART	1,523	/	1,530	1,349	/	1,372	380	/	5	18	/	363	0					
PM	4:00 PM	35	286	0	2	321	29	31	1	45	1	0	2	753	0	0	0	0	0
	4:15 PM	37	286	1	1	304	29	42	0	83	1	1	3	788	0	0	0	0	0
	4:30 PM	29	300	0	0	409	37	47	1	87	0	0	2	912	0	0	0	0	0
	4:45 PM	23	296	1	1	384	42	42	14	65	0	0	0	868	0	0	0	0	0
	5:00 PM	27	303	1	2	372	28	50	1	66	1	0	5	856	0	0	0	0	0
	5:15 PM	23	342	1	3	364	23	38	1	76	0	1	3	875	0	1	0	0	1
	5:30 PM	30	316	0	1	358	22	43	1	76	1	0	4	852	0	0	0	0	0
	5:45 PM	27	286	2	1	306	27	49	0	73	1	1	3	776	0	0	0	0	0
	VOLUMES	231	2,415	6	11	2,818	237	342	19	571	5	3	22	6,680	0	1	0	0	1
	APPROACH %	9%	91%	0%	0%	92%	8%	37%	2%	61%	17%	10%	73%						
	APP/DEPART	2,652	/	2,780	3,066	/	3,394	932	/	35	30	/	471	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	102	1,241	3	6	1,529	130	177	17	294	1	1	10	3,511					
	APPROACH %	8%	92%	0%	0%	92%	8%	36%	3%	60%	8%	8%	83%						
	PEAK HR FACTOR		0.919			0.933			0.904			0.500		0.962					
	APP/DEPART	1,346	/	1,429	1,665	/	1,824	488	/	25	12	/	233	0					

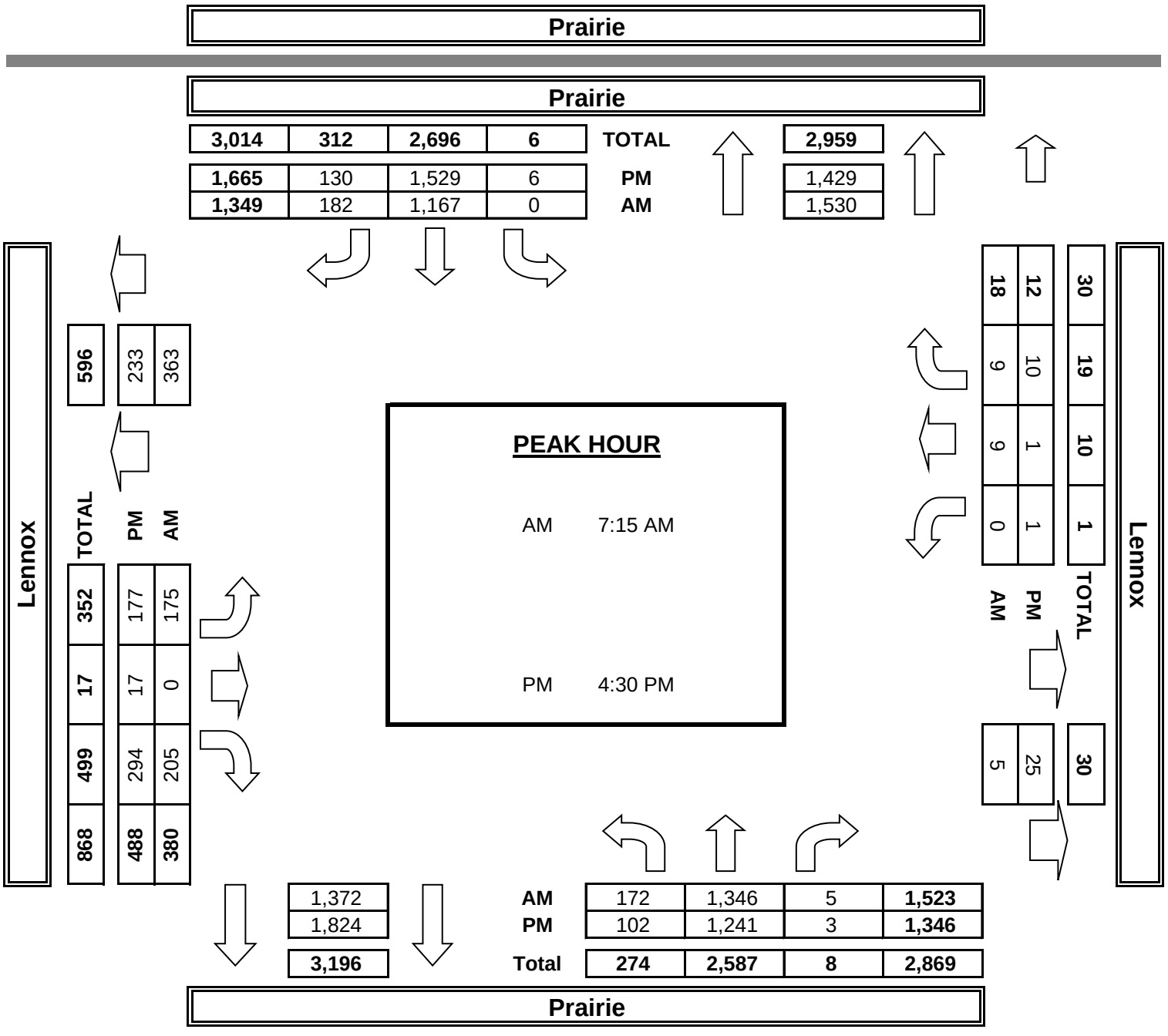


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	11	0	11	18	40	10	0	9	16	35	1	0	2	2	5
	7:15 AM	9	0	2	10	21	7	0	2	10	19	2	0	0	0	2
	7:30 AM	6	0	14	1	21	6	0	12	1	19	0	0	2	0	2
	7:45 AM	14	0	4	5	23	14	0	3	5	22	0	0	1	0	1
	8:00 AM	9	0	4	3	16	9	0	4	2	15	0	0	0	1	1
	8:15 AM	9	0	4	6	19	9	0	4	5	18	0	0	0	1	1
	8:30 AM	15	0	9	11	35	15	0	7	10	32	0	0	2	1	3
	8:45 AM	6	1	5	3	15	5	0	3	2	10	1	1	2	1	5
	TOTAL	79	1	53	57	190	75	0	44	51	170	4	1	9	6	20
	AM BEGIN PEAK HR	7:15 AM					36	0	21	18	75					
PM	4:00 PM	15	0	9	10	34	13	0	8	9	30	2	0	1	1	4
	4:15 PM	9	0	5	20	34	9	0	5	18	32	0	0	0	2	2
	4:30 PM	12	0	5	12	29	12	0	4	12	28	0	0	1	0	1
	4:45 PM	16	0	3	18	37	15	0	2	11	28	1	0	1	7	9
	5:00 PM	6	0	4	9	19	3	0	3	8	14	3	0	1	1	5
	5:15 PM	12	0	0	14	26	8	0	0	14	22	4	0	0	0	4
	5:30 PM	9	0	0	10	19	7	0	0	9	16	2	0	0	1	3
	5:45 PM	3	0	13	15	31	3	0	10	13	26	0	0	3	2	5
	TOTAL	82	0	39	108	229	70	0	32	94	196	12	0	7	14	33
	PM BEGIN PEAK HR	4:30 PM					38	0	9	45	92					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 26, 18

LOCATION: Inglewood
NORTH & SOUTH: Prairie
EAST & WEST: 112th

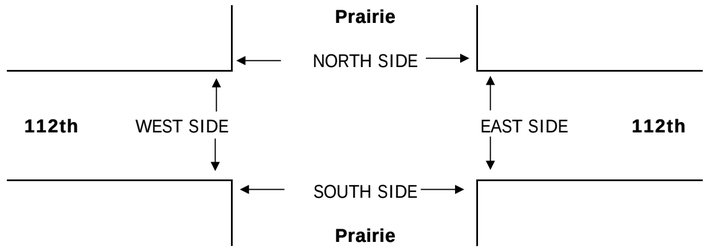
PROJECT #: IBEC
LOCATION #: 48
CONTROL: SIGNAL

NOTES: Queue SB AM PM

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

☑ Add U-Turns to Left Turns

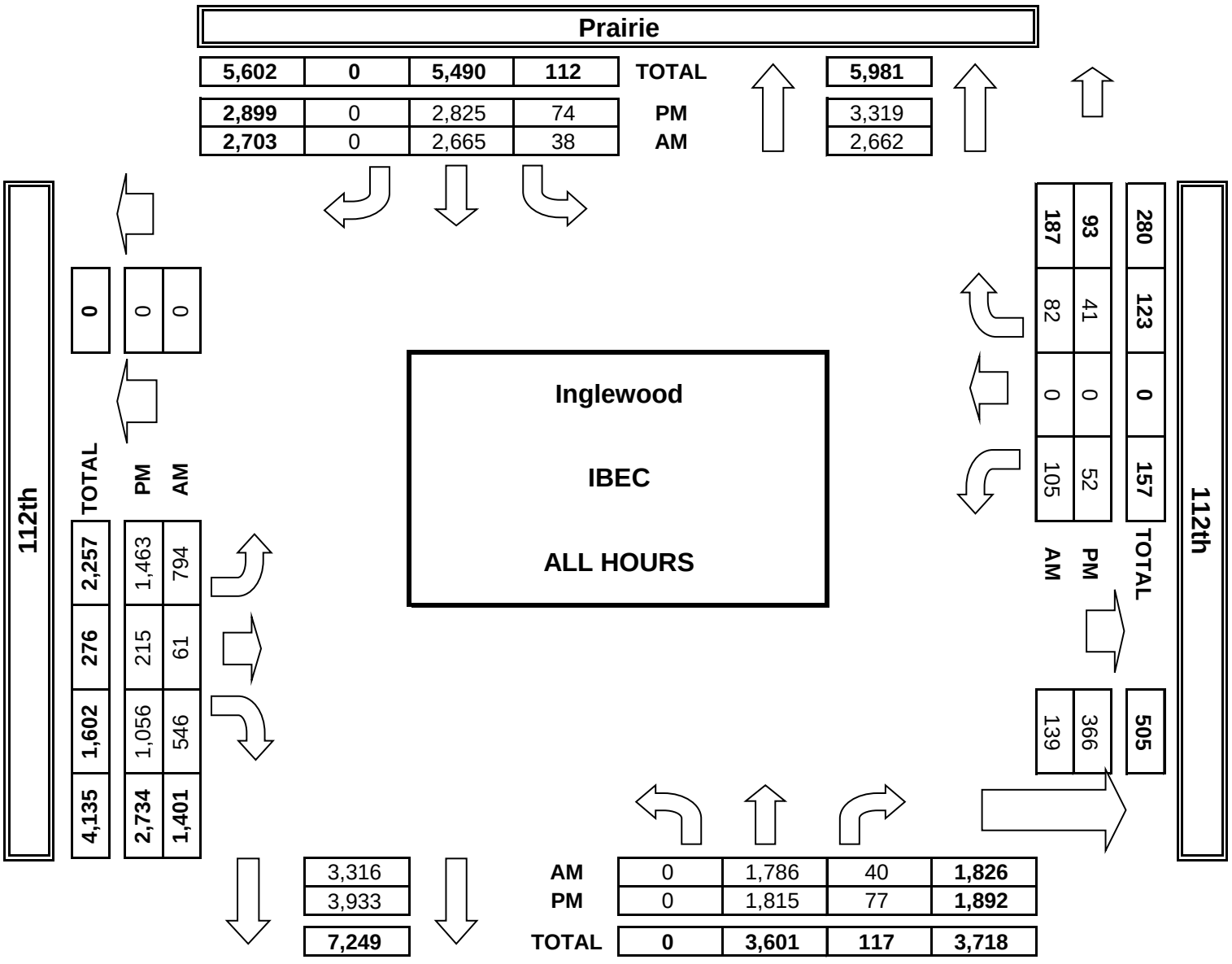
		NORTHBOUND Prairie			SOUTHBOUND Prairie			EASTBOUND 112th			WESTBOUND 112th				U-TURNS				
	LANES:	NL X	NT 3	NR 0	SL 1	ST 3	SR X	EL 2	ET 0.5	ER 0.5	WL 0	WT X	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	0	188	5	2	283	0	74	3	47	13	0	14	629	0	0	0	0	0
	7:15 AM	0	247	3	4	352	0	105	9	58	17	0	11	806	0	0	0	0	0
	7:30 AM	0	236	5	5	426	0	109	12	59	23	0	10	885	0	0	0	0	0
	7:45 AM	0	238	8	8	401	0	117	8	88	10	0	16	894	0	0	0	0	0
	8:00 AM	0	238	6	7	351	0	86	4	74	17	0	12	795	0	0	0	0	0
	8:15 AM	0	228	7	3	357	0	80	7	81	7	0	7	777	0	0	0	0	0
	8:30 AM	0	207	5	7	235	0	115	10	67	11	0	4	661	0	0	0	0	0
	8:45 AM	0	204	1	2	260	0	108	8	72	7	0	8	670	0	0	0	0	0
	VOLUMES	0	1,786	40	38	2,665	0	794	61	546	105	0	82	6,117	0	0	0	0	0
	APPROACH %	0%	98%	2%	1%	99%	0%	57%	4%	39%	56%	0%	44%						
	APP/DEPART	1,826	/	2,662	2,703	/	3,316	1,401	/	139	187	/	0	0					
	BEGIN PEAK HR		7:15 AM																
	VOLUMES	0	959	22	24	1,530	0	417	33	279	67	0	49	3,380					
	APPROACH %	0%	98%	2%	2%	98%	0%	57%	5%	38%	58%	0%	42%						
	PEAK HR FACTOR		0.981			0.901			0.856			0.879		0.945					
	APP/DEPART	981	/	1,425	1,554	/	1,876	729	/	79	116	/	0	0					
PM	4:00 PM	0	229	19	9	340	0	165	29	121	8	0	4	924	0	0	0	0	0
	4:15 PM	0	226	9	8	318	0	183	23	122	5	0	3	897	0	0	0	0	0
	4:30 PM	0	217	9	11	346	0	193	21	145	9	0	3	954	0	0	0	0	0
	4:45 PM	0	207	11	15	384	0	180	33	129	6	0	8	973	0	0	0	0	0
	5:00 PM	0	242	11	7	364	0	156	15	142	7	0	3	947	0	0	0	0	0
	5:15 PM	0	248	7	7	355	0	203	31	131	8	0	7	997	0	0	0	0	0
	5:30 PM	0	222	6	8	371	0	184	31	135	7	0	8	972	0	0	0	0	0
	5:45 PM	0	224	5	9	347	0	199	32	131	2	0	5	954	0	0	0	0	0
	VOLUMES	0	1,815	77	74	2,825	0	1,463	215	1,056	52	0	41	7,618	0	0	0	0	0
	APPROACH %	0%	96%	4%	3%	97%	0%	54%	8%	39%	56%	0%	44%						
	APP/DEPART	1,892	/	3,319	2,899	/	3,933	2,734	/	366	93	/	0	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	0	919	35	37	1,474	0	723	110	537	28	0	26	3,889					
	APPROACH %	0%	96%	4%	2%	98%	0%	53%	8%	39%	52%	0%	48%						
	PEAK HR FACTOR		0.935			0.947			0.938			0.900		0.975					
	APP/DEPART	954	/	1,668	1,511	/	2,039	1,370	/	182	54	/	0	0					

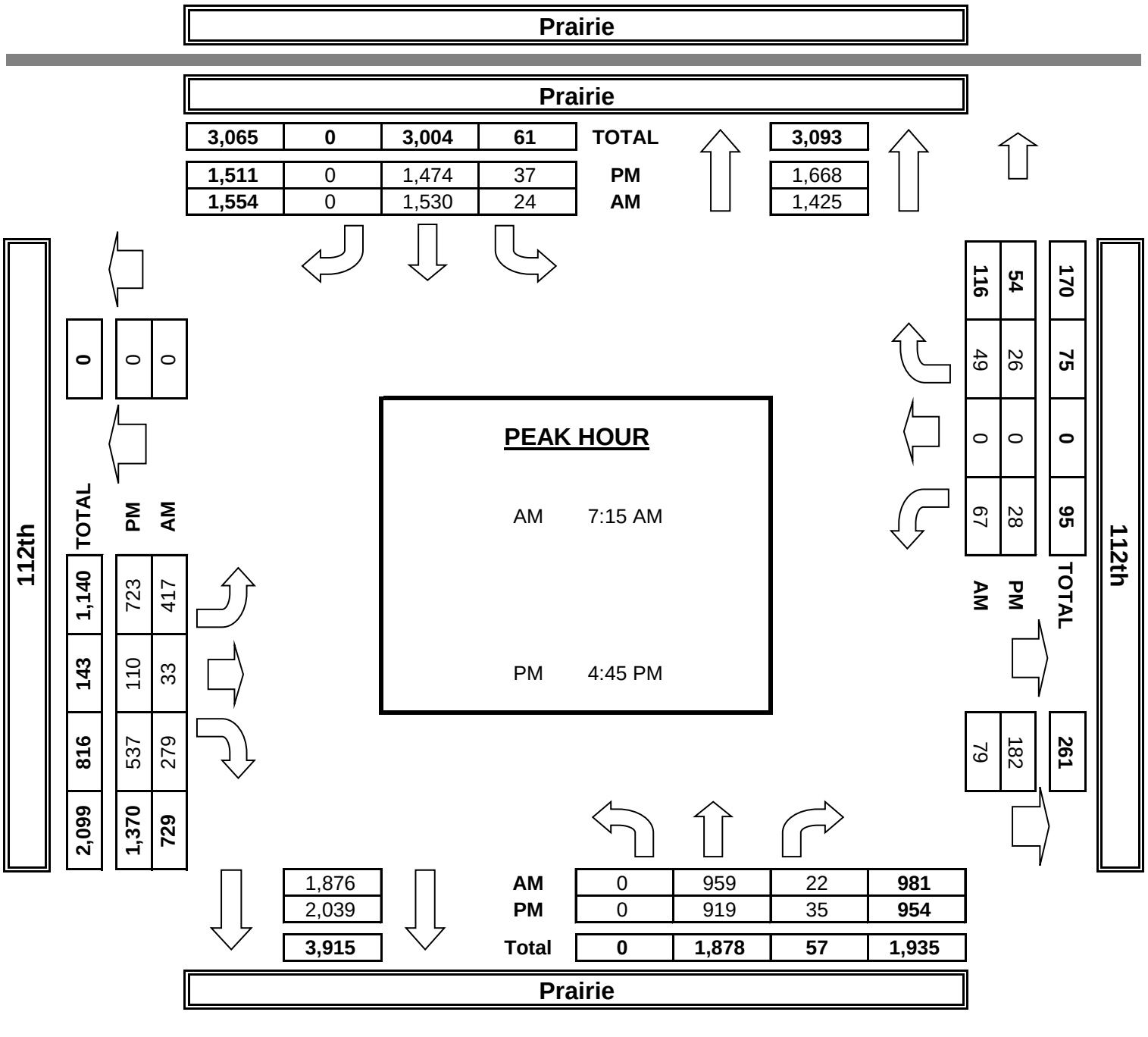


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	2	14	2	18	0	2	12	2	16	0	0	2	0	2
	7:15 AM	0	2	9	3	14	0	2	8	3	13	0	0	1	0	1
	7:30 AM	0	2	5	3	10	0	2	4	3	9	0	0	1	0	1
	7:45 AM	0	0	7	1	8	0	0	6	0	6	0	0	1	1	2
	8:00 AM	0	2	5	8	15	0	2	5	7	14	0	0	0	1	1
	8:15 AM	0	5	3	4	12	0	3	2	4	9	0	2	1	0	3
	8:30 AM	0	4	5	3	12	0	4	4	2	10	0	0	1	1	2
	8:45 AM	0	3	9	4	16	0	3	5	2	10	0	0	4	2	6
	TOTAL	0	20	57	28	105	0	18	46	23	87	0	2	11	5	18
	AM BEGIN PEAK HR			7:15 AM			0	6	23	13	42					
PM	4:00 PM	0	2	8	5	15	0	2	7	2	11	0	0	1	3	4
	4:15 PM	0	4	4	7	15	0	4	4	6	14	0	0	0	1	1
	4:30 PM	0	1	5	6	12	0	1	4	5	10	0	0	1	1	2
	4:45 PM	0	2	3	1	6	0	1	2	1	4	0	1	1	0	2
	5:00 PM	0	1	5	5	11	0	1	4	5	10	0	0	1	0	1
	5:15 PM	0	6	7	6	19	0	5	5	5	15	0	1	2	1	4
	5:30 PM	0	1	7	3	11	0	1	6	1	8	0	0	1	2	3
	5:45 PM	0	1	11	12	24	0	1	7	11	19	0	0	4	1	5
	TOTAL	0	18	50	45	113	0	16	39	36	91	0	2	11	9	22
	PM BEGIN PEAK HR			4:45 PM			0	8	17	12	37					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 26, 18

LOCATION: Inglewood
NORTH & SOUTH: Prairie
EAST & WEST: Imperial

PROJECT #: IBEC
LOCATION #: 49
CONTROL: SIGNAL

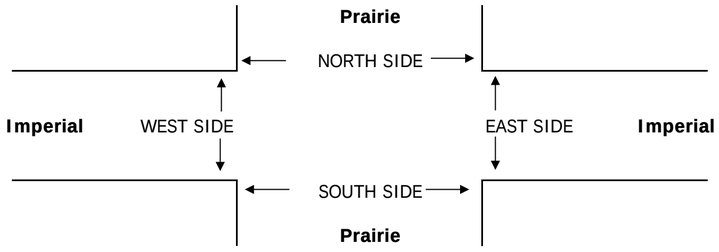
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

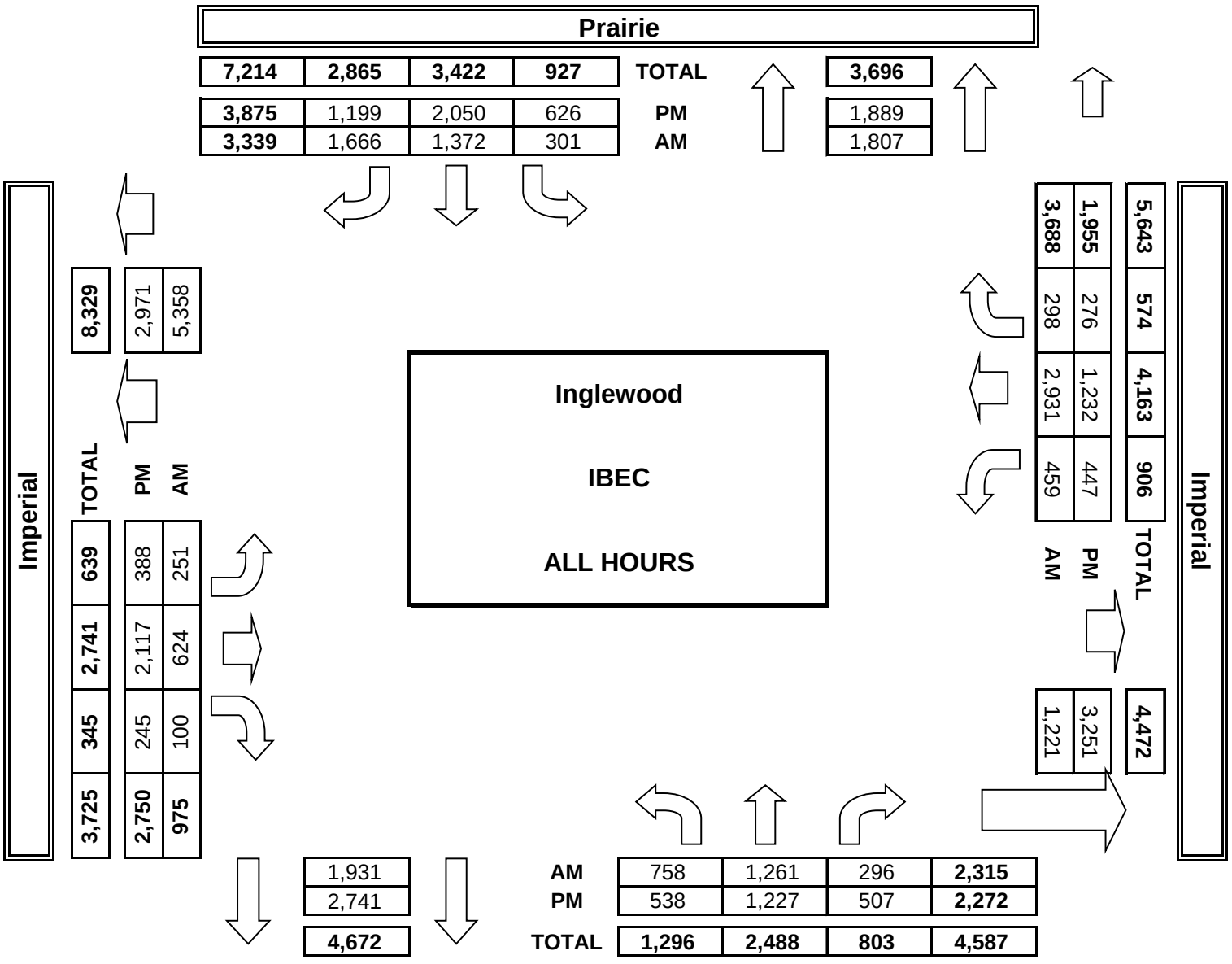
		NORTHBOUND Prairie			SOUTHBOUND Prairie			EASTBOUND Imperial			WESTBOUND Imperial				U-TURNS				
	LANES:	NL 1	NT 3	NR 1	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	106	127	22	23	121	211	29	59	7	32	394	33	1,164	0	0	0	0	0
	7:15 AM	85	172	21	28	142	260	29	68	10	62	402	36	1,315	0	0	0	0	0
	7:30 AM	86	180	44	41	201	267	27	81	20	76	390	32	1,445	0	0	0	0	0
	7:45 AM	97	171	47	51	199	226	33	98	21	79	388	51	1,461	0	0	1	0	1
	8:00 AM	96	150	37	46	210	200	38	84	13	73	361	44	1,352	0	0	0	0	0
	8:15 AM	97	167	47	38	189	216	40	94	7	69	347	32	1,343	0	0	0	0	0
	8:30 AM	96	148	51	35	150	141	26	77	14	38	353	39	1,168	0	0	0	0	0
	8:45 AM	95	146	27	39	160	145	29	63	8	30	296	31	1,069	0	0	2	0	2
	VOLUMES	758	1,261	296	301	1,372	1,666	251	624	100	459	2,931	298	10,317	0	0	3	0	3
	APPROACH %	33%	54%	13%	9%	41%	50%	26%	64%	10%	12%	79%	8%						
	APP/DEPART	2,315	/	1,807	3,339	/	1,931	975	/	1,221	3,688	/	5,358	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	376	668	175	176	799	909	138	357	61	297	1,486	159	5,601					
	APPROACH %	31%	55%	14%	9%	42%	48%	25%	64%	11%	15%	77%	8%						
	PEAK HR FACTOR		0.967			0.925			0.914			0.937		0.958					
	APP/DEPART	1,219	/	964	1,884	/	1,157	556	/	708	1,942	/	2,772	0					
PM	4:00 PM	65	163	50	71	205	151	54	268	30	35	170	32	1,294	0	0	1	0	1
	4:15 PM	55	151	52	87	221	161	31	240	26	71	145	33	1,273	0	0	0	0	0
	4:30 PM	85	148	59	91	258	154	43	249	30	61	173	32	1,383	0	0	0	0	0
	4:45 PM	67	147	63	70	298	162	52	254	29	60	156	37	1,395	0	0	1	0	1
	5:00 PM	65	147	65	71	274	153	61	267	18	58	160	36	1,375	0	0	0	0	0
	5:15 PM	73	177	67	82	262	141	51	278	33	55	139	41	1,399	0	0	0	0	0
	5:30 PM	56	156	89	74	269	143	53	305	48	66	167	24	1,450	0	0	0	1	1
	5:45 PM	72	138	62	80	263	134	43	256	31	41	122	41	1,283	0	0	0	0	0
	VOLUMES	538	1,227	507	626	2,050	1,199	388	2,117	245	447	1,232	276	10,852	0	0	2	1	3
	APPROACH %	24%	54%	22%	16%	53%	31%	14%	77%	9%	23%	63%	14%						
	APP/DEPART	2,272	/	1,889	3,875	/	2,741	2,750	/	3,251	1,955	/	2,971	0					
	BEGIN PEAK HR		4:45 PM																
	VOLUMES	261	627	284	297	1,103	599	217	1,104	128	239	622	138	5,619					
	APPROACH %	22%	53%	24%	15%	55%	30%	15%	76%	9%	24%	62%	14%						
	PEAK HR FACTOR		0.924			0.943			0.892			0.972		0.969					
	APP/DEPART	1,172	/	981	1,999	/	1,469	1,449	/	1,686	999	/	1,483	0					

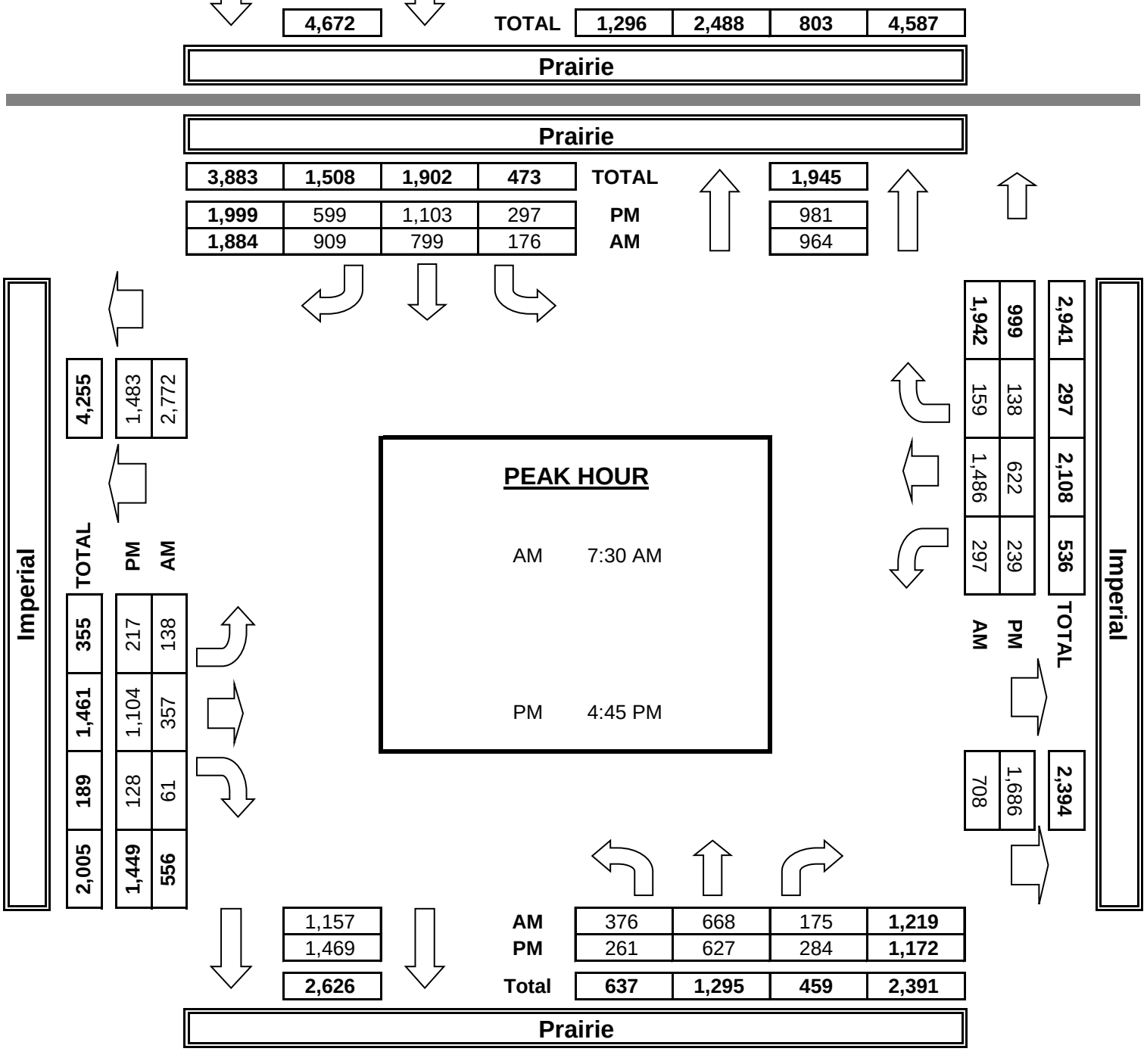


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	0	6	8	2	16	0	6	7	2	15	0	0	1	0	1
	7:15 AM	0	4	5	0	9	0	3	4	0	7	0	1	1	0	2
	7:30 AM	3	6	8	1	18	1	3	5	1	10	2	3	3	0	8
	7:45 AM	0	6	1	1	8	0	6	1	0	7	0	0	0	1	1
	8:00 AM	1	10	3	4	18	0	8	2	4	14	1	2	1	0	4
	8:15 AM	3	8	7	0	18	1	6	4	0	11	2	2	3	0	7
	8:30 AM	1	4	8	1	14	1	3	8	0	12	0	1	0	1	2
	8:45 AM	1	5	6	3	15	1	4	4	1	10	0	1	2	2	5
	TOTAL	9	49	46	12	116	4	39	35	8	86	5	10	11	4	30
	AM BEGIN PEAK HR			7:30 AM			2	23	12	5	42					
PM	4:00 PM	1	11	3	1	16	1	6	3	1	11	0	5	0	0	5
	4:15 PM	5	6	9	3	23	5	3	7	0	15	0	3	2	3	8
	4:30 PM	1	3	0	0	4	1	1	0	0	2	0	2	0	0	2
	4:45 PM	1	9	6	1	17	1	5	5	0	11	0	4	1	1	6
	5:00 PM	1	3	6	2	12	1	1	4	2	8	0	2	2	0	4
	5:15 PM	1	1	3	2	7	1	1	3	0	5	0	0	0	2	2
	5:30 PM	2	3	6	4	15	1	3	4	2	10	1	0	2	2	5
	5:45 PM	2	5	3	4	14	2	2	1	2	7	0	3	2	2	7
	TOTAL	14	41	36	17	108	13	22	27	7	69	1	19	9	10	39
	PM BEGIN PEAK HR			4:45 PM			4	10	16	4	34					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

T418

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Fri, Apr 27, 18

LOCATION: Inglewood
NORTH & SOUTH: Prairie
EAST & WEST: 120th

PROJECT #: IBEC
LOCATION #: 51
CONTROL: SIGNAL

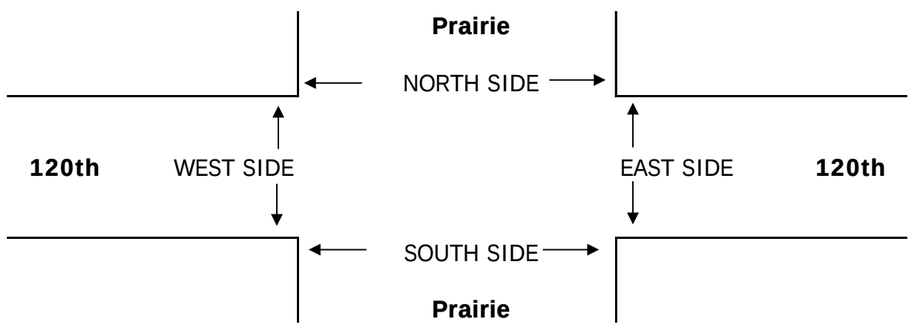
NOTES:

AM
PM
MD
OTHER
OTHER

▲ N
◄ W
E ►
S ▼

☑ Add U-Turns to Left Turns

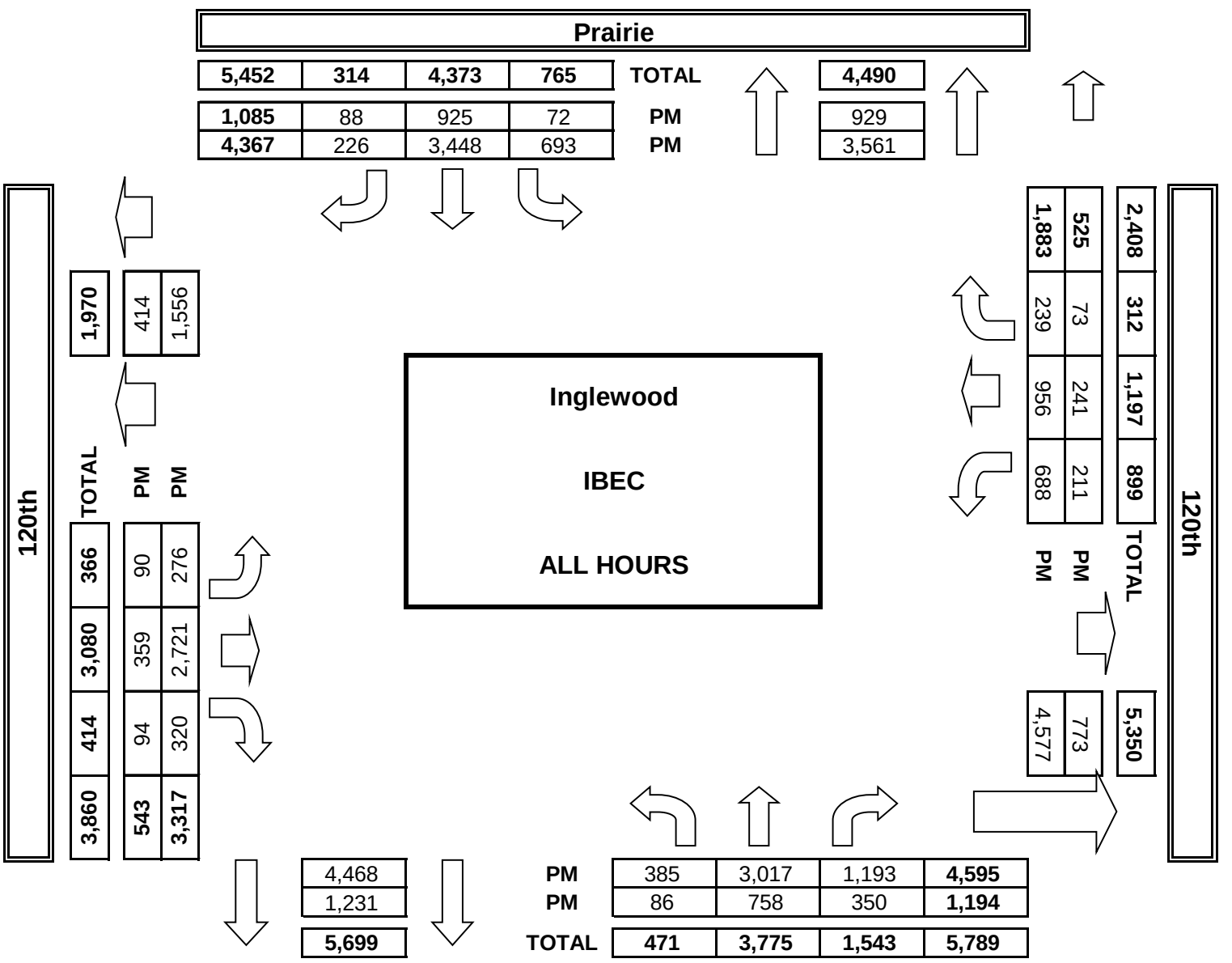
		NORTHBOUND Prairie			SOUTHBOUND Prairie			EASTBOUND 120th			WESTBOUND 120th				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
PM	4:00 PM	27	199	90	70	237	11	24	229	23	50	65	13	1,038	0	1	0	0	1
	4:15 PM	23	238	90	58	280	16	13	194	11	43	63	21	1,050	1	0	0	0	1
	4:30 PM	24	225	103	42	251	18	20	238	17	54	74	14	1,080	0	0	0	0	0
	4:45 PM	32	233	110	48	263	22	15	207	28	42	74	18	1,092	2	1	0	0	3
	5:00 PM	26	219	102	62	288	15	16	219	16	37	75	19	1,094	0	1	1	0	2
	5:15 PM	27	232	109	56	261	27	14	217	12	58	69	23	1,105	0	4	0	0	4
	5:30 PM	18	217	78	53	261	15	20	210	28	68	68	19	1,055	0	1	0	0	1
	5:45 PM	25	236	79	64	247	14	21	209	20	53	61	22	1,051	5	5	0	0	10
	6:00 PM	33	225	89	57	267	12	21	200	29	57	90	17	1,097	0	3	0	0	3
	6:15 PM	37	246	71	37	244	14	28	201	26	53	64	17	1,038	0	2	0	0	2
	6:30 PM	34	174	81	54	224	15	24	164	30	54	60	14	928	0	4	0	0	4
	6:45 PM	26	202	65	29	235	13	22	153	22	39	69	16	891	1	2	0	0	3
	7:00 PM	26	180	62	29	194	12	23	131	32	38	64	15	806	1	4	0	0	5
	7:15 PM	27	191	64	34	196	22	15	149	26	42	60	11	837	2	2	0	0	4
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	385	3,017	1,193	693	3,448	226	276	2,721	320	688	956	239	14,162	12	30	1	0	43
	APPROACH %	8%	66%	26%	16%	79%	5%	8%	82%	10%	37%	51%	13%						
	APP/DEPART	4,595	/	3,561	4,367	/	4,468	3,317	/	4,577	1,883	/	1,556	0					
	BEGIN PEAK HR		4:30 PM																
	VOLUMES	109	909	424	208	1,063	82	65	881	73	191	292	74	4,371					
	APPROACH %	8%	63%	29%	15%	79%	6%	6%	86%	7%	34%	52%	13%						
	PEAK HR FACTOR		0.961			0.927			0.926			0.928		0.989					
	APP/DEPART	1,442	/	1,053	1,353	/	1,329	1,019	/	1,507	557	/	482	0					
PM	9:30 PM	10	122	52	12	158	9	15	58	18	47	42	11	554	0	2	0	0	2
	9:45 PM	6	117	59	12	126	12	13	53	12	21	30	11	472	0	1	0	0	1
	10:00 PM	12	84	47	9	114	16	15	54	10	24	30	10	425	0	2	0	0	2
	10:15 PM	13	95	53	9	133	13	8	54	15	25	36	8	462	1	2	0	0	3
	10:30 PM	18	92	46	9	99	8	12	46	16	33	35	10	424	0	0	0	0	0
	10:45 PM	6	91	36	8	112	10	12	34	8	20	21	7	365	0	1	0	0	1
	11:00 PM	12	85	27	11	90	10	11	38	7	18	24	10	343	0	0	0	0	0
	11:15 PM	9	72	30	2	93	10	4	22	8	23	23	6	302	0	0	0	0	0
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	VOLUMES	86	758	350	72	925	88	90	359	94	211	241	73	3,347	1	8	0	0	9
	APPROACH %	7%	63%	29%	7%	85%	8%	17%	66%	17%	40%	46%	14%						
	APP/DEPART	1,194	/	929	1,085	/	1,231	543	/	773	525	/	414	0					
	BEGIN PEAK HR		9:30 PM																
	VOLUMES	41	418	211	42	531	50	51	219	55	117	138	40	1,913					
	APPROACH %	6%	62%	31%	7%	85%	8%	16%	67%	17%	40%	47%	14%						
	PEAK HR FACTOR		0.910			0.870			0.893			0.738		0.863					
	APP/DEPART	670	/	516	623	/	704	325	/	465	295	/	228	0					

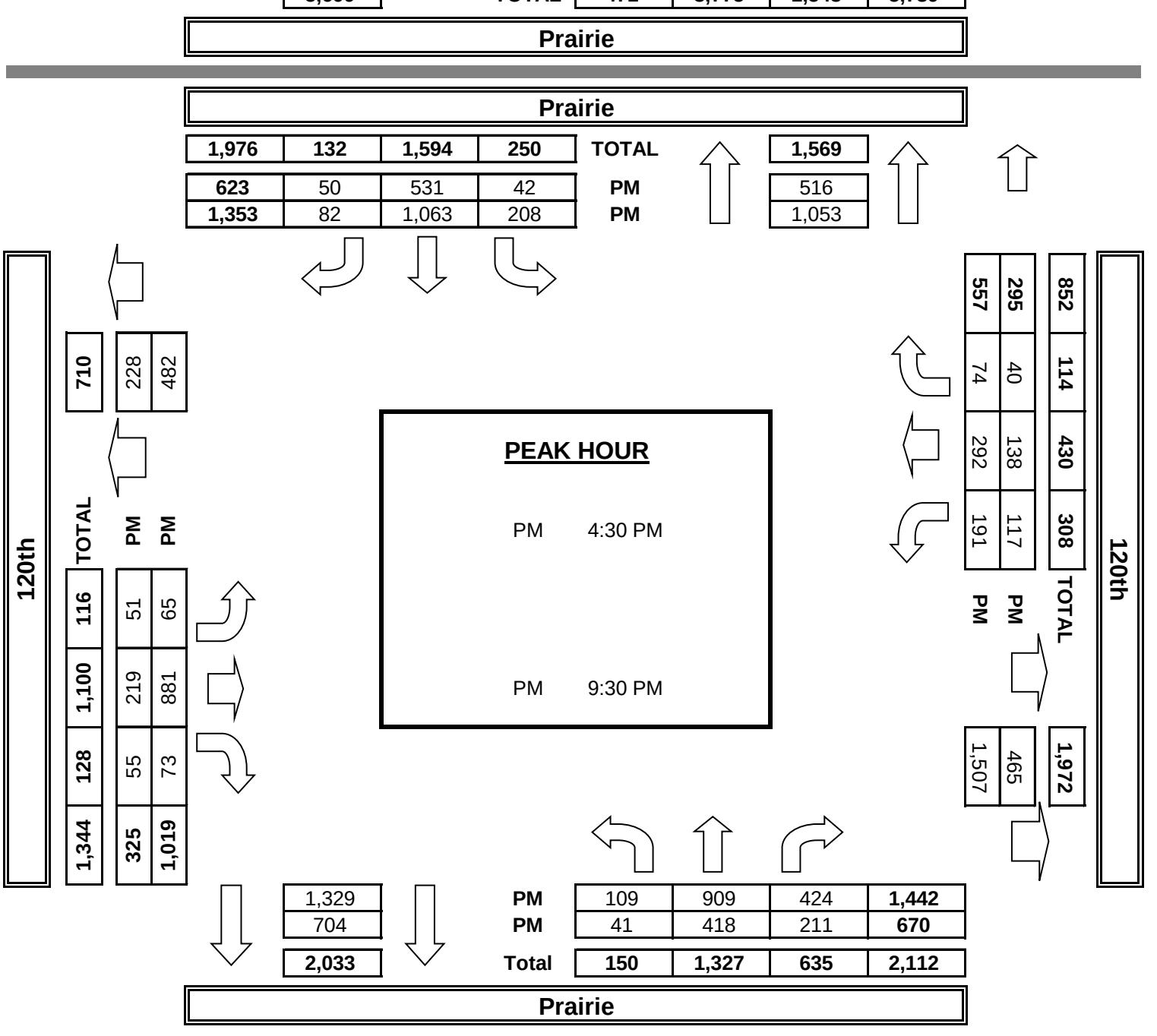


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
PM	4:00 PM	0	1	1	2	4	0	0	0	0	0	0	1	1	2	4
	4:15 PM	2	0	5	5	12	1	0	4	5	10	1	0	1	0	2
	4:30 PM	3	1	1	2	7	3	1	1	1	6	0	0	0	1	1
	4:45 PM	2	0	1	4	7	2	0	0	3	5	0	0	1	1	2
	5:00 PM	4	0	3	3	10	3	0	1	1	5	1	0	2	2	5
	5:15 PM	0	2	0	2	4	0	2	0	2	4	0	0	0	0	0
	5:30 PM	1	1	0	2	4	0	0	0	1	1	1	1	0	1	3
	5:45 PM	0	2	2	0	4	0	1	2	0	3	0	1	0	0	1
	6:00 PM	1	1	0	3	5	1	1	0	1	3	0	0	0	2	2
	6:15 PM	0	1	0	2	3	0	0	0	2	2	0	1	0	0	1
	6:30 PM	3	0	1	2	6	2	0	0	2	4	1	0	1	0	2
	6:45 PM	0	0	2	0	2	0	0	2	0	2	0	0	0	0	0
	7:00 PM	0	0	2	2	4	0	0	1	0	1	0	0	1	2	3
	7:15 PM	0	0	1	1	2	0	0	0	1	1	0	0	1	0	1
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	16	9	19	30	74	12	5	11	19	47	4	4	8	11	27
	AM BEGIN PEAK HR	4:30 PM					9	5	4	11	29					
PM	9:30 PM	3	0	0	4	7	3	0	0	4	7	0	0	0	0	0
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:00 PM	3	1	2	0	6	0	0	0	0	0	3	1	2	0	6
	10:15 PM	1	1	0	2	4	0	0	0	1	1	1	1	0	1	3
	10:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1
	10:45 PM	0	1	0	2	3	0	0	0	1	1	0	1	0	1	2
	11:00 PM	1	0	1	1	3	0	0	0	0	0	1	0	1	1	3
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	8	3	3	10	24	3	0	0	6	9	5	3	3	4	15
	PM BEGIN PEAK HR	9:30 PM					3	0	0	5	8					

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 12, 18

LOCATION: Inglewood
NORTH & SOUTH: Crenshaw
EAST & WEST: Imperial

PROJECT #: TOD
LOCATION #: 78
CONTROL: SIGNAL

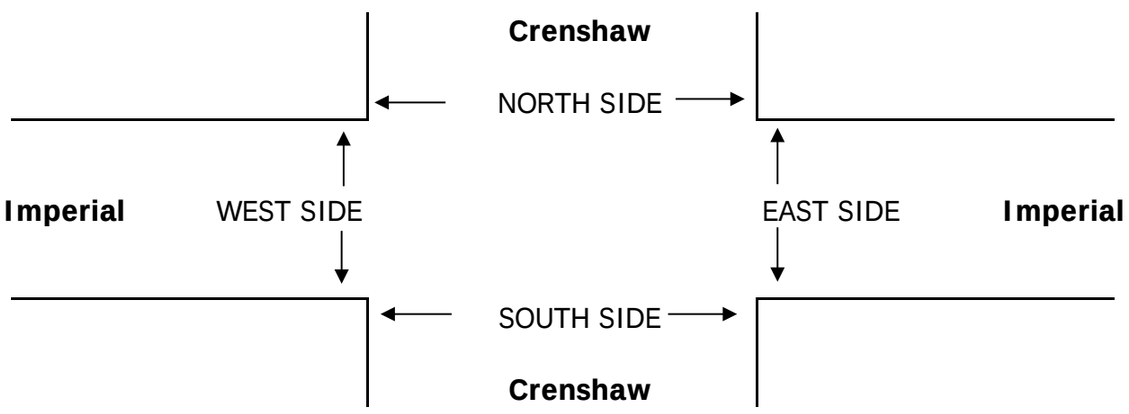
NOTES:

AM / PM / MD / OTHER / OTHER

▲ N ▼ S ◄ W E ►

☑ Add U-Turns to Left Turns

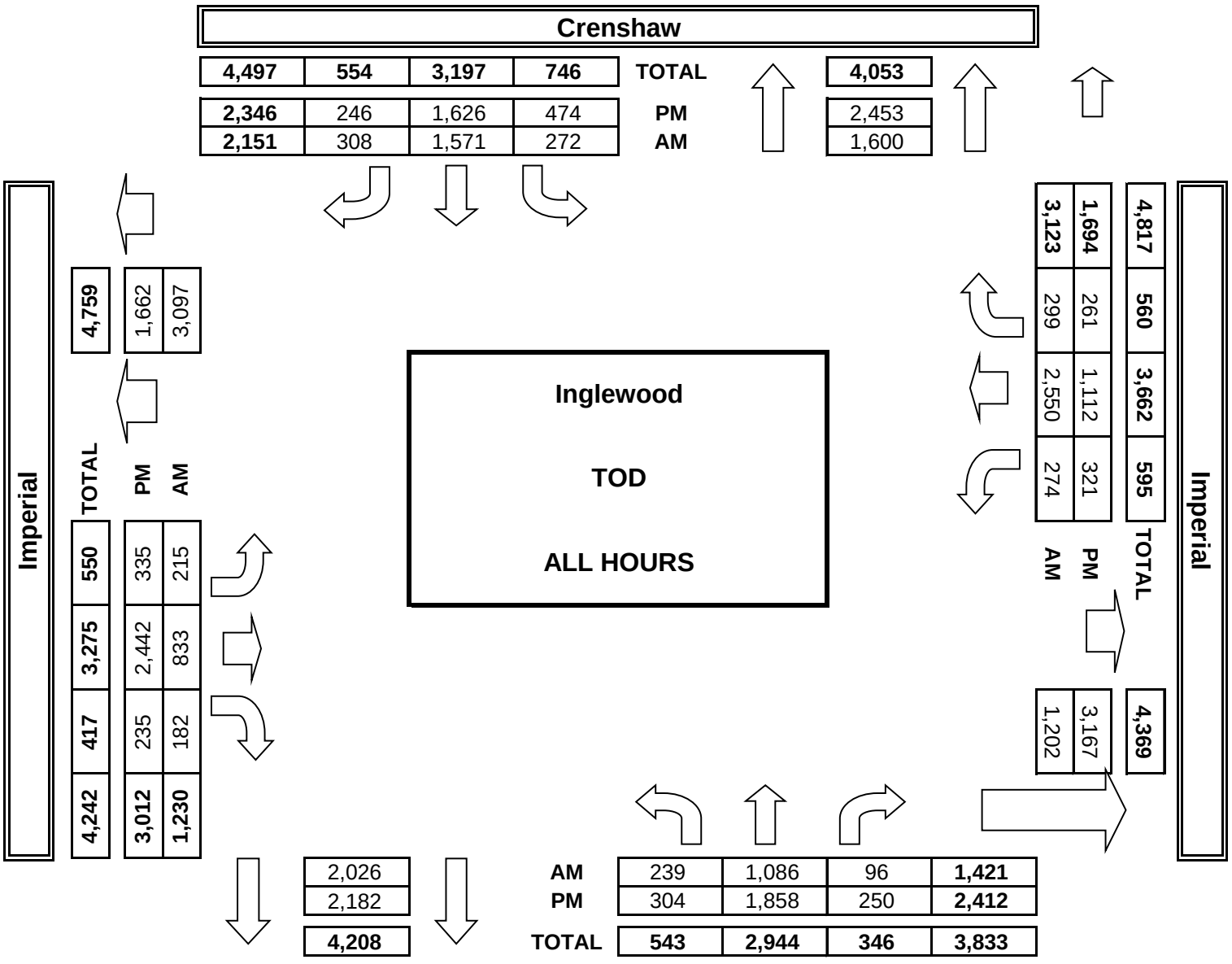
		NORTHBOUND Crenshaw			SOUTHBOUND Crenshaw			EASTBOUND Imperial			WESTBOUND Imperial				U-TURNS				
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
AM	7:00 AM	24	111	6	21	205	32	17	61	14	40	304	33	868	0	0	0	0	0
	7:15 AM	18	124	7	14	193	32	16	87	15	36	353	45	940	0	0	0	0	0
	7:30 AM	43	136	11	37	218	31	21	101	35	28	340	37	1,038	0	0	0	1	1
	7:45 AM	41	145	9	48	225	53	39	140	27	23	312	42	1,104	0	0	0	0	0
	8:00 AM	29	142	23	41	238	66	40	133	28	34	309	41	1,124	0	0	0	0	0
	8:15 AM	29	139	10	44	183	34	38	127	17	33	301	37	992	0	0	0	0	0
	8:30 AM	24	127	16	32	135	24	16	111	31	42	309	35	902	0	0	0	0	0
	8:45 AM	31	162	14	35	174	36	28	73	15	38	322	29	957	0	0	0	0	0
	VOLUMES	239	1,086	96	272	1,571	308	215	833	182	274	2,550	299	7,925	0	0	0	1	1
	APPROACH %	17%	76%	7%	13%	73%	14%	17%	68%	15%	9%	82%	10%						
	APP/DEPART	1,421	/	1,600	2,151	/	2,026	1,230	/	1,202	3,123	/	3,097	0					
	BEGIN PEAK HR		7:30 AM																
	VOLUMES	142	562	53	170	864	184	138	501	107	118	1,262	157	4,258					
	APPROACH %	19%	74%	7%	14%	71%	15%	18%	67%	14%	8%	82%	10%						
	PEAK HR FACTOR		0.971			0.883			0.905			0.949		0.947					
	APP/DEPART	757	/	857	1,218	/	1,088	746	/	725	1,537	/	1,588	0					
PM	4:00 PM	35	207	30	64	176	36	49	313	32	50	146	29	1,167	0	0	1	0	1
	4:15 PM	40	238	24	51	207	26	46	304	19	43	143	39	1,180	0	0	0	0	0
	4:30 PM	31	251	30	58	186	29	41	299	25	49	114	31	1,144	0	0	0	1	1
	4:45 PM	44	230	43	62	180	18	39	268	30	42	117	29	1,102	0	0	0	0	0
	5:00 PM	43	248	26	58	231	35	31	303	32	41	143	43	1,234	1	0	0	0	1
	5:15 PM	36	232	30	63	231	32	29	323	35	30	164	35	1,240	0	0	0	0	0
	5:30 PM	42	203	36	58	199	36	50	328	30	45	142	31	1,200	0	0	0	0	0
	5:45 PM	33	249	31	60	216	34	50	304	32	21	143	24	1,197	0	0	0	0	0
	VOLUMES	304	1,858	250	474	1,626	246	335	2,442	235	321	1,112	261	9,464	1	0	1	1	3
	APPROACH %	13%	77%	10%	20%	69%	10%	11%	81%	8%	19%	66%	15%						
	APP/DEPART	2,412	/	2,453	2,346	/	2,182	3,012	/	3,167	1,694	/	1,662	0					
	BEGIN PEAK HR		5:00 PM																
	VOLUMES	154	932	123	239	877	137	160	1,258	129	137	592	133	4,871					
	APPROACH %	13%	77%	10%	19%	70%	11%	10%	81%	8%	16%	69%	15%						
	PEAK HR FACTOR		0.953			0.961			0.948			0.941		0.982					
	APP/DEPART	1,209	/	1,225	1,253	/	1,144	1,547	/	1,620	862	/	882	0					

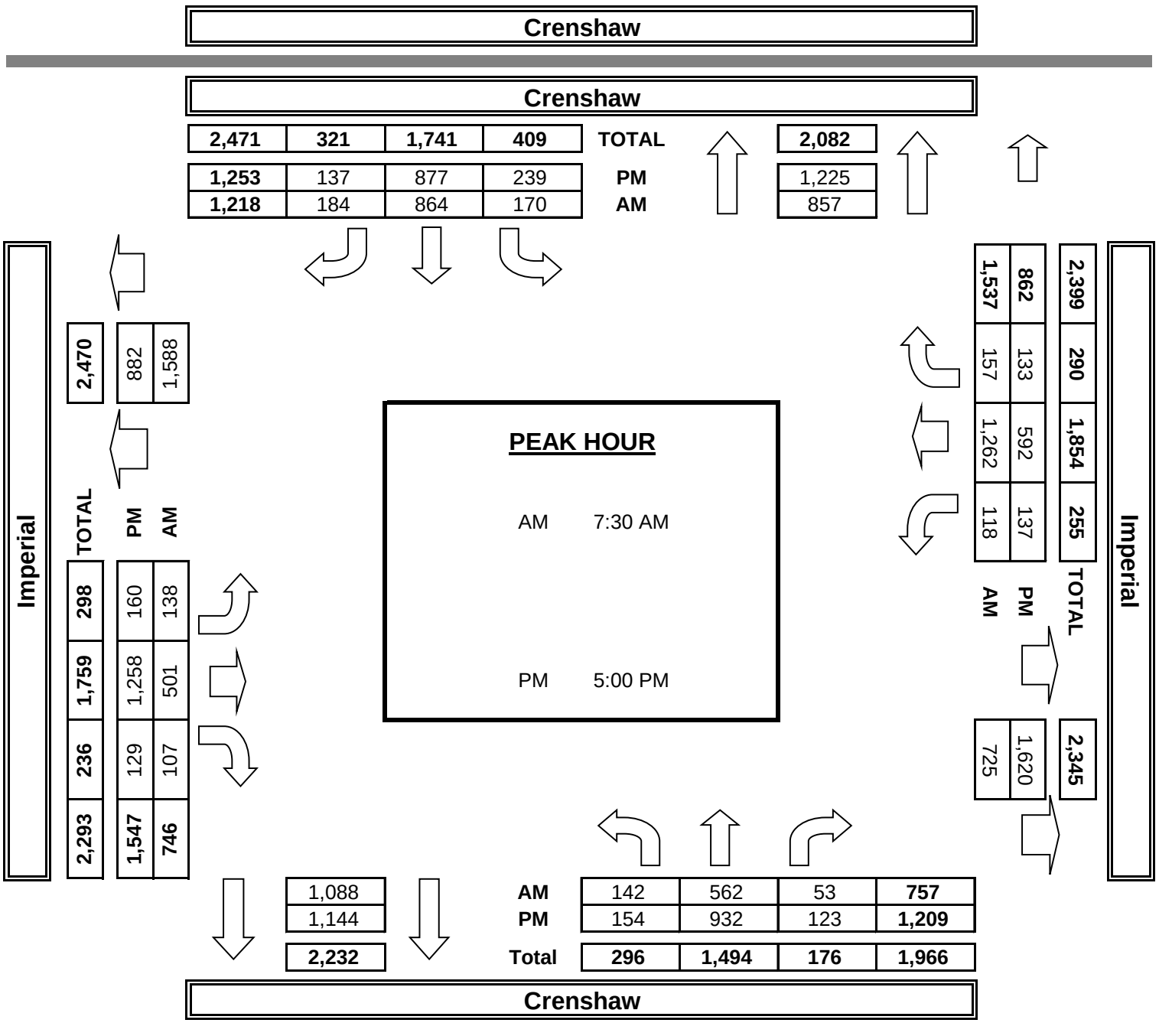


		PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
AM	7:00 AM	1	8	8	18	35	1	8	8	18	35	0	0	0	0	0
	7:15 AM	6	11	7	8	32	6	10	7	8	31	0	1	0	0	1
	7:30 AM	8	13	8	8	37	7	13	7	8	35	1	0	1	0	2
	7:45 AM	9	15	9	20	53	7	15	8	19	49	2	0	1	1	4
	8:00 AM	5	3	5	12	25	4	3	5	12	24	1	0	0	0	1
	8:15 AM	5	13	5	11	34	5	13	5	11	34	0	0	0	0	0
	8:30 AM	7	20	9	8	44	7	20	9	8	44	0	0	0	0	0
	8:45 AM	12	5	17	9	43	11	4	16	8	39	1	1	1	1	4
	TOTAL	53	88	68	94	303	48	86	65	92	291	5	2	3	2	12
	AM BEGIN PEAK HR	7:30 AM					23	44	25	50	142					
PM	4:00 PM	24	17	23	21	85	23	15	21	20	79	1	2	2	1	6
	4:15 PM	19	6	24	10	59	19	4	22	9	54	0	2	2	1	5
	4:30 PM	17	9	18	9	53	17	9	17	9	52	0	0	1	0	1
	4:45 PM	8	12	23	11	54	8	12	22	11	53	0	0	1	0	1
	5:00 PM	23	8	23	7	61	20	8	22	5	55	3	0	1	2	6
	5:15 PM	12	10	17	13	52	11	9	16	12	48	1	1	1	1	4
	5:30 PM	12	15	11	13	51	11	14	10	11	46	1	1	1	2	5
	5:45 PM	14	11	10	14	49	12	9	9	14	44	2	2	1	0	5
	TOTAL	129	88	149	98	464	121	80	139	91	431	8	8	10	7	33
	PM BEGIN PEAK HR	5:00 PM					54	40	57	42	193					

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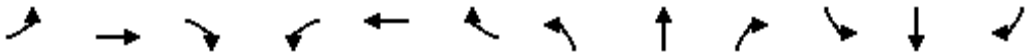
TURNING MOVEMENT COUNTS





APPENDIX B – LOS CALCULATION SHEETS

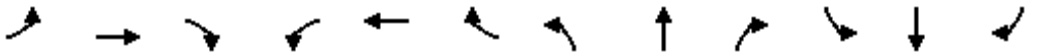
Existing LOS Calculation Sheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	514	87	130	851	152	201	698	187	145	814	313
Future Volume (vph)	152	514	87	130	851	152	201	698	187	145	814	313
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	4975		1770	4970		3433	5085	1583	1770	4873	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	4975		1770	4970		3433	5085	1583	1770	4873	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	173	584	99	148	967	173	228	793	212	165	925	356
RTOR Reduction (vph)	0	23	0	0	25	0	0	0	53	0	68	0
Lane Group Flow (vph)	173	660	0	148	1115	0	228	793	160	165	1213	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.1	25.5		12.9	25.3		9.3	29.2	42.1	12.4	32.3	
Effective Green, g (s)	13.1	25.5		12.9	25.3		9.3	29.2	42.1	12.4	32.3	
Actuated g/C Ratio	0.13	0.26		0.13	0.26		0.09	0.30	0.43	0.13	0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	236	1294		232	1283		325	1515	752	223	1606	
v/s Ratio Prot	c0.10	0.13		0.08	c0.22		0.07	0.16	0.03	c0.09	c0.25	
v/s Ratio Perm									0.07			
v/c Ratio	0.73	0.51		0.64	0.87		0.70	0.52	0.21	0.74	0.76	
Uniform Delay, d1	40.8	30.9		40.3	34.8		43.0	28.6	17.5	41.2	29.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2	0.3		5.7	6.5		6.7	1.3	0.1	12.1	3.4	
Delay (s)	51.9	31.3		46.0	41.3		49.7	29.9	17.7	53.4	32.7	
Level of Service	D	C		D	D		D	C	B	D	C	
Approach Delay (s)		35.4			41.8			31.5			35.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	36.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	437	13	16	1184	408	35	98	13	0	0	0
Future Volume (veh/h)	308	437	13	16	1184	408	35	98	13	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	328	465	14	17	1260	434	37	104	14			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	0			
Cap, veh/h	368	2878	86	361	1582	491	147	413	56			
Arrive On Green	0.21	0.56	0.56	0.31	0.31	0.31	0.34	0.34	0.34			
Sat Flow, veh/h	1781	5094	153	916	5106	1585	434	1221	164			
Grp Volume(v), veh/h	328	310	169	17	1260	434	155	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1843	916	1702	1585	1819	0	0			
Q Serve(g_s), s	16.7	4.1	4.1	1.2	21.0	24.2	5.7	0.0	0.0			
Cycle Q Clear(g_c), s	16.7	4.1	4.1	1.2	21.0	24.2	5.7	0.0	0.0			
Prop In Lane	1.00		0.08	1.00		1.00	0.24		0.09			
Lane Grp Cap(c), veh/h	368	1923	1041	361	1582	491	616	0	0			
V/C Ratio(X)	0.89	0.16	0.16	0.05	0.80	0.88	0.25	0.00	0.00			
Avail Cap(c_a), veh/h	488	2176	1178	368	1618	502	616	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	35.9	9.7	9.7	22.6	29.4	30.5	22.3	0.0	0.0			
Incr Delay (d2), s/veh	14.8	0.0	0.1	0.1	2.8	16.6	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.6	1.4	1.6	0.3	8.8	11.2	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.7	9.7	9.8	22.6	32.3	47.2	23.2	0.0	0.0			
LnGrp LOS	D	A	A	C	C	D	C	A	A			
Approach Vol, veh/h		807			1711			155				
Approach Delay, s/veh		26.4			35.9			23.2				
Approach LOS		C			D			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		36.0		57.1			23.7	33.3				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		31.5		59.5			25.5	29.5				
Max Q Clear Time (g_c+I1), s		7.7		6.1			18.7	26.2				
Green Ext Time (p_c), s		0.8		3.4			0.6	2.6				
Intersection Summary												
HCM 6th Ctrl Delay			32.3									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	179	0	209	0	9	9	175	1373	5	0	1190	186
Future Volume (vph)	179	0	209	0	9	9	175	1373	5	0	1190	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91			0.91	
Frt	1.00	0.85			0.93		1.00	1.00			0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583			1737		1770	5083			4982	
Flt Permitted	0.74	1.00			1.00		0.15	1.00			1.00	
Satd. Flow (perm)	1386	1583			1737		276	5083			4982	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	0	227	0	10	10	190	1492	5	0	1293	202
RTOR Reduction (vph)	0	86	0	0	8	0	0	0	0	0	20	0
Lane Group Flow (vph)	195	141	0	0	12	0	190	1497	0	0	1475	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.6	16.6			16.6		73.0	73.0			73.0	
Effective Green, g (s)	16.6	16.6			16.6		73.0	73.0			73.0	
Actuated g/C Ratio	0.17	0.17			0.17		0.74	0.74			0.74	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	233	266			292		204	3763			3688	
v/s Ratio Prot		0.09			0.01			0.29			0.30	
v/s Ratio Perm	c0.14						c0.69					
v/c Ratio	0.84	0.53			0.04		0.93	0.40			0.40	
Uniform Delay, d1	39.7	37.4			34.3		10.7	4.7			4.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	22.2	1.9			0.1		47.3	0.3			0.3	
Delay (s)	61.9	39.3			34.4		58.0	5.0			5.0	
Level of Service	E	D			C		E	A			A	
Approach Delay (s)		49.7			34.4			11.0			5.0	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	34	285	68	0	50	0	978	22	24	1561	0
Future Volume (veh/h)	425	34	285	68	0	50	0	978	22	24	1561	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	447	36	300	72	0	53	0	1029	23	25	1643	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	795	40	331	96	0	70	0	2581	58	293	2565	0
Arrive On Green	0.23	0.23	0.23	0.10	0.00	0.10	0.00	0.50	0.50	0.50	0.50	0.00
Sat Flow, veh/h	3456	173	1439	975	0	718	0	5307	115	536	5274	0
Grp Volume(v), veh/h	447	0	336	125	0	0	0	681	371	25	1643	0
Grp Sat Flow(s),veh/h/ln	1728	0	1611	1692	0	0	0	1702	1850	536	1702	0
Q Serve(g_s), s	9.1	0.0	16.2	5.7	0.0	0.0	0.0	9.9	9.9	2.4	18.8	0.0
Cycle Q Clear(g_c), s	9.1	0.0	16.2	5.7	0.0	0.0	0.0	9.9	9.9	12.4	18.8	0.0
Prop In Lane	1.00		0.89	0.58		0.42	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	795	0	371	166	0	0	0	1710	929	293	2565	0
V/C Ratio(X)	0.56	0.00	0.91	0.75	0.00	0.00	0.00	0.40	0.40	0.09	0.64	0.00
Avail Cap(c_a), veh/h	803	0	374	595	0	0	0	1710	929	293	2565	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.1	0.0	29.8	35.0	0.0	0.0	0.0	12.3	12.3	16.2	14.5	0.0
Incr Delay (d2), s/veh	0.9	0.0	24.9	6.7	0.0	0.0	0.0	0.7	1.3	0.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	8.6	2.6	0.0	0.0	0.0	3.6	4.1	0.3	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	0.0	54.7	41.7	0.0	0.0	0.0	13.0	13.6	16.7	15.8	0.0
LnGrp LOS	C	A	D	D	A	A	A	B	B	B	B	A
Approach Vol, veh/h		783			125			1052			1668	
Approach Delay, s/veh		39.5			41.7			13.2			15.8	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.5		22.8		44.5		12.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.0		18.5		40.0		28.0				
Max Q Clear Time (g_c+I1), s		11.9		18.2		20.8		7.7				
Green Ext Time (p_c), s		8.1		0.2		12.2		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			21.1									
HCM 6th LOS			C									

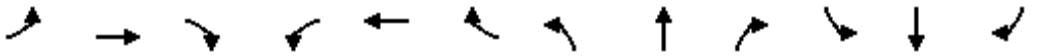
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	20	0	10	10	964	10	20	1892	10
Future Vol, veh/h	0	0	10	20	0	10	10	964	10	20	1892	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	11	22	0	11	11	1048	11	22	2057	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2548	3188	1034	1943	3188	530	2068	0	0	1059	0	0
Stage 1	2107	2107	-	1076	1076	-	-	-	-	-	-	-
Stage 2	441	1081	-	867	2112	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	29	10	197	69	10	422	115	-	-	367	-	-
Stage 1	32	91	-	176	294	-	-	-	-	-	-	-
Stage 2	517	292	-	284	90	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	9	197	58	9	422	115	-	-	367	-	-
Mov Cap-2 Maneuver	25	9	-	58	9	-	-	-	-	-	-	-
Stage 1	29	86	-	159	266	-	-	-	-	-	-	-
Stage 2	456	264	-	252	85	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24.3	76.6	0.4	0.2
HCM LOS	C	F		

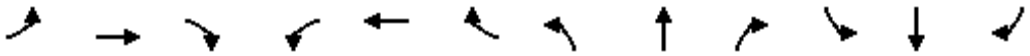
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	115	-	-	197	81	367	-	-
HCM Lane V/C Ratio	0.095	-	-	0.055	0.403	0.059	-	-
HCM Control Delay (s)	39.5	-	-	24.3	76.6	15.4	-	-
HCM Lane LOS	E	-	-	C	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	1.6	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	364	62	303	1516	162	384	681	179	180	815	927
Future Volume (vph)	141	364	62	303	1516	162	384	681	179	180	815	927
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.95	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	4974		1770	5012		3433	4927		3433	4544	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	4974		1770	5012		3433	4927		3433	4544	1362
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	147	379	65	316	1579	169	400	709	186	188	849	966
RTOR Reduction (vph)	0	24	0	0	13	0	0	47	0	0	87	38
Lane Group Flow (vph)	147	420	0	316	1735	0	400	848	0	188	1245	445
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Effective Green, g (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Actuated g/C Ratio	0.06	0.34		0.06	0.35		0.06	0.36		0.05	0.36	0.42
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1691		115	1754		188	1798		171	1635	626
v/s Ratio Prot	0.08	0.08		c0.18	c0.35		c0.12	0.17		0.05	c0.27	0.04
v/s Ratio Perm												0.29
v/c Ratio	1.52	0.25		2.75	0.99		2.13	0.47		1.10	0.76	0.71
Uniform Delay, d1	47.2	23.8		46.8	32.3		47.2	24.4		47.5	28.2	24.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	277.6	0.1		810.4	18.7		524.9	0.9		97.9	3.4	3.8
Delay (s)	324.8	23.9		857.2	51.0		572.2	25.2		145.4	31.6	28.1
Level of Service	F	C		F	D		F	C		F	C	C
Approach Delay (s)		98.7			174.5			194.2			41.4	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay	126.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

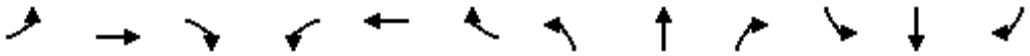
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	511	109	120	1287	160	145	573	54	173	881	188
Future Volume (vph)	141	511	109	120	1287	160	145	573	54	173	881	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4951		1770	5001		1770	5019		1770	4951	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4951		1770	5001		1770	5019		1770	4951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	538	115	126	1355	168	153	603	57	182	927	198
RTOR Reduction (vph)	0	34	0	0	15	0	0	11	0	0	33	0
Lane Group Flow (vph)	148	620	0	126	1508	0	153	649	0	182	1092	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.08	0.34		0.08	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1633		115	1650		132	1706		150	1732	
v/s Ratio Prot	c0.08	0.13		0.07	c0.30		0.09	0.13		c0.10	c0.22	
v/s Ratio Perm												
v/c Ratio	1.29	0.38		1.10	0.91		1.16	0.38		1.21	0.63	
Uniform Delay, d1	46.8	25.7		46.8	32.1		46.2	25.0		45.8	27.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	179.6	0.1		112.0	8.2		127.4	0.6		142.1	1.8	
Delay (s)	226.4	25.8		158.7	40.3		173.7	25.7		187.9	28.9	
Level of Service	F	C		F	D		F	C		F	C	
Approach Delay (s)		62.9			49.4			53.5			51.0	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

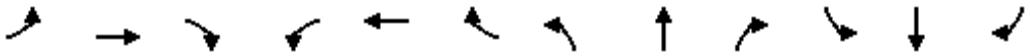
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	428	334	72	202	91	258	1006	130	163	1157	99
Future Volume (vph)	81	428	334	72	202	91	258	1006	130	163	1157	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3306		1770	1863	1583	1770	5085	1583	1770	5025	
Flt Permitted	0.52	1.00		0.15	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	968	3306		280	1863	1583	1770	5085	1583	1770	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	465	363	78	220	99	280	1093	141	177	1258	108
RTOR Reduction (vph)	0	151	0	0	0	70	0	0	84	0	9	0
Lane Group Flow (vph)	88	677	0	78	220	29	280	1093	57	177	1357	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			
Actuated Green, G (s)	26.6	26.6		26.6	26.6	26.6	17.9	36.1	36.1	13.8	32.0	
Effective Green, g (s)	26.6	26.6		26.6	26.6	26.6	17.9	36.1	36.1	13.8	32.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.20	0.40	0.40	0.15	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	286	977		82	550	467	352	2039	634	271	1786	
v/s Ratio Prot		0.20			0.12		c0.16	c0.21		0.10	c0.27	
v/s Ratio Perm	0.09			c0.28		0.02			0.04			
v/c Ratio	0.31	0.69		0.95	0.40	0.06	0.80	0.54	0.09	0.65	0.76	
Uniform Delay, d1	24.6	28.1		31.1	25.3	22.8	34.3	20.6	16.7	35.8	25.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	2.1		82.6	0.5	0.1	11.7	1.0	0.3	5.6	3.1	
Delay (s)	25.2	30.2		113.7	25.8	22.8	46.1	21.6	17.0	41.4	28.7	
Level of Service	C	C		F	C	C	D	C	B	D	C	
Approach Delay (s)		29.7			42.3			25.7			30.2	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

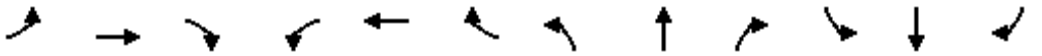
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	1342	115	123	329	108	141	684	311	210	1131	172
Future Volume (vph)	109	1342	115	123	329	108	141	684	311	210	1131	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.99		1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	111	1369	117	126	336	110	144	698	317	214	1154	176
RTOR Reduction (vph)	0	10	0	0	58	0	0	0	76	0	20	0
Lane Group Flow (vph)	111	1476	0	126	388	0	144	698	241	214	1310	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	10.7	32.5		10.3	32.1		6.5	23.3	33.6	15.2	32.0	
Effective Green, g (s)	10.7	32.5		10.3	32.1		6.5	23.3	33.6	15.2	32.0	
Actuated g/C Ratio	0.11	0.33		0.10	0.32		0.07	0.23	0.34	0.15	0.32	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	190	1644		183	1583		224	1193	607	270	1606	
v/s Ratio Prot	0.06	c0.29		c0.07	0.08		0.04	0.14	0.04	c0.12	c0.26	
v/s Ratio Perm									0.11			
v/c Ratio	0.58	0.90		0.69	0.25		0.64	0.59	0.40	0.79	0.82	
Uniform Delay, d1	42.2	31.8		43.0	24.7		45.3	33.7	25.1	40.5	30.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.5	6.9		10.3	0.1		6.2	2.1	0.4	14.7	4.7	
Delay (s)	46.7	38.7		53.2	24.8		51.5	35.8	25.5	55.2	35.6	
Level of Service	D	D		D	C		D	D	C	E	D	
Approach Delay (s)		39.3			31.0			34.9			38.3	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	99.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	467	1334	22	38	549	361	26	194	35	0	0	0
Future Volume (veh/h)	467	1334	22	38	549	361	26	194	35	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	481	1375	23	39	566	372	27	200	36			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	0			
Cap, veh/h	520	3054	51	173	1284	399	59	435	78			
Arrive On Green	0.29	0.59	0.59	0.25	0.25	0.25	0.31	0.31	0.31			
Sat Flow, veh/h	1781	5172	87	386	5106	1585	186	1381	249			
Grp Volume(v), veh/h	481	905	493	39	566	372	263	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	386	1702	1585	1816	0	0			
Q Serve(g_s), s	25.0	14.1	14.1	8.0	8.9	21.9	11.0	0.0	0.0			
Cycle Q Clear(g_c), s	25.0	14.1	14.1	8.0	8.9	21.9	11.0	0.0	0.0			
Prop In Lane	1.00		0.05	1.00		1.00	0.10		0.14			
Lane Grp Cap(c), veh/h	520	2010	1095	173	1284	399	572	0	0			
V/C Ratio(X)	0.93	0.45	0.45	0.23	0.44	0.93	0.46	0.00	0.00			
Avail Cap(c_a), veh/h	608	2180	1188	173	1287	399	572	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	32.7	10.9	10.9	29.7	30.0	34.9	26.1	0.0	0.0			
Incr Delay (d2), s/veh	18.6	0.2	0.3	0.7	0.2	28.8	2.6	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	13.1	4.9	5.4	0.8	3.6	11.4	5.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	11.0	11.2	30.3	30.3	63.7	28.8	0.0	0.0			
LnGrp LOS	D	B	B	C	C	E	C	A	A			
Approach Vol, veh/h		1879			977			263				
Approach Delay, s/veh		21.4			43.0			28.8				
Approach LOS		C			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		34.5		60.7			32.3	28.4				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		30.0		61.0			32.5	24.0				
Max Q Clear Time (g_c+I1), s		13.0		16.1			27.0	23.9				
Green Ext Time (p_c), s		1.4		13.6			0.8	0.1				

Intersection Summary												
HCM 6th Ctrl Delay			28.8									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	17	300	1	1	10	104	1266	3	6	1560	133
Future Volume (vph)	181	17	300	1	1	10	104	1266	3	6	1560	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.86			0.89		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598			1644		1770	5084		1770	5025	
Flt Permitted	0.75	1.00			0.97		0.09	1.00		0.17	1.00	
Satd. Flow (perm)	1395	1598			1604		171	5084		309	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	197	18	326	1	1	11	113	1376	3	7	1696	145
RTOR Reduction (vph)	0	34	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	197	310	0	0	4	0	113	1379	0	7	1831	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.4	20.4			20.4		70.5	70.5		70.5	70.5	
Effective Green, g (s)	20.4	20.4			20.4		70.5	70.5		70.5	70.5	
Actuated g/C Ratio	0.20	0.20			0.20		0.71	0.71		0.71	0.71	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	284	326			327		120	3587		218	3546	
v/s Ratio Prot		c0.19						0.27			0.36	
v/s Ratio Perm	0.14				0.00		c0.66			0.02		
v/c Ratio	0.69	0.95			0.01		0.94	0.38		0.03	0.52	
Uniform Delay, d1	36.9	39.2			31.7		12.9	5.9		4.4	6.8	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.1	36.7			0.0		67.7	0.3		0.3	0.5	
Delay (s)	44.0	76.0			31.7		80.6	6.2		4.7	7.3	
Level of Service	D	E			C		F	A		A	A	
Approach Delay (s)		64.3			31.7			11.9			7.3	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	738	112	548	29	0	27	0	937	36	38	1504	0
Future Volume (veh/h)	738	112	548	29	0	27	0	937	36	38	1504	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	753	114	559	30	0	28	0	956	37	39	1535	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	1268	101	496	41	0	38	0	2057	80	248	2082	0
Arrive On Green	0.37	0.37	0.37	0.05	0.00	0.05	0.00	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	3456	276	1351	869	0	811	0	5213	195	567	5274	0
Grp Volume(v), veh/h	753	0	673	58	0	0	0	645	348	39	1535	0
Grp Sat Flow(s),veh/h/ln	1728	0	1627	1681	0	0	0	1702	1835	567	1702	0
Q Serve(g_s), s	13.3	0.0	27.7	2.6	0.0	0.0	0.0	10.4	10.5	4.1	19.2	0.0
Cycle Q Clear(g_c), s	13.3	0.0	27.7	2.6	0.0	0.0	0.0	10.4	10.5	14.5	19.2	0.0
Prop In Lane	1.00		0.83	0.52		0.48	0.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	1268	0	597	78	0	0	0	1388	749	248	2082	0
V/C Ratio(X)	0.59	0.00	1.13	0.74	0.00	0.00	0.00	0.46	0.47	0.16	0.74	0.00
Avail Cap(c_a), veh/h	1268	0	597	623	0	0	0	1388	749	248	2082	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.4	0.0	23.9	35.5	0.0	0.0	0.0	16.3	16.3	21.7	18.9	0.0
Incr Delay (d2), s/veh	0.8	0.0	77.3	12.8	0.0	0.0	0.0	1.1	2.1	1.3	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	22.6	1.3	0.0	0.0	0.0	4.0	4.5	0.6	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	101.2	48.3	0.0	0.0	0.0	17.5	18.4	23.0	21.3	0.0
LnGrp LOS	C	A	F	D	A	A	A	B	B	C	C	A
Approach Vol, veh/h		1426			58			993			1574	
Approach Delay, s/veh		58.4			48.3			17.8			21.3	
Approach LOS		E			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.3		32.2		35.3		8.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		30.8		27.7		30.8		28.0				
Max Q Clear Time (g_c+I1), s		12.5		29.7		21.2		4.6				
Green Ext Time (p_c), s		6.5		0.0		6.9		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			33.9									
HCM 6th LOS			C									

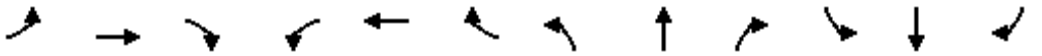
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	10	20	0	10	10	982	10	20	2009	10
Future Vol, veh/h	10	0	10	20	0	10	10	982	10	20	2009	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	0	11	22	0	11	11	1067	11	22	2184	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2683	3334	1098	2013	3334	539	2195	0	0	1078	0	0
Stage 1	2234	2234	-	1095	1095	-	-	-	-	-	-	-
Stage 2	449	1100	-	918	2239	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	23	8	178	62	8	417	99	-	-	359	-	-
Stage 1	26	78	-	171	288	-	-	-	-	-	-	-
Stage 2	511	286	-	264	78	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	20	7	178	51	7	417	99	-	-	359	-	-
Mov Cap-2 Maneuver	20	7	-	51	7	-	-	-	-	-	-	-
Stage 1	23	73	-	152	256	-	-	-	-	-	-	-
Stage 2	442	254	-	233	73	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	203.3	91.1	0.5	0.2
HCM LOS	F	F		

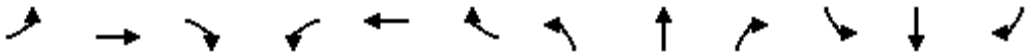
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	99	-	-	36	72	359	-	-
HCM Lane V/C Ratio	0.11	-	-	0.604	0.453	0.061	-	-
HCM Control Delay (s)	45.8	-	-	203.3	91.1	15.7	-	-
HCM Lane LOS	E	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	-	2.1	1.8	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	1126	131	244	635	141	266	640	290	303	1125	611
Future Volume (vph)	221	1126	131	244	635	141	266	640	290	303	1125	611
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.97		1.00	0.95		1.00	0.98	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5006		1770	4947		3433	4847		3433	4688	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5006		1770	4947		3433	4847		3433	4688	1362
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	228	1161	135	252	655	145	274	660	299	312	1160	630
RTOR Reduction (vph)	0	15	0	0	36	0	0	81	0	0	26	42
Lane Group Flow (vph)	228	1281	0	252	764	0	274	878	0	312	1361	361
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	6.5	32.5		6.5	32.5		5.5	36.0		5.5	36.0	42.5
Effective Green, g (s)	6.5	32.5		6.5	32.5		5.5	36.0		5.5	36.0	42.5
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.06	0.37		0.06	0.37	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	116	1651		116	1632		191	1771		191	1713	649
v/s Ratio Prot	0.13	c0.26		c0.14	0.15		0.08	0.18		c0.09	c0.29	0.04
v/s Ratio Perm												0.23
v/c Ratio	1.97	0.78		2.17	0.47		1.43	0.50		1.63	0.79	0.56
Uniform Delay, d1	46.0	29.7		46.0	26.2		46.5	24.2		46.5	27.9	21.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	464.1	2.4		554.9	0.2		222.8	1.0		307.6	3.9	1.0
Delay (s)	510.1	32.1		600.9	26.4		269.3	25.2		354.1	31.8	22.0
Level of Service	F	C		F	C		F	C		F	C	C
Approach Delay (s)		103.6			164.0			79.5			77.8	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	100.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

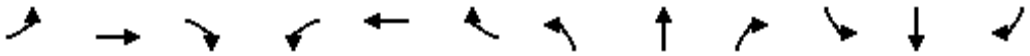
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	899	74	195	298	75	111	927	433	212	1084	84
Future Volume (vph)	66	899	74	195	298	75	111	927	433	212	1084	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3499		1770	3432		1770	4842		1770	5031	
Flt Permitted	0.51	1.00		0.11	1.00		0.13	1.00		0.12	1.00	
Satd. Flow (perm)	956	3499		205	3432		240	4842		217	5031	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	977	80	212	324	82	121	1008	471	230	1178	91
RTOR Reduction (vph)	0	6	0	0	22	0	0	85	0	0	9	0
Lane Group Flow (vph)	72	1051	0	212	384	0	121	1394	0	230	1260	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.1	31.9		45.9	37.2		38.1	31.0		44.9	34.4	
Effective Green, g (s)	36.1	31.9		45.9	37.2		38.1	31.0		44.9	34.4	
Actuated g/C Ratio	0.36	0.32		0.45	0.37		0.38	0.31		0.44	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	375	1106		240	1265		198	1487		258	1715	
v/s Ratio Prot	0.01	0.30		c0.08	0.11		0.04	0.29		c0.09	0.25	
v/s Ratio Perm	0.06			c0.32			0.19			c0.30		
v/c Ratio	0.19	0.95		0.88	0.30		0.61	0.94		0.89	0.73	
Uniform Delay, d1	21.7	33.7		23.4	22.6		22.5	34.0		24.1	29.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	16.5		29.4	0.1		5.5	12.6		29.5	2.8	
Delay (s)	21.9	50.2		52.8	22.8		28.0	46.6		53.6	32.1	
Level of Service	C	D		D	C		C	D		D	C	
Approach Delay (s)		48.4			33.1			45.2			35.4	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	1283	132	140	604	136	157	951	125	244	895	140
Future Volume (vph)	163	1283	132	140	604	136	157	951	125	244	895	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5014		1770	4945		1770	4996		1770	4982	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5014		1770	4945		1770	4996		1770	4982	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	166	1309	135	143	616	139	160	970	128	249	913	143
RTOR Reduction (vph)	0	12	0	0	36	0	0	16	0	0	21	0
Lane Group Flow (vph)	166	1432	0	143	719	0	160	1082	0	249	1035	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	32.9		6.5	32.9		6.5	34.0		8.5	36.0	
Effective Green, g (s)	6.5	32.9		6.5	32.9		6.5	34.0		8.5	36.0	
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.07	0.34		0.09	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1651		115	1628		115	1700		150	1795	
v/s Ratio Prot	c0.09	c0.29		0.08	0.15		0.09	c0.22		c0.14	0.21	
v/s Ratio Perm												
v/c Ratio	1.44	0.87		1.24	0.44		1.39	0.64		1.66	0.58	
Uniform Delay, d1	46.7	31.5		46.7	26.3		46.7	27.7		45.7	25.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	241.6	5.1		163.2	0.2		220.5	1.8		324.6	1.4	
Delay (s)	288.3	36.5		209.9	26.5		267.2	29.6		370.3	27.2	
Level of Service	F	D		F	C		F	C		F	C	
Approach Delay (s)		62.5			55.7			59.8			92.6	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	68.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Existing Plus Project LOS Calculation Sheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	514	87	136	851	152	201	698	189	145	814	313
Future Volume (vph)	152	514	87	136	851	152	201	698	189	145	814	313
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	4975		1770	4970		3433	5085	1583	1770	4873	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	4975		1770	4970		3433	5085	1583	1770	4873	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	173	584	99	155	967	173	228	793	215	165	925	356
RTOR Reduction (vph)	0	23	0	0	25	0	0	0	53	0	68	0
Lane Group Flow (vph)	173	660	0	155	1115	0	228	793	162	165	1213	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.1	25.3		13.1	25.3		9.3	29.2	42.3	12.4	32.3	
Effective Green, g (s)	13.1	25.3		13.1	25.3		9.3	29.2	42.3	12.4	32.3	
Actuated g/C Ratio	0.13	0.26		0.13	0.26		0.09	0.30	0.43	0.13	0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	236	1284		236	1283		325	1515	755	223	1606	
v/s Ratio Prot	c0.10	0.13		0.09	c0.22		0.07	0.16	0.03	c0.09	c0.25	
v/s Ratio Perm									0.07			
v/c Ratio	0.73	0.51		0.66	0.87		0.70	0.52	0.21	0.74	0.76	
Uniform Delay, d1	40.8	31.1		40.3	34.8		43.0	28.6	17.4	41.2	29.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2	0.3		6.4	6.5		6.7	1.3	0.1	12.1	3.4	
Delay (s)	51.9	31.4		46.8	41.3		49.7	29.9	17.6	53.4	32.7	
Level of Service	D	C		D	D		D	C	B	D	C	
Approach Delay (s)		35.6			41.9			31.4			35.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	439	13	16	1190	433	35	98	13	0	0	0
Future Volume (veh/h)	308	439	13	16	1190	433	35	98	13	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	328	467	14	17	1266	461	37	104	14			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	368	2892	86	363	1599	496	146	410	55			
Arrive On Green	0.21	0.57	0.57	0.31	0.31	0.31	0.34	0.34	0.34			
Sat Flow, veh/h	1781	5095	152	914	5106	1585	434	1221	164			
Grp Volume(v), veh/h	328	311	170	17	1266	461	155	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1843	914	1702	1585	1819	0	0			
Q Serve(g_s), s	16.8	4.1	4.1	1.2	21.2	26.4	5.8	0.0	0.0			
Cycle Q Clear(g_c), s	16.8	4.1	4.1	1.2	21.2	26.4	5.8	0.0	0.0			
Prop In Lane	1.00		0.08	1.00		1.00	0.24		0.09			
Lane Grp Cap(c), veh/h	368	1932	1046	363	1599	496	612	0	0			
V/C Ratio(X)	0.89	0.16	0.16	0.05	0.79	0.93	0.25	0.00	0.00			
Avail Cap(c_a), veh/h	485	2162	1171	365	1608	499	612	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	36.1	9.6	9.6	22.5	29.4	31.2	22.6	0.0	0.0			
Incr Delay (d2), s/veh	15.1	0.0	0.1	0.1	2.8	23.9	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.7	1.4	1.6	0.3	8.8	13.0	2.6	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	9.7	9.7	22.6	32.2	55.1	23.6	0.0	0.0			
LnGrp LOS	D	A	A	C	C	E	C	A	A			
Approach Vol, veh/h		809			1744			155				
Approach Delay, s/veh		26.5			38.1			23.6				
Approach LOS		C			D			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		36.0		57.7			23.9	33.8				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		31.5		59.5			25.5	29.5				
Max Q Clear Time (g_c+I1), s		7.8		6.1			18.8	28.4				
Green Ext Time (p_c), s		0.8		3.4			0.6	0.9				
Intersection Summary												
HCM 6th Ctrl Delay			33.8									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	179	0	211	0	9	9	181	1379	5	0	1192	186
Future Volume (vph)	179	0	211	0	9	9	181	1379	5	0	1192	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91			0.91	
Frt	1.00	0.85			0.93		1.00	1.00			0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583			1737		1770	5083			4982	
Flt Permitted	0.74	1.00			1.00		0.15	1.00			1.00	
Satd. Flow (perm)	1386	1583			1737		275	5083			4982	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	0	229	0	10	10	197	1499	5	0	1296	202
RTOR Reduction (vph)	0	86	0	0	8	0	0	0	0	0	20	0
Lane Group Flow (vph)	195	143	0	0	12	0	197	1504	0	0	1478	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.6	16.6			16.6		73.0	73.0			73.0	
Effective Green, g (s)	16.6	16.6			16.6		73.0	73.0			73.0	
Actuated g/C Ratio	0.17	0.17			0.17		0.74	0.74			0.74	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	233	266			292		203	3763			3688	
v/s Ratio Prot		0.09			0.01			0.30			0.30	
v/s Ratio Perm	c0.14						c0.72					
v/c Ratio	0.84	0.54			0.04		0.97	0.40			0.40	
Uniform Delay, d1	39.7	37.5			34.3		11.8	4.7			4.7	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	22.2	2.1			0.1		55.9	0.3			0.3	
Delay (s)	61.9	39.6			34.4		67.7	5.0			5.1	
Level of Service	E	D			C		E	A			A	
Approach Delay (s)		49.8			34.4			12.3			5.1	
Approach LOS		D			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	425	34	311	68	0	50	0	991	22	24	1565	0
Future Volume (veh/h)	425	34	311	68	0	50	0	991	22	24	1565	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	447	36	327	72	0	53	0	1043	23	25	1647	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	801	37	336	96	0	70	0	2576	57	288	2558	0
Arrive On Green	0.23	0.23	0.23	0.10	0.00	0.10	0.00	0.50	0.50	0.50	0.50	0.00
Sat Flow, veh/h	3456	160	1450	975	0	718	0	5309	113	529	5274	0
Grp Volume(v), veh/h	447	0	363	125	0	0	0	690	376	25	1647	0
Grp Sat Flow(s),veh/h/ln	1728	0	1609	1692	0	0	0	1702	1850	529	1702	0
Q Serve(g_s), s	9.1	0.0	17.9	5.7	0.0	0.0	0.0	10.1	10.1	2.5	19.0	0.0
Cycle Q Clear(g_c), s	9.1	0.0	17.9	5.7	0.0	0.0	0.0	10.1	10.1	12.6	19.0	0.0
Prop In Lane	1.00		0.90	0.58		0.42	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	801	0	373	166	0	0	0	1706	927	288	2558	0
V/C Ratio(X)	0.56	0.00	0.97	0.75	0.00	0.00	0.00	0.40	0.41	0.09	0.64	0.00
Avail Cap(c_a), veh/h	801	0	373	594	0	0	0	1706	927	288	2558	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.1	0.0	30.4	35.1	0.0	0.0	0.0	12.5	12.5	16.4	14.7	0.0
Incr Delay (d2), s/veh	0.9	0.0	39.4	6.7	0.0	0.0	0.0	0.7	1.3	0.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	10.7	2.6	0.0	0.0	0.0	3.7	4.2	0.3	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	69.8	41.8	0.0	0.0	0.0	13.2	13.8	17.0	15.9	0.0
LnGrp LOS	C	A	E	D	A	A	A	B	B	B	B	A
Approach Vol, veh/h		810			125			1066			1672	
Approach Delay, s/veh		46.7			41.8			13.4			15.9	
Approach LOS		D			D			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.5		23.0		44.5		12.3				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		40.0		18.5		40.0		28.0				
Max Q Clear Time (g_c+I1), s		12.1		19.9		21.0		7.7				
Green Ext Time (p_c), s		8.2		0.0		12.2		0.6				

Intersection Summary												
HCM 6th Ctrl Delay			22.9									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	12.3

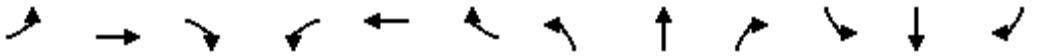
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	113	20	0	10	7	964	10	20	1892	30
Future Vol, veh/h	13	0	113	20	0	10	7	964	10	20	1892	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	0	123	22	0	11	8	1048	11	22	2057	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2553	3193	1045	1937	3204	530	2090	0	0	1059	0	0
Stage 1	2118	2118	-	1070	1070	-	-	-	-	-	-	-
Stage 2	435	1075	-	867	2134	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	28	10	194	69	10	422	113	-	-	367	-	-
Stage 1	32	90	-	178	296	-	-	-	-	-	-	-
Stage 2	521	294	-	284	88	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	25	9	194	23	9	422	113	-	-	367	-	-
Mov Cap-2 Maneuver	25	9	-	23	9	-	-	-	-	-	-	-
Stage 1	30	85	-	165	275	-	-	-	-	-	-	-
Stage 2	472	273	-	98	83	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	220.2	$ 315.6	0.3	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	113	-	-	114	34	367	-	-
HCM Lane V/C Ratio	0.067	-	-	1.201	0.959	0.059	-	-
HCM Control Delay (s)	39.1	-	-	220.2	$ 315.6	15.4	-	-
HCM Lane LOS	E	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	8.7	3.4	0.2	-	-

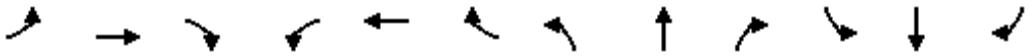
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	364	62	303	1516	166	384	683	179	193	821	1021
Future Volume (vph)	143	364	62	303	1516	166	384	683	179	193	821	1021
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.99		1.00	0.97		1.00	0.94	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	4974		1770	5010		3433	4927		3433	4529	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	4974		1770	5010		3433	4927		3433	4529	1362
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	149	379	65	316	1579	173	400	711	186	201	855	1064
RTOR Reduction (vph)	0	24	0	0	13	0	0	47	0	0	87	38
Lane Group Flow (vph)	149	420	0	316	1739	0	400	850	0	201	1300	494
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Effective Green, g (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Actuated g/C Ratio	0.06	0.34		0.06	0.35		0.06	0.36		0.05	0.36	0.42
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1691		115	1753		188	1798		171	1630	626
v/s Ratio Prot	0.08	0.08		c0.18	c0.35		c0.12	0.17		0.06	0.29	c0.04
v/s Ratio Perm												0.32
v/c Ratio	1.54	0.25		2.75	0.99		2.13	0.47		1.18	0.80	0.79
Uniform Delay, d1	47.2	23.8		46.8	32.4		47.2	24.4		47.5	28.7	25.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	286.1	0.1		810.4	19.5		524.9	0.9		123.9	4.2	6.6
Delay (s)	333.3	23.9		857.2	51.9		572.2	25.3		171.4	32.9	32.0
Level of Service	F	C		F	D		F	C		F	C	C
Approach Delay (s)		101.6			174.9			193.9			45.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay	126.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

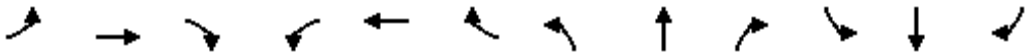
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	141	517	115	120	1289	160	147	573	54	173	881	188
Future Volume (vph)	141	517	115	120	1289	160	147	573	54	173	881	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4946		1770	5001		1770	5019		1770	4951	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4946		1770	5001		1770	5019		1770	4951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	544	121	126	1357	168	155	603	57	182	927	198
RTOR Reduction (vph)	0	36	0	0	15	0	0	11	0	0	33	0
Lane Group Flow (vph)	148	629	0	126	1510	0	155	649	0	182	1092	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.08	0.34		0.08	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1632		115	1650		132	1706		150	1732	
v/s Ratio Prot	c0.08	0.13		0.07	c0.30		0.09	0.13		c0.10	c0.22	
v/s Ratio Perm												
v/c Ratio	1.29	0.39		1.10	0.91		1.17	0.38		1.21	0.63	
Uniform Delay, d1	46.8	25.7		46.8	32.2		46.2	25.0		45.8	27.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	179.6	0.2		112.0	8.3		132.7	0.6		142.1	1.8	
Delay (s)	226.4	25.9		158.7	40.4		179.0	25.7		187.9	28.9	
Level of Service	F	C		F	D		F	C		F	C	
Approach Delay (s)		62.4			49.4			54.8			51.0	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

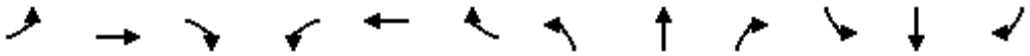
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	428	334	72	202	94	258	1006	130	168	1157	99
Future Volume (vph)	81	428	334	72	202	94	258	1006	130	168	1157	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3306		1770	1863	1583	1770	5085	1583	1770	5025	
Flt Permitted	0.52	1.00		0.15	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	968	3306		280	1863	1583	1770	5085	1583	1770	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	88	465	363	78	220	102	280	1093	141	183	1258	108
RTOR Reduction (vph)	0	151	0	0	0	72	0	0	85	0	9	0
Lane Group Flow (vph)	88	677	0	78	220	30	280	1093	56	183	1357	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			
Actuated Green, G (s)	26.6	26.6		26.6	26.6	26.6	17.9	35.9	35.9	14.0	32.0	
Effective Green, g (s)	26.6	26.6		26.6	26.6	26.6	17.9	35.9	35.9	14.0	32.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.20	0.40	0.40	0.16	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	286	977		82	550	467	352	2028	631	275	1786	
v/s Ratio Prot		0.20			0.12		c0.16	c0.21		0.10	c0.27	
v/s Ratio Perm	0.09			c0.28		0.02			0.04			
v/c Ratio	0.31	0.69		0.95	0.40	0.06	0.80	0.54	0.09	0.67	0.76	
Uniform Delay, d1	24.6	28.1		31.1	25.3	22.8	34.3	20.7	16.9	35.8	25.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	2.1		82.6	0.5	0.1	11.7	1.0	0.3	6.0	3.1	
Delay (s)	25.2	30.2		113.7	25.8	22.8	46.1	21.7	17.1	41.8	28.7	
Level of Service	C	C		F	C	C	D	C	B	D	C	
Approach Delay (s)		29.7			42.2			25.8			30.2	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

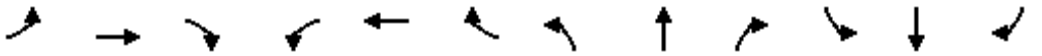
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	1342	115	126	329	108	141	684	316	210	1131	172
Future Volume (vph)	109	1342	115	126	329	108	141	684	316	210	1131	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.99		1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	111	1369	117	129	336	110	144	698	322	214	1154	176
RTOR Reduction (vph)	0	10	0	0	57	0	0	0	76	0	20	0
Lane Group Flow (vph)	111	1476	0	129	389	0	144	698	246	214	1310	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	10.7	32.5		10.4	32.2		6.5	23.3	33.7	15.2	32.0	
Effective Green, g (s)	10.7	32.5		10.4	32.2		6.5	23.3	33.7	15.2	32.0	
Actuated g/C Ratio	0.11	0.33		0.10	0.32		0.07	0.23	0.34	0.15	0.32	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	190	1642		185	1586		224	1191	608	270	1604	
v/s Ratio Prot	0.06	c0.29		c0.07	0.08		0.04	0.14	0.04	c0.12	c0.26	
v/s Ratio Perm									0.11			
v/c Ratio	0.58	0.90		0.70	0.24		0.64	0.59	0.40	0.79	0.82	
Uniform Delay, d1	42.2	31.9		43.0	24.7		45.3	33.8	25.2	40.6	31.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.5	7.0		10.9	0.1		6.2	2.1	0.4	14.7	4.7	
Delay (s)	46.8	38.8		53.9	24.8		51.5	35.9	25.6	55.2	35.7	
Level of Service	D	D		D	C		D	D	C	E	D	
Approach Delay (s)		39.4			31.3			35.0			38.4	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	99.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	467	1339	22	38	552	374	26	194	35	0	0	0
Future Volume (veh/h)	467	1339	22	38	552	374	26	194	35	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	481	1380	23	39	569	386	27	200	36			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	520	3056	51	172	1286	399	59	435	78			
Arrive On Green	0.29	0.59	0.59	0.25	0.25	0.25	0.31	0.31	0.31			
Sat Flow, veh/h	1781	5173	86	384	5106	1585	186	1381	249			
Grp Volume(v), veh/h	481	908	495	39	569	386	263	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	384	1702	1585	1816	0	0			
Q Serve(g_s), s	25.0	14.2	14.2	8.1	8.9	23.0	11.1	0.0	0.0			
Cycle Q Clear(g_c), s	25.0	14.2	14.2	8.1	8.9	23.0	11.1	0.0	0.0			
Prop In Lane	1.00		0.05	1.00		1.00	0.10		0.14			
Lane Grp Cap(c), veh/h	520	2011	1096	172	1286	399	572	0	0			
V/C Ratio(X)	0.93	0.45	0.45	0.23	0.44	0.97	0.46	0.00	0.00			
Avail Cap(c_a), veh/h	607	2179	1187	172	1286	399	572	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	32.7	10.9	10.9	29.7	30.0	35.3	26.2	0.0	0.0			
Incr Delay (d2), s/veh	18.6	0.2	0.3	0.7	0.2	36.4	2.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	13.1	5.0	5.4	0.8	3.6	12.7	5.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	11.0	11.2	30.4	30.3	71.7	28.8	0.0	0.0			
LnGrp LOS	D	B	B	C	C	E	C	A	A			
Approach Vol, veh/h		1884			994			263				
Approach Delay, s/veh		21.4			46.3			28.8				
Approach LOS		C			D			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		34.5		60.8			32.3	28.5				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		30.0		61.0			32.5	24.0				
Max Q Clear Time (g_c+I1), s		13.1		16.2			27.0	25.0				
Green Ext Time (p_c), s		1.4		13.7			0.8	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	181	17	305	1	1	10	107	1269	3	6	1565	133
Future Volume (vph)	181	17	305	1	1	10	107	1269	3	6	1565	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.86			0.89		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598			1644		1770	5084		1770	5025	
Flt Permitted	0.75	1.00			0.96		0.09	1.00		0.17	1.00	
Satd. Flow (perm)	1395	1598			1580		169	5084		308	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	197	18	332	1	1	11	116	1379	3	7	1701	145
RTOR Reduction (vph)	0	33	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	197	317	0	0	4	0	116	1382	0	7	1836	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Effective Green, g (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Actuated g/C Ratio	0.20	0.20			0.20		0.70	0.70		0.70	0.70	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	285	327			323		119	3584		217	3542	
v/s Ratio Prot		c0.20						0.27			0.37	
v/s Ratio Perm	0.14				0.00		c0.69			0.02		
v/c Ratio	0.69	0.97			0.01		0.97	0.39		0.03	0.52	
Uniform Delay, d1	36.8	39.4			31.7		13.9	6.0		4.5	6.9	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.1	40.8			0.0		76.0	0.3		0.3	0.5	
Delay (s)	43.9	80.2			31.7		89.9	6.3		4.7	7.4	
Level of Service	D	F			C		F	A		A	A	
Approach Delay (s)		67.1			31.7			12.8			7.4	
Approach LOS		E			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	738	112	621	29	0	27	0	944	36	38	1514	0
Future Volume (veh/h)	738	112	621	29	0	27	0	944	36	38	1514	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	753	114	634	30	0	28	0	963	37	39	1545	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	1268	91	505	41	0	38	0	2058	79	246	2082	0
Arrive On Green	0.37	0.37	0.37	0.05	0.00	0.05	0.00	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	3456	247	1375	869	0	811	0	5214	194	563	5274	0
Grp Volume(v), veh/h	753	0	748	58	0	0	0	649	351	39	1545	0
Grp Sat Flow(s),veh/h/ln	1728	0	1623	1681	0	0	0	1702	1836	563	1702	0
Q Serve(g_s), s	13.3	0.0	27.7	2.6	0.0	0.0	0.0	10.5	10.6	4.1	19.4	0.0
Cycle Q Clear(g_c), s	13.3	0.0	27.7	2.6	0.0	0.0	0.0	10.5	10.6	14.7	19.4	0.0
Prop In Lane	1.00		0.85	0.52		0.48	0.00		0.11	1.00		0.00
Lane Grp Cap(c), veh/h	1268	0	595	78	0	0	0	1388	749	246	2082	0
V/C Ratio(X)	0.59	0.00	1.26	0.74	0.00	0.00	0.00	0.47	0.47	0.16	0.74	0.00
Avail Cap(c_a), veh/h	1268	0	595	623	0	0	0	1388	749	246	2082	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.4	0.0	23.9	35.5	0.0	0.0	0.0	16.4	16.4	21.7	19.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	128.8	12.8	0.0	0.0	0.0	1.1	2.1	1.4	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	31.1	1.3	0.0	0.0	0.0	4.1	4.6	0.6	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	152.7	48.3	0.0	0.0	0.0	17.5	18.5	23.1	21.4	0.0
LnGrp LOS	C	A	F	D	A	A	A	B	B	C	C	A
Approach Vol, veh/h		1501			58			1000			1584	
Approach Delay, s/veh		86.2			48.3			17.8			21.5	
Approach LOS		F			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		35.3		32.2		35.3		8.0				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		30.8		27.7		30.8		28.0				
Max Q Clear Time (g_c+I1), s		12.6		29.7		21.4		4.6				
Green Ext Time (p_c), s		6.5		0.0		6.8		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			44.4									
HCM 6th LOS			D									

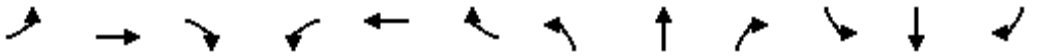
Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	60	20	0	10	21	982	10	20	2009	84
Future Vol, veh/h	7	0	60	20	0	10	21	982	10	20	2009	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	0	65	22	0	11	23	1067	11	22	2184	91

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2747	3398	1138	2037	3438	539	2275	0	0	1078	0	0
Stage 1	2274	2274	-	1119	1119	-	-	-	-	-	-	-
Stage 2	473	1124	-	918	2319	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	21	7	168	60	7	417	90	-	-	359	-	-
Stage 1	24	75	-	164	280	-	-	-	-	-	-	-
Stage 2	494	279	-	264	71	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	16	5	168	28	5	417	90	-	-	359	-	-
Mov Cap-2 Maneuver	16	5	-	28	5	-	-	-	-	-	-	-
Stage 1	18	70	-	122	208	-	-	-	-	-	-	-
Stage 2	358	208	-	152	67	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	150.7	229.9	1.2	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	90	-	-	84	41	359	-	-
HCM Lane V/C Ratio	0.254	-	-	0.867	0.795	0.061	-	-
HCM Control Delay (s)	58.1	-	-	150.7	229.9	15.7	-	-
HCM Lane LOS	F	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	0.9	-	-	4.6	3	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	226	1126	131	244	635	151	266	645	290	310	1128	661
Future Volume (vph)	226	1126	131	244	635	151	266	645	290	310	1128	661
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.97		1.00	0.95		1.00	0.97	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5006		1770	4939		3433	4849		3433	4672	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5006		1770	4939		3433	4849		3433	4672	1362
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	233	1161	135	252	655	156	274	665	299	320	1163	681
RTOR Reduction (vph)	0	15	0	0	40	0	0	80	0	0	33	41
Lane Group Flow (vph)	233	1281	0	252	771	0	274	884	0	320	1396	374
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	6.5	32.5		6.5	32.5		5.5	36.0		5.5	36.0	42.5
Effective Green, g (s)	6.5	32.5		6.5	32.5		5.5	36.0		5.5	36.0	42.5
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.06	0.37		0.06	0.37	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	116	1651		116	1629		191	1772		191	1707	649
v/s Ratio Prot	0.13	c0.26		c0.14	0.16		0.08	0.18		c0.09	c0.30	0.04
v/s Ratio Perm												0.24
v/c Ratio	2.01	0.78		2.17	0.47		1.43	0.50		1.68	0.82	0.58
Uniform Delay, d1	46.0	29.7		46.0	26.2		46.5	24.3		46.5	28.3	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	482.9	2.4		554.9	0.2		222.8	1.0		325.7	4.5	1.2
Delay (s)	528.9	32.1		600.9	26.4		269.3	25.3		372.2	32.8	22.4
Level of Service	F	C		F	C		F	C		F	C	C
Approach Delay (s)		107.8			162.6			79.3			81.0	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	101.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	899	74	195	298	75	111	932	433	212	1087	84
Future Volume (vph)	66	899	74	195	298	75	111	932	433	212	1087	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3499		1770	3432		1770	4843		1770	5031	
Flt Permitted	0.51	1.00		0.11	1.00		0.13	1.00		0.12	1.00	
Satd. Flow (perm)	956	3499		205	3432		240	4843		217	5031	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	977	80	212	324	82	121	1013	471	230	1182	91
RTOR Reduction (vph)	0	6	0	0	22	0	0	85	0	0	9	0
Lane Group Flow (vph)	72	1051	0	212	384	0	121	1399	0	230	1264	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.1	31.9		45.9	37.2		38.1	31.0		44.9	34.4	
Effective Green, g (s)	36.1	31.9		45.9	37.2		38.1	31.0		44.9	34.4	
Actuated g/C Ratio	0.36	0.32		0.45	0.37		0.38	0.31		0.44	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	375	1106		240	1265		198	1487		258	1715	
v/s Ratio Prot	0.01	0.30		c0.08	0.11		0.04	0.29		c0.09	0.25	
v/s Ratio Perm	0.06			c0.32			0.19			c0.30		
v/c Ratio	0.19	0.95		0.88	0.30		0.61	0.94		0.89	0.74	
Uniform Delay, d1	21.7	33.7		23.4	22.6		22.5	34.1		24.2	29.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	16.5		29.4	0.1		5.5	13.0		29.5	2.9	
Delay (s)	21.9	50.2		52.8	22.8		28.0	47.0		53.6	32.1	
Level of Service	C	D		D	C		C	D		D	C	
Approach Delay (s)		48.4			33.1			45.6			35.4	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

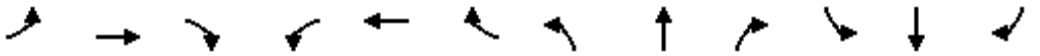
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	1286	135	140	609	136	162	951	125	244	895	140
Future Volume (vph)	163	1286	135	140	609	136	162	951	125	244	895	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5013		1770	4946		1770	4996		1770	4982	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5013		1770	4946		1770	4996		1770	4982	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	166	1312	138	143	621	139	165	970	128	249	913	143
RTOR Reduction (vph)	0	13	0	0	36	0	0	16	0	0	21	0
Lane Group Flow (vph)	166	1437	0	143	724	0	165	1082	0	249	1035	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	32.9		6.5	32.9		6.5	34.0		8.5	36.0	
Effective Green, g (s)	6.5	32.9		6.5	32.9		6.5	34.0		8.5	36.0	
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.07	0.34		0.09	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1650		115	1628		115	1700		150	1795	
v/s Ratio Prot	c0.09	c0.29		0.08	0.15		0.09	c0.22		c0.14	0.21	
v/s Ratio Perm												
v/c Ratio	1.44	0.87		1.24	0.44		1.43	0.64		1.66	0.58	
Uniform Delay, d1	46.7	31.5		46.7	26.3		46.7	27.7		45.7	25.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	241.6	5.3		163.2	0.2		238.1	1.8		324.6	1.4	
Delay (s)	288.3	36.9		209.9	26.5		284.8	29.6		370.3	27.2	
Level of Service	F	D		F	C		F	C		F	C	
Approach Delay (s)		62.7			55.6			62.9			92.6	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	69.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

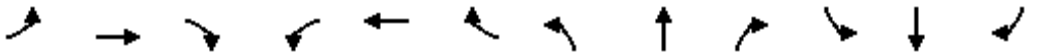
Opening Year 2026 Without Project LOS Calculation Sheets



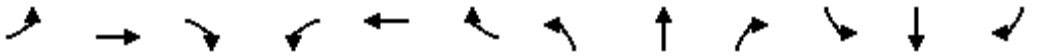
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	546	92	140	903	161	213	741	202	154	864	332
Future Volume (vph)	161	546	92	140	903	161	213	741	202	154	864	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	4975		1770	4970		3433	5085	1583	1770	4874	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	4975		1770	4970		3433	5085	1583	1770	4874	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	183	620	105	159	1026	183	242	842	230	175	982	377
RTOR Reduction (vph)	0	23	0	0	26	0	0	0	51	0	69	0
Lane Group Flow (vph)	183	702	0	159	1183	0	242	842	179	175	1290	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.4	26.5		13.5	26.6		9.7	27.7	41.2	12.9	30.9	
Effective Green, g (s)	13.4	26.5		13.5	26.6		9.7	27.7	41.2	12.9	30.9	
Actuated g/C Ratio	0.14	0.27		0.14	0.27		0.10	0.28	0.42	0.13	0.31	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	240	1337		242	1340		337	1428	733	231	1527	
v/s Ratio Prot	c0.10	0.14		0.09	c0.24		0.07	0.17	0.03	c0.10	c0.26	
v/s Ratio Perm									0.08			
v/c Ratio	0.76	0.53		0.66	0.88		0.72	0.59	0.24	0.76	0.85	
Uniform Delay, d1	41.1	30.7		40.4	34.5		43.1	30.6	18.6	41.3	31.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	13.4	0.4		6.3	7.2		7.1	1.8	0.2	13.2	5.9	
Delay (s)	54.4	31.1		46.7	41.7		50.3	32.3	18.8	54.6	37.5	
Level of Service	D	C		D	D		D	C	B	D	D	
Approach Delay (s)		35.8			42.3			33.3			39.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	467	14	17	1259	559	37	104	14	0	0	0
Future Volume (veh/h)	327	467	14	17	1259	559	37	104	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	348	497	15	18	1339	595	39	111	15			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	386	2979	90	360	1637	508	138	392	53			
Arrive On Green	0.22	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32			
Sat Flow, veh/h	1781	5094	153	888	5106	1585	430	1224	165			
Grp Volume(v), veh/h	348	331	181	18	1339	595	165	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1843	888	1702	1585	1819	0	0			
Q Serve(g_s), s	18.1	4.3	4.3	1.3	23.0	30.5	6.4	0.0	0.0			
Cycle Q Clear(g_c), s	18.1	4.3	4.3	1.3	23.0	30.5	6.4	0.0	0.0			
Prop In Lane	1.00		0.08	1.00		1.00	0.24		0.09			
Lane Grp Cap(c), veh/h	386	1991	1078	360	1637	508	583	0	0			
V/C Ratio(X)	0.90	0.17	0.17	0.05	0.82	1.17	0.28	0.00	0.00			
Avail Cap(c_a), veh/h	477	2165	1172	360	1637	508	583	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	36.3	9.1	9.1	22.4	29.8	32.3	24.1	0.0	0.0			
Incr Delay (d2), s/veh	17.5	0.0	0.1	0.1	3.4	96.2	1.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.6	1.5	1.6	0.3	9.6	24.9	2.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	9.1	9.2	22.5	33.1	128.6	25.4	0.0	0.0			
LnGrp LOS	D	A	A	C	C	F	C	A	A			
Approach Vol, veh/h		860			1952			165				
Approach Delay, s/veh		27.2			62.1			25.4				
Approach LOS		C			E			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		35.0		60.1			25.1	35.0				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		30.5		60.5			25.5	30.5				
Max Q Clear Time (g_c+I1), s		8.4		6.3			20.1	32.5				
Green Ext Time (p_c), s		0.9		3.7			0.5	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			50.0									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	273	0	228	0	10	10	190	1759	5	0	1445	243
Future Volume (vph)	273	0	228	0	10	10	190	1759	5	0	1445	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91			0.91	
Frt	1.00	0.85			0.93		1.00	1.00			0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583			1737		1770	5083			4976	
Flt Permitted	0.74	1.00			1.00		0.09	1.00			1.00	
Satd. Flow (perm)	1384	1583			1737		176	5083			4976	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	297	0	248	0	11	11	207	1912	5	0	1571	264
RTOR Reduction (vph)	0	49	0	0	9	0	0	0	0	0	23	0
Lane Group Flow (vph)	297	199	0	0	13	0	207	1917	0	0	1812	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	18.5	18.5			18.5		72.5	72.5			72.5	
Effective Green, g (s)	18.5	18.5			18.5		72.5	72.5			72.5	
Actuated g/C Ratio	0.18	0.18			0.18		0.72	0.72			0.72	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	256	292			321		127	3685			3607	
v/s Ratio Prot		0.13			0.01			0.38			0.36	
v/s Ratio Perm	c0.21						c1.17					
v/c Ratio	1.16	0.68			0.04		1.63	0.52			0.50	
Uniform Delay, d1	40.8	38.0			33.5		13.8	6.1			5.9	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	106.5	6.4			0.1		316.3	0.5			0.5	
Delay (s)	147.3	44.4			33.5		330.1	6.6			6.4	
Level of Service	F	D			C		F	A			A	
Approach Delay (s)		100.5			33.5			38.1			6.4	
Approach LOS		F			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.53		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	691	36	303	72	0	53	0	1146	23	25	1868	0
Future Volume (veh/h)	691	36	303	72	0	53	0	1146	23	25	1868	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	727	38	319	76	0	56	0	1206	24	26	1966	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	862	43	359	101	0	74	0	2461	49	235	2438	0
Arrive On Green	0.25	0.25	0.25	0.10	0.00	0.10	0.00	0.48	0.48	0.48	0.48	0.00
Sat Flow, veh/h	3456	172	1440	974	0	718	0	5322	103	453	5274	0
Grp Volume(v), veh/h	727	0	357	132	0	0	0	797	433	26	1966	0
Grp Sat Flow(s),veh/h/ln	1728	0	1611	1692	0	0	0	1702	1852	453	1702	0
Q Serve(g_s), s	15.9	0.0	17.0	6.0	0.0	0.0	0.0	12.7	12.7	3.3	26.0	0.0
Cycle Q Clear(g_c), s	15.9	0.0	17.0	6.0	0.0	0.0	0.0	12.7	12.7	16.0	26.0	0.0
Prop In Lane	1.00		0.89	0.58		0.42	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h	862	0	402	175	0	0	0	1626	884	235	2438	0
V/C Ratio(X)	0.84	0.00	0.89	0.75	0.00	0.00	0.00	0.49	0.49	0.11	0.81	0.00
Avail Cap(c_a), veh/h	890	0	415	596	0	0	0	1626	884	235	2438	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.4	0.0	28.8	34.7	0.0	0.0	0.0	14.2	14.2	19.6	17.7	0.0
Incr Delay (d2), s/veh	7.3	0.0	19.9	6.5	0.0	0.0	0.0	1.1	1.9	1.0	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	0.0	8.5	2.7	0.0	0.0	0.0	4.7	5.4	0.4	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	0.0	48.7	41.2	0.0	0.0	0.0	15.2	16.1	20.6	20.6	0.0
LnGrp LOS	D	A	D	D	A	A	A	B	B	C	C	A
Approach Vol, veh/h		1084			132			1230			1992	
Approach Delay, s/veh		39.9			41.2			15.5			20.6	
Approach LOS		D			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.5		24.3		42.5		12.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		38.0		20.5		38.0		28.0				
Max Q Clear Time (g_c+I1), s		14.7		19.0		28.0		8.0				
Green Ext Time (p_c), s		9.2		0.9		8.3		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			24.5									
HCM 6th LOS			C									

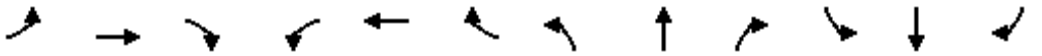
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	11	21	0	11	11	1131	11	21	2219	11
Future Vol, veh/h	0	0	11	21	0	11	11	1131	11	21	2219	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	12	23	0	12	12	1229	12	23	2412	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2980	3729	1212	2270	3729	621	2424	0	0	1241	0	0
Stage 1	2464	2464	-	1259	1259	-	-	-	-	-	-	-
Stage 2	516	1265	-	1011	2470	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	15	4	149	43	4	369	76	-	-	299	-	-
Stage 1	17	59	-	131	240	-	-	-	-	-	-	-
Stage 2	466	239	-	231	59	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	12	3	149	33	3	369	76	-	-	299	-	-
Mov Cap-2 Maneuver	12	3	-	33	3	-	-	-	-	-	-	-
Stage 1	14	54	-	110	202	-	-	-	-	-	-	-
Stage 2	380	201	-	196	54	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.3	186.3	0.6	0.2
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	76	-	-	149	48	299	-	-
HCM Lane V/C Ratio	0.157	-	-	0.08	0.725	0.076	-	-
HCM Control Delay (s)	61	-	-	31.3	186.3	18	-	-
HCM Lane LOS	F	-	-	D	F	C	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.3	2.9	0.2	-	-

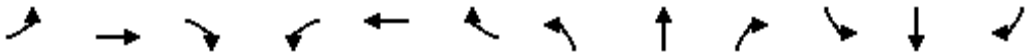


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	386	66	322	1609	219	408	780	190	218	900	1134
Future Volume (vph)	153	386	66	322	1609	219	408	780	190	218	900	1134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.94	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	4974		1770	4994		3433	4936		3433	4527	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	4974		1770	4994		3433	4936		3433	4527	1362
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	159	402	69	335	1676	228	425	812	198	227	938	1181
RTOR Reduction (vph)	0	24	0	0	18	0	0	41	0	0	87	38
Lane Group Flow (vph)	159	447	0	335	1886	0	425	970	0	227	1442	552
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Effective Green, g (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Actuated g/C Ratio	0.06	0.34		0.06	0.35		0.06	0.36		0.05	0.36	0.42
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1691		115	1747		188	1801		171	1629	626
v/s Ratio Prot	0.09	0.09		c0.19	c0.38		c0.12	0.20		0.07	0.32	c0.05
v/s Ratio Perm												0.36
v/c Ratio	1.64	0.26		2.91	1.08		2.26	0.54		1.33	0.94dr	0.88
Uniform Delay, d1	47.2	23.9		46.8	32.5		47.2	25.1		47.5	30.1	27.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	329.2	0.1		884.1	46.7		584.0	1.2		181.9	7.4	13.8
Delay (s)	376.5	24.0		930.8	79.2		631.2	26.3		229.4	37.5	40.8
Level of Service	F	C		F	E		F	C		F	D	D
Approach Delay (s)		113.0			206.6			205.3			56.9	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	144.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	105.7%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

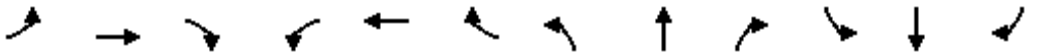
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	569	116	127	1413	170	154	608	57	184	935	200
Future Volume (vph)	150	569	116	127	1413	170	154	608	57	184	935	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4956		1770	5003		1770	5020		1770	4951	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4956		1770	5003		1770	5020		1770	4951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	599	122	134	1487	179	162	640	60	194	984	211
RTOR Reduction (vph)	0	31	0	0	15	0	0	11	0	0	33	0
Lane Group Flow (vph)	158	690	0	134	1651	0	162	689	0	194	1162	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.08	0.34		0.08	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1635		115	1650		132	1706		150	1732	
v/s Ratio Prot	c0.09	0.14		0.08	c0.33		0.09	0.14		c0.11	c0.23	
v/s Ratio Perm												
v/c Ratio	1.37	0.42		1.17	1.00		1.23	0.40		1.29	0.67	
Uniform Delay, d1	46.8	26.1		46.8	33.5		46.2	25.2		45.8	27.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	213.6	0.2		135.1	22.3		151.9	0.7		172.5	2.1	
Delay (s)	260.3	26.3		181.8	55.8		198.1	26.0		218.2	29.7	
Level of Service	F	C		F	E		F	C		F	C	
Approach Delay (s)		68.3			65.2			58.3			56.0	
Approach LOS		E			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	62.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

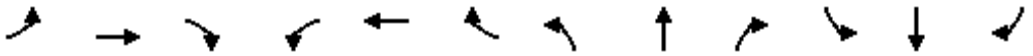
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	577	355	76	376	104	274	1068	138	180	1228	105
Future Volume (vph)	86	577	355	76	376	104	274	1068	138	180	1228	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3337		1770	1863	1583	1770	5085	1583	1770	5025	
Flt Permitted	0.33	1.00		0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	620	3337		227	1863	1583	1770	5085	1583	1770	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	627	386	83	409	113	298	1161	150	196	1335	114
RTOR Reduction (vph)	0	94	0	0	0	70	0	0	94	0	10	0
Lane Group Flow (vph)	93	919	0	83	409	43	298	1161	56	196	1439	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			
Actuated Green, G (s)	37.9	37.9		37.9	37.9	37.9	18.2	34.5	34.5	14.0	30.3	
Effective Green, g (s)	37.9	37.9		37.9	37.9	37.9	18.2	34.5	34.5	14.0	30.3	
Actuated g/C Ratio	0.38	0.38		0.38	0.38	0.38	0.18	0.35	0.35	0.14	0.30	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	235	1265		86	706	600	322	1756	546	248	1524	
v/s Ratio Prot		0.28			0.22		c0.17	c0.23		0.11	c0.29	
v/s Ratio Perm	0.15			c0.37		0.03			0.04			
v/c Ratio	0.40	0.73		0.97	0.58	0.07	0.93	0.66	0.10	0.79	0.94	
Uniform Delay, d1	22.6	26.6		30.4	24.7	19.8	40.2	27.7	22.2	41.5	34.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	2.1		84.7	1.2	0.1	31.3	2.0	0.4	15.6	13.1	
Delay (s)	23.7	28.7		115.1	25.8	19.8	71.5	29.7	22.6	57.2	47.1	
Level of Service	C	C		F	C	B	E	C	C	E	D	
Approach Delay (s)		28.2			36.9			36.8			48.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

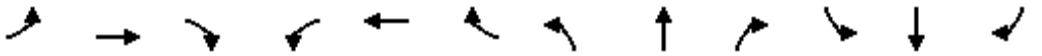
c Critical Lane Group



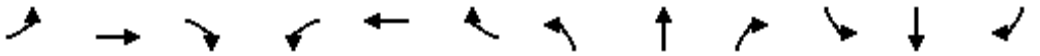
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	1425	122	134	349	115	150	726	333	223	1201	183
Future Volume (vph)	116	1425	122	134	349	115	150	726	333	223	1201	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.99		1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	118	1454	124	137	356	117	153	741	340	228	1226	187
RTOR Reduction (vph)	0	10	0	0	57	0	0	0	76	0	20	0
Lane Group Flow (vph)	118	1568	0	137	416	0	153	741	264	228	1393	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	11.1	32.5		9.5	30.9		5.7	24.0	33.5	15.9	34.2	
Effective Green, g (s)	11.1	32.5		9.5	30.9		5.7	24.0	33.5	15.9	34.2	
Actuated g/C Ratio	0.11	0.33		0.10	0.31		0.06	0.24	0.34	0.16	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	196	1634		168	1514		195	1221	602	281	1706	
v/s Ratio Prot	0.07	c0.31		c0.08	0.08		0.04	0.15	0.04	c0.13	c0.28	
v/s Ratio Perm									0.12			
v/c Ratio	0.60	0.96		0.82	0.27		0.78	0.61	0.44	0.81	0.82	
Uniform Delay, d1	42.3	33.1		44.3	26.0		46.5	33.8	25.9	40.6	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	13.7		25.3	0.1		18.4	2.2	0.5	16.1	4.4	
Delay (s)	47.4	46.8		69.6	26.1		64.9	36.0	26.4	56.7	34.4	
Level of Service	D	D		E	C		E	D	C	E	C	
Approach Delay (s)		46.8			35.9			36.9			37.5	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



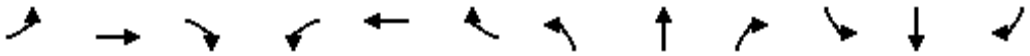
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	496	1419	23	40	586	758	28	206	37	0	0	0
Future Volume (veh/h)	496	1419	23	40	586	758	28	206	37	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	511	1463	24	41	604	781	29	212	38			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	454	3027	50	173	1455	452	61	449	80			
Arrive On Green	0.25	0.58	0.58	0.28	0.28	0.28	0.32	0.32	0.32			
Sat Flow, veh/h	1781	5174	85	354	5106	1585	189	1380	247			
Grp Volume(v), veh/h	511	962	525	41	604	781	279	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	354	1702	1585	1816	0	0			
Q Serve(g_s), s	25.5	16.4	16.4	9.4	9.6	28.5	12.2	0.0	0.0			
Cycle Q Clear(g_c), s	25.5	16.4	16.4	9.4	9.6	28.5	12.2	0.0	0.0			
Prop In Lane	1.00		0.05	1.00		1.00	0.10		0.14			
Lane Grp Cap(c), veh/h	454	1991	1085	173	1455	452	590	0	0			
V/C Ratio(X)	1.12	0.48	0.48	0.24	0.42	1.73	0.47	0.00	0.00			
Avail Cap(c_a), veh/h	454	1991	1085	173	1455	452	590	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	37.3	12.0	12.0	28.9	29.0	35.8	26.9	0.0	0.0			
Incr Delay (d2), s/veh	81.0	0.2	0.3	0.7	0.2	337.2	2.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.1	5.8	6.4	0.8	3.9	53.0	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.3	12.2	12.3	29.6	29.2	372.9	29.6	0.0	0.0			
LnGrp LOS	F	B	B	C	C	F	C	A	A			
Approach Vol, veh/h		1998			1426			279				
Approach Delay, s/veh		39.4			217.5			29.6				
Approach LOS		D			F			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		37.0		63.0			30.0	33.0				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		32.5		58.5			25.5	28.5				
Max Q Clear Time (g_c+I1), s		14.2		18.4			27.5	30.5				
Green Ext Time (p_c), s		1.5		14.5			0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			107.2									
HCM 6th LOS			F									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	18	325	1	1	11	117	1780	3	6	2207	303
Future Volume (vph)	315	18	325	1	1	11	117	1780	3	6	2207	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.86			0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598			1641		1770	5084		1770	4993	
Flt Permitted	0.75	1.00			0.89		0.06	1.00		0.08	1.00	
Satd. Flow (perm)	1394	1598			1459		106	5084		149	4993	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	342	20	353	1	1	12	127	1935	3	7	2399	329
RTOR Reduction (vph)	0	8	0	0	10	0	0	0	0	0	18	0
Lane Group Flow (vph)	342	365	0	0	4	0	127	1938	0	7	2710	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Effective Green, g (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Actuated g/C Ratio	0.20	0.20			0.20		0.70	0.70		0.70	0.70	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	285	327			299		74	3584		105	3520	
v/s Ratio Prot		0.23						0.38			0.54	
v/s Ratio Perm	c0.25				0.00		c1.20			0.05		
v/c Ratio	1.20	1.12			0.01		1.72	0.54		0.07	0.77	
Uniform Delay, d1	39.8	39.8			31.7		14.8	7.0		4.6	9.5	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	118.7	84.9			0.0		372.7	0.6		1.2	1.7	
Delay (s)	158.5	124.7			31.7		387.5	7.6		5.8	11.2	
Level of Service	F	F			C		F	A		A	B	
Approach Delay (s)		140.8			31.7			31.0			11.2	
Approach LOS		F			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1115	119	582	31	0	29	0	1147	38	40	2194	0
Future Volume (veh/h)	1115	119	582	31	0	29	0	1147	38	40	2194	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	1138	121	594	32	0	30	0	1170	39	41	2239	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	1119	89	438	42	0	39	0	2281	76	227	2295	0
Arrive On Green	0.32	0.32	0.32	0.05	0.00	0.05	0.00	0.45	0.45	0.45	0.45	0.00
Sat Flow, veh/h	3456	275	1352	867	0	813	0	5243	169	462	5274	0
Grp Volume(v), veh/h	1138	0	715	62	0	0	0	785	424	41	2239	0
Grp Sat Flow(s),veh/h/ln	1728	0	1627	1681	0	0	0	1702	1840	462	1702	0
Q Serve(g_s), s	24.5	0.0	24.5	2.8	0.0	0.0	0.0	12.5	12.5	5.3	32.5	0.0
Cycle Q Clear(g_c), s	24.5	0.0	24.5	2.8	0.0	0.0	0.0	12.5	12.5	17.8	32.5	0.0
Prop In Lane	1.00		0.83	0.52		0.48	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	1119	0	527	81	0	0	0	1530	827	227	2295	0
V/C Ratio(X)	1.02	0.00	1.36	0.76	0.00	0.00	0.00	0.51	0.51	0.18	0.98	0.00
Avail Cap(c_a), veh/h	1119	0	527	622	0	0	0	1530	827	227	2295	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.6	0.0	25.6	35.6	0.0	0.0	0.0	14.9	14.9	21.3	20.4	0.0
Incr Delay (d2), s/veh	31.2	0.0	172.7	13.7	0.0	0.0	0.0	1.2	2.3	1.7	13.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	0.0	34.1	1.4	0.0	0.0	0.0	4.7	5.3	0.7	14.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	198.3	49.3	0.0	0.0	0.0	16.1	17.2	23.0	34.3	0.0
LnGrp LOS	F	A	F	D	A	A	A	B	B	C	C	A
Approach Vol, veh/h		1853			62			1209			2280	
Approach Delay, s/veh		111.4			49.3			16.5			34.1	
Approach LOS		F			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.5		29.0		38.5		8.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.0		24.5		34.0		28.0				
Max Q Clear Time (g_c+I1), s		14.5		26.5		34.5		4.8				
Green Ext Time (p_c), s		8.3		0.0		0.0		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			56.8									
HCM 6th LOS			E									

Intersection	
Int Delay, s/veh	14.1

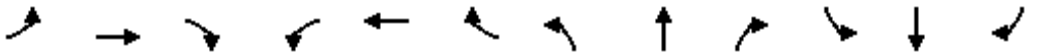
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	0	11	21	0	11	11	1194	11	21	2730	11
Future Vol, veh/h	11	0	11	21	0	11	11	1194	11	21	2730	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	0	12	23	0	12	12	1298	12	23	2967	12

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3562	4353	1490	2561	4353	655	2979	0	0	1310	0	0
Stage 1	3019	3019	-	1328	1328	-	-	-	-	-	-	-
Stage 2	543	1334	-	1233	3025	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 6	2	97	28	2	350	39	-	-	277	-	-
Stage 1	~ 7	30	-	117	223	-	-	-	-	-	-	-
Stage 2	449	221	-	168	30	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 4	1	97	~ 18	1	350	39	-	-	277	-	-
Mov Cap-2 Maneuver	~ 4	1	-	~ 18	1	-	-	-	-	-	-	-
Stage 1	~ 5	28	-	81	154	-	-	-	-	-	-	-
Stage 2	300	153	-	135	28	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 1800.1	$ 488.7	1.2	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	39	-	-	8	27	277	-	-
HCM Lane V/C Ratio	0.307	-	-	2.989	1.288	0.082	-	-
HCM Control Delay (s)	133.8	-	-	$ 1800.1	$ 488.7	19.2	-	-
HCM Lane LOS	F	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	1	-	-	4.2	4.1	0.3	-	-

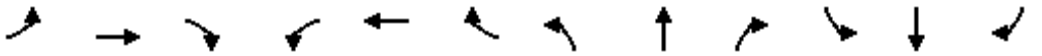
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	1195	139	259	674	218	282	758	308	410	1292	1060
Future Volume (vph)	238	1195	139	259	674	218	282	758	308	410	1292	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.96		1.00	0.96		1.00	0.96	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5006		1770	4899		3433	4865		3433	4599	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5006		1770	4899		3433	4865		3433	4599	1362
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	245	1232	143	267	695	225	291	781	318	423	1332	1093
RTOR Reduction (vph)	0	15	0	0	59	0	0	73	0	0	72	37
Lane Group Flow (vph)	245	1360	0	267	861	0	291	1026	0	423	1796	520
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	6.5	33.2		6.5	33.2		5.5	36.0		5.5	36.0	42.5
Effective Green, g (s)	6.5	33.2		6.5	33.2		5.5	36.0		5.5	36.0	42.5
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.06	0.36		0.06	0.36	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	115	1675		115	1639		190	1765		190	1668	645
v/s Ratio Prot	0.14	c0.27		c0.15	0.18		0.08	0.21		c0.12	c0.39	0.05
v/s Ratio Perm												0.33
v/c Ratio	2.13	0.81		2.32	0.53		1.53	0.58		2.23	1.08	0.81
Uniform Delay, d1	46.4	30.2		46.4	26.6		46.9	25.5		46.9	31.6	24.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	536.7	3.1		621.1	0.3		263.9	1.4		568.5	45.9	7.3
Delay (s)	583.0	33.3		667.5	26.9		310.8	26.9		615.4	77.5	32.0
Level of Service	F	C		F	C		F	C		F	E	C
Approach Delay (s)		116.4			171.0			86.3			148.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	132.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

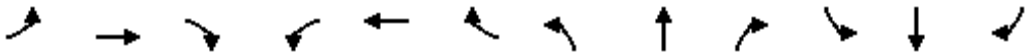
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	954	79	207	316	80	118	1063	460	225	1249	89
Future Volume (vph)	70	954	79	207	316	80	118	1063	460	225	1249	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3499		1770	3432		1770	4855		1770	5034	
Flt Permitted	0.50	1.00		0.11	1.00		0.13	1.00		0.12	1.00	
Satd. Flow (perm)	934	3499		205	3432		235	4855		217	5034	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1037	86	225	343	87	128	1155	500	245	1358	97
RTOR Reduction (vph)	0	6	0	0	22	0	0	78	0	0	8	0
Lane Group Flow (vph)	76	1117	0	225	408	0	128	1577	0	245	1447	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.3	31.9		45.6	36.7		39.1	31.7		44.5	34.4	
Effective Green, g (s)	36.3	31.9		45.6	36.7		39.1	31.7		44.5	34.4	
Actuated g/C Ratio	0.36	0.32		0.45	0.36		0.39	0.31		0.44	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	372	1106		235	1248		203	1525		251	1716	
v/s Ratio Prot	0.01	0.32		c0.09	0.12		0.05	0.32		c0.10	0.29	
v/s Ratio Perm	0.06			c0.35			0.20			c0.33		
v/c Ratio	0.20	1.01		0.96	0.33		0.63	1.03		0.98	0.84	
Uniform Delay, d1	21.6	34.5		25.3	23.2		23.0	34.6		26.2	30.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	29.5		46.4	0.2		6.2	32.3		49.6	5.3	
Delay (s)	21.9	64.0		71.7	23.3		29.3	66.9		75.8	36.0	
Level of Service	C	E		E	C		C	E		E	D	
Approach Delay (s)		61.3			39.9			64.2			41.7	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

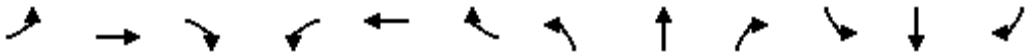


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1450	140	149	709	144	167	1010	133	259	950	149
Future Volume (vph)	173	1450	140	149	709	144	167	1010	133	259	950	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5018		1770	4956		1770	4996		1770	4982	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5018		1770	4956		1770	4996		1770	4982	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	177	1480	143	152	723	147	170	1031	136	264	969	152
RTOR Reduction (vph)	0	11	0	0	31	0	0	17	0	0	21	0
Lane Group Flow (vph)	177	1612	0	152	839	0	170	1151	0	264	1100	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		6.5	34.0		8.5	36.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		6.5	34.0		8.5	36.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.06	0.34		0.08	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1655		115	1635		115	1698		150	1793	
v/s Ratio Prot	c0.10	c0.32		0.09	0.17		0.10	c0.23		c0.15	0.22	
v/s Ratio Perm												
v/c Ratio	1.54	0.97		1.32	0.51		1.48	0.68		1.76	0.61	
Uniform Delay, d1	46.8	33.1		46.8	27.0		46.8	28.3		45.8	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	281.2	16.2		193.0	0.3		255.9	2.2		367.8	1.6	
Delay (s)	327.9	49.3		239.8	27.3		302.7	30.5		413.6	27.9	
Level of Service	F	D		F	C		F	C		F	C	
Approach Delay (s)		76.7			58.9			65.1			101.4	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	76.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

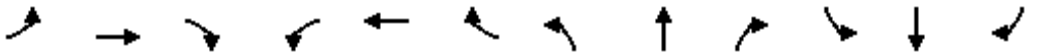
Opening Year 2026 With Project LOS Calculation Sheets



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	546	92	146	903	161	213	741	204	154	864	332
Future Volume (vph)	161	546	92	146	903	161	213	741	204	154	864	332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.98		1.00	0.98		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	4975		1770	4970		3433	5085	1583	1770	4874	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	4975		1770	4970		3433	5085	1583	1770	4874	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	183	620	105	166	1026	183	242	842	232	175	982	377
RTOR Reduction (vph)	0	23	0	0	26	0	0	0	50	0	69	0
Lane Group Flow (vph)	183	702	0	166	1183	0	242	842	182	175	1290	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.4	26.3		13.7	26.6		9.7	27.7	41.4	12.9	30.9	
Effective Green, g (s)	13.4	26.3		13.7	26.6		9.7	27.7	41.4	12.9	30.9	
Actuated g/C Ratio	0.14	0.27		0.14	0.27		0.10	0.28	0.42	0.13	0.31	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	240	1327		245	1340		337	1428	736	231	1527	
v/s Ratio Prot	c0.10	0.14		0.09	c0.24		0.07	0.17	0.03	c0.10	c0.26	
v/s Ratio Perm									0.08			
v/c Ratio	0.76	0.53		0.68	0.88		0.72	0.59	0.25	0.76	0.85	
Uniform Delay, d1	41.1	30.9		40.4	34.5		43.1	30.6	18.5	41.3	31.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	13.4	0.4		7.2	7.2		7.1	1.8	0.2	13.2	5.9	
Delay (s)	54.4	31.2		47.6	41.7		50.3	32.3	18.7	54.6	37.5	
Level of Service	D	C		D	D		D	C	B	D	D	
Approach Delay (s)		35.9			42.4			33.2			39.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

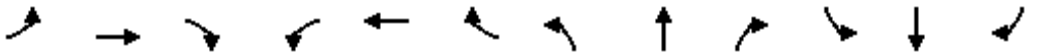


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	327	469	14	17	1265	584	37	104	14	0	0	0
Future Volume (veh/h)	327	469	14	17	1265	584	37	104	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	348	499	15	18	1346	621	39	111	15			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	386	2979	89	360	1637	508	138	392	53			
Arrive On Green	0.22	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32			
Sat Flow, veh/h	1781	5094	153	887	5106	1585	430	1224	165			
Grp Volume(v), veh/h	348	333	181	18	1346	621	165	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1843	887	1702	1585	1819	0	0			
Q Serve(g_s), s	18.1	4.3	4.3	1.3	23.1	30.5	6.4	0.0	0.0			
Cycle Q Clear(g_c), s	18.1	4.3	4.3	1.3	23.1	30.5	6.4	0.0	0.0			
Prop In Lane	1.00		0.08	1.00		1.00	0.24		0.09			
Lane Grp Cap(c), veh/h	386	1991	1078	360	1637	508	583	0	0			
V/C Ratio(X)	0.90	0.17	0.17	0.05	0.82	1.22	0.28	0.00	0.00			
Avail Cap(c_a), veh/h	477	2165	1172	360	1637	508	583	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	36.3	9.1	9.1	22.4	29.8	32.3	24.1	0.0	0.0			
Incr Delay (d2), s/veh	17.5	0.0	0.1	0.1	3.5	116.6	1.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.6	1.5	1.6	0.3	9.7	27.7	2.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	9.1	9.2	22.5	33.3	148.9	25.4	0.0	0.0			
LnGrp LOS	D	A	A	C	C	F	C	A	A			
Approach Vol, veh/h		862			1985			165				
Approach Delay, s/veh		27.2			69.4			25.4				
Approach LOS		C			E			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		35.0		60.1			25.1	35.0				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		30.5		60.5			25.5	30.5				
Max Q Clear Time (g_c+I1), s		8.4		6.3			20.1	32.5				
Green Ext Time (p_c), s		0.9		3.7			0.5	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			54.9									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	273	0	230	0	10	10	196	1765	5	0	1447	243
Future Volume (vph)	273	0	230	0	10	10	196	1765	5	0	1447	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91			0.91	
Frt	1.00	0.85			0.93		1.00	1.00			0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	1583			1737		1770	5083			4976	
Flt Permitted	0.74	1.00			1.00		0.09	1.00			1.00	
Satd. Flow (perm)	1384	1583			1737		176	5083			4976	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	297	0	250	0	11	11	213	1918	5	0	1573	264
RTOR Reduction (vph)	0	49	0	0	9	0	0	0	0	0	23	0
Lane Group Flow (vph)	297	201	0	0	13	0	213	1923	0	0	1814	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	18.5	18.5			18.5		72.5	72.5			72.5	
Effective Green, g (s)	18.5	18.5			18.5		72.5	72.5			72.5	
Actuated g/C Ratio	0.18	0.18			0.18		0.72	0.72			0.72	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5			4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	256	292			321		127	3685			3607	
v/s Ratio Prot		0.13			0.01			0.38			0.36	
v/s Ratio Perm	c0.21						c1.21					
v/c Ratio	1.16	0.69			0.04		1.68	0.52			0.50	
Uniform Delay, d1	40.8	38.1			33.5		13.8	6.1			6.0	
Progression Factor	1.00	1.00			1.00		1.00	1.00			1.00	
Incremental Delay, d2	106.5	6.6			0.1		336.5	0.5			0.5	
Delay (s)	147.3	44.7			33.5		350.3	6.6			6.5	
Level of Service	F	D			C		F	A			A	
Approach Delay (s)		100.4			33.5			40.9			6.5	
Approach LOS		F			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	77.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	691	36	329	72	0	53	0	1159	23	25	1872	0
Future Volume (veh/h)	691	36	329	72	0	53	0	1159	23	25	1872	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	727	38	346	76	0	56	0	1220	24	26	1971	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	882	41	370	101	0	74	0	2440	48	228	2417	0
Arrive On Green	0.26	0.26	0.26	0.10	0.00	0.10	0.00	0.47	0.47	0.47	0.47	0.00
Sat Flow, veh/h	3456	159	1450	974	0	718	0	5323	101	447	5274	0
Grp Volume(v), veh/h	727	0	384	132	0	0	0	806	438	26	1971	0
Grp Sat Flow(s),veh/h/ln	1728	0	1609	1692	0	0	0	1702	1852	447	1702	0
Q Serve(g_s), s	15.9	0.0	18.7	6.1	0.0	0.0	0.0	13.1	13.1	3.4	26.6	0.0
Cycle Q Clear(g_c), s	15.9	0.0	18.7	6.1	0.0	0.0	0.0	13.1	13.1	16.5	26.6	0.0
Prop In Lane	1.00		0.90	0.58		0.42	0.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	882	0	411	175	0	0	0	1611	877	228	2417	0
V/C Ratio(X)	0.82	0.00	0.93	0.76	0.00	0.00	0.00	0.50	0.50	0.11	0.82	0.00
Avail Cap(c_a), veh/h	882	0	411	590	0	0	0	1611	877	228	2417	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	0.0	29.2	35.0	0.0	0.0	0.0	14.6	14.6	20.3	18.1	0.0
Incr Delay (d2), s/veh	6.4	0.0	28.5	6.5	0.0	0.0	0.0	1.1	2.0	1.0	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	10.2	2.8	0.0	0.0	0.0	4.9	5.6	0.4	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	0.0	57.7	41.5	0.0	0.0	0.0	15.7	16.6	21.3	21.3	0.0
LnGrp LOS	C	A	E	D	A	A	A	B	B	C	C	A
Approach Vol, veh/h		1111			132			1244			1997	
Approach Delay, s/veh		42.6			41.5			16.0			21.3	
Approach LOS		D			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		42.5		25.0		42.5		12.8				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		38.0		20.5		38.0		28.0				
Max Q Clear Time (g_c+I1), s		15.1		20.7		28.6		8.1				
Green Ext Time (p_c), s		9.2		0.0		7.9		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			25.7									
HCM 6th LOS			C									

Intersection	
Int Delay, s/veh	91.2

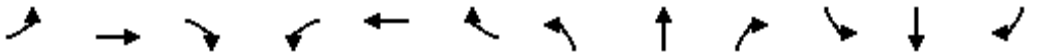
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	124	21	0	11	18	1131	11	21	2219	41
Future Vol, veh/h	13	0	124	21	0	11	18	1131	11	21	2219	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	0	135	23	0	12	20	1229	12	23	2412	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3013	3762	1229	2286	3778	621	2457	0	0	1241	0	0
Stage 1	2481	2481	-	1275	1275	-	-	-	-	-	-	-
Stage 2	532	1281	-	1011	2503	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 14	4	146	42	4	369	73	-	-	299	-	-
Stage 1	17	58	-	128	236	-	-	-	-	-	-	-
Stage 2	456	235	-	231	57	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 10	3	146	~ 2	3	369	73	-	-	299	-	-
Mov Cap-2 Maneuver	~ 10	3	-	~ 2	3	-	-	-	-	-	-	-
Stage 1	~ 12	54	-	93	171	-	-	-	-	-	-	-
Stage 2	320	171	-	~ 16	53	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 744.5	$ 7044.5	1.1	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	73	-	-	64	3	299	-	-
HCM Lane V/C Ratio	0.268	-	-	2.327	11.594	0.076	-	-
HCM Control Delay (s)	71.5	-	-	$ 744.5	$ 7044.5	18	-	-
HCM Lane LOS	F	-	-	F	F	C	-	-
HCM 95th %tile Q(veh)	1	-	-	14.5	6.1	0.2	-	-

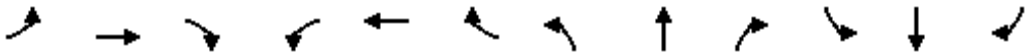
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	386	66	322	1609	223	408	782	190	231	906	1228
Future Volume (vph)	155	386	66	322	1609	223	408	782	190	231	906	1228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.94	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	4974		1770	4993		3433	4936		3433	4515	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	4974		1770	4993		3433	4936		3433	4515	1362
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	402	69	335	1676	232	425	815	198	241	944	1279
RTOR Reduction (vph)	0	24	0	0	18	0	0	41	0	0	87	38
Lane Group Flow (vph)	161	447	0	335	1890	0	425	972	0	241	1497	601
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Effective Green, g (s)	5.5	34.0		6.5	35.0		5.5	36.5		5.0	36.0	41.5
Actuated g/C Ratio	0.06	0.34		0.06	0.35		0.06	0.36		0.05	0.36	0.42
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1691		115	1747		188	1801		171	1625	626
v/s Ratio Prot	0.09	0.09		c0.19	c0.38		c0.12	0.20		0.07	0.33	c0.05
v/s Ratio Perm												0.39
v/c Ratio	1.66	0.26		2.91	1.08		2.26	0.54		1.41	1.02dr	0.96
Uniform Delay, d1	47.2	23.9		46.8	32.5		47.2	25.1		47.5	30.6	28.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	337.9	0.1		884.1	47.4		584.0	1.2		215.2	10.1	26.3
Delay (s)	385.2	24.0		930.8	79.9		631.2	26.3		262.7	40.7	54.7
Level of Service	F	C		F	E		F	C		F	D	D
Approach Delay (s)		116.0			207.0			205.1			66.1	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	146.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	109.6%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	575	122	127	1415	170	156	608	57	184	935	200
Future Volume (vph)	150	575	122	127	1415	170	156	608	57	184	935	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	4952		1770	5003		1770	5020		1770	4951	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	4952		1770	5003		1770	5020		1770	4951	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	605	128	134	1489	179	164	640	60	194	984	211
RTOR Reduction (vph)	0	33	0	0	15	0	0	11	0	0	33	0
Lane Group Flow (vph)	158	700	0	134	1653	0	164	689	0	194	1162	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		7.5	34.0		8.5	35.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.08	0.34		0.08	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1634		115	1650		132	1706		150	1732	
v/s Ratio Prot	c0.09	0.14		0.08	c0.33		0.09	0.14		c0.11	c0.23	
v/s Ratio Perm												
v/c Ratio	1.37	0.43		1.17	1.00		1.24	0.40		1.29	0.67	
Uniform Delay, d1	46.8	26.1		46.8	33.5		46.2	25.2		45.8	27.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	213.6	0.2		135.1	22.6		157.5	0.7		172.5	2.1	
Delay (s)	260.3	26.3		181.8	56.1		203.7	26.0		218.2	29.7	
Level of Service	F	C		F	E		F	C		F	C	
Approach Delay (s)		67.8			65.5			59.7			56.0	
Approach LOS		E			E			E			E	

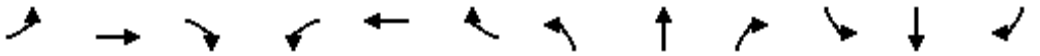
Intersection Summary			
HCM 2000 Control Delay	62.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	86	577	355	76	376	107	274	1068	138	185	1228	105
Future Volume (vph)	86	577	355	76	376	107	274	1068	138	185	1228	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt	1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3337		1770	1863	1583	1770	5085	1583	1770	5025	
Flt Permitted	0.33	1.00		0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	620	3337		227	1863	1583	1770	5085	1583	1770	5025	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	93	627	386	83	409	116	298	1161	150	201	1335	114
RTOR Reduction (vph)	0	94	0	0	0	72	0	0	92	0	10	0
Lane Group Flow (vph)	93	919	0	83	409	44	298	1161	58	201	1439	0
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			
Actuated Green, G (s)	37.9	37.9		37.9	37.9	37.9	18.2	34.4	34.4	14.1	30.3	
Effective Green, g (s)	37.9	37.9		37.9	37.9	37.9	18.2	34.4	34.4	14.1	30.3	
Actuated g/C Ratio	0.38	0.38		0.38	0.38	0.38	0.18	0.34	0.34	0.14	0.30	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	235	1265		86	706	600	322	1750	545	249	1524	
v/s Ratio Prot		0.28			0.22		c0.17	c0.23		0.11	c0.29	
v/s Ratio Perm	0.15			c0.37		0.03			0.04			
v/c Ratio	0.40	0.73		0.97	0.58	0.07	0.93	0.66	0.11	0.81	0.94	
Uniform Delay, d1	22.6	26.6		30.4	24.7	19.8	40.2	27.8	22.3	41.6	34.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	2.1		84.7	1.2	0.1	31.3	2.0	0.4	17.2	13.1	
Delay (s)	23.7	28.7		115.1	25.8	19.8	71.5	29.8	22.7	58.8	47.1	
Level of Service	C	C		F	C	B	E	C	C	E	D	
Approach Delay (s)		28.2			36.9			36.9			48.5	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

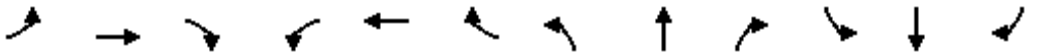
c Critical Lane Group



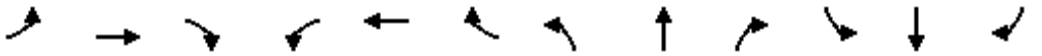
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	1425	122	137	349	115	150	726	338	223	1201	183
Future Volume (vph)	116	1425	122	137	349	115	150	726	338	223	1201	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frt	1.00	0.99		1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5025		1770	4897		3433	5085	1583	1770	4984	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	118	1454	124	140	356	117	153	741	345	228	1226	187
RTOR Reduction (vph)	0	10	0	0	57	0	0	0	76	0	20	0
Lane Group Flow (vph)	118	1568	0	140	416	0	153	741	269	228	1393	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	11.1	32.5		9.6	31.0		5.7	24.0	33.6	15.9	34.2	
Effective Green, g (s)	11.1	32.5		9.6	31.0		5.7	24.0	33.6	15.9	34.2	
Actuated g/C Ratio	0.11	0.32		0.10	0.31		0.06	0.24	0.34	0.16	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	196	1633		169	1518		195	1220	603	281	1704	
v/s Ratio Prot	0.07	c0.31		c0.08	0.08		0.04	0.15	0.04	c0.13	c0.28	
v/s Ratio Perm									0.13			
v/c Ratio	0.60	0.96		0.83	0.27		0.78	0.61	0.45	0.81	0.82	
Uniform Delay, d1	42.3	33.1		44.4	26.0		46.5	33.8	25.9	40.6	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	14.0		27.1	0.1		18.4	2.3	0.5	16.1	4.5	
Delay (s)	47.5	47.1		71.5	26.1		65.0	36.1	26.5	56.7	34.5	
Level of Service	D	D		E	C		E	D	C	E	C	
Approach Delay (s)		47.1			36.5			37.0			37.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



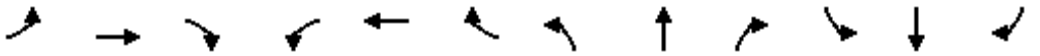
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	496	1424	23	40	589	771	28	206	37	0	0	0
Future Volume (veh/h)	496	1424	23	40	589	771	28	206	37	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	511	1468	24	41	607	795	29	212	38			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	454	3027	49	172	1455	452	61	449	80			
Arrive On Green	0.25	0.58	0.58	0.28	0.28	0.28	0.32	0.32	0.32			
Sat Flow, veh/h	1781	5175	85	353	5106	1585	189	1380	247			
Grp Volume(v), veh/h	511	966	526	41	607	795	279	0	0			
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	353	1702	1585	1816	0	0			
Q Serve(g_s), s	25.5	16.4	16.4	9.4	9.6	28.5	12.2	0.0	0.0			
Cycle Q Clear(g_c), s	25.5	16.4	16.4	9.4	9.6	28.5	12.2	0.0	0.0			
Prop In Lane	1.00		0.05	1.00		1.00	0.10		0.14			
Lane Grp Cap(c), veh/h	454	1991	1085	172	1455	452	590	0	0			
V/C Ratio(X)	1.12	0.48	0.48	0.24	0.42	1.76	0.47	0.00	0.00			
Avail Cap(c_a), veh/h	454	1991	1085	172	1455	452	590	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	37.3	12.0	12.0	28.9	29.0	35.8	26.9	0.0	0.0			
Incr Delay (d2), s/veh	81.0	0.2	0.3	0.7	0.2	350.9	2.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.1	5.9	6.4	0.8	3.9	54.8	5.7	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.3	12.2	12.4	29.6	29.2	386.7	29.6	0.0	0.0			
LnGrp LOS	F	B	B	C	C	F	C	A	A			
Approach Vol, veh/h		2003			1443			279				
Approach Delay, s/veh		39.3			226.2			29.6				
Approach LOS		D			F			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		37.0		63.0			30.0	33.0				
Change Period (Y+Rc), s		4.5		4.5			4.5	4.5				
Max Green Setting (Gmax), s		32.5		58.5			25.5	28.5				
Max Q Clear Time (g_c+I1), s		14.2		18.4			27.5	30.5				
Green Ext Time (p_c), s		1.5		14.6			0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			111.0									
HCM 6th LOS			F									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	315	18	330	1	1	11	120	1783	3	6	2212	303
Future Volume (vph)	315	18	330	1	1	11	120	1783	3	6	2212	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.86			0.88		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1598			1641		1770	5084		1770	4993	
Flt Permitted	0.75	1.00			0.87		0.06	1.00		0.08	1.00	
Satd. Flow (perm)	1394	1598			1427		106	5084		149	4993	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	342	20	359	1	1	12	130	1938	3	7	2404	329
RTOR Reduction (vph)	0	8	0	0	10	0	0	0	0	0	18	0
Lane Group Flow (vph)	342	371	0	0	4	0	130	1941	0	7	2715	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Effective Green, g (s)	20.5	20.5			20.5		70.5	70.5		70.5	70.5	
Actuated g/C Ratio	0.20	0.20			0.20		0.70	0.70		0.70	0.70	
Clearance Time (s)	4.5	4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	285	327			292		74	3584		105	3520	
v/s Ratio Prot		0.23						0.38			0.54	
v/s Ratio Perm	c0.25				0.00		c1.23			0.05		
v/c Ratio	1.20	1.13			0.02		1.76	0.54		0.07	0.77	
Uniform Delay, d1	39.8	39.8			31.7		14.8	7.0		4.6	9.5	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	118.7	91.4			0.0		389.9	0.6		1.2	1.7	
Delay (s)	158.5	131.1			31.7		404.6	7.6		5.8	11.2	
Level of Service	F	F			C		F	A		A	B	
Approach Delay (s)		144.1			31.7			32.5			11.2	
Approach LOS		F			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1115	119	655	31	0	29	0	1154	38	40	2204	0
Future Volume (veh/h)	1115	119	655	31	0	29	0	1154	38	40	2204	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	1138	121	668	32	0	30	0	1178	39	41	2249	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	0
Cap, veh/h	1119	81	445	42	0	39	0	2281	76	225	2295	0
Arrive On Green	0.32	0.32	0.32	0.05	0.00	0.05	0.00	0.45	0.45	0.45	0.45	0.00
Sat Flow, veh/h	3456	249	1374	867	0	813	0	5245	168	459	5274	0
Grp Volume(v), veh/h	1138	0	789	62	0	0	0	790	427	41	2249	0
Grp Sat Flow(s),veh/h/ln	1728	0	1623	1681	0	0	0	1702	1840	459	1702	0
Q Serve(g_s), s	24.5	0.0	24.5	2.8	0.0	0.0	0.0	12.6	12.6	5.3	32.8	0.0
Cycle Q Clear(g_c), s	24.5	0.0	24.5	2.8	0.0	0.0	0.0	12.6	12.6	17.9	32.8	0.0
Prop In Lane	1.00		0.85	0.52		0.48	0.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	1119	0	526	81	0	0	0	1530	827	225	2295	0
V/C Ratio(X)	1.02	0.00	1.50	0.76	0.00	0.00	0.00	0.52	0.52	0.18	0.98	0.00
Avail Cap(c_a), veh/h	1119	0	526	622	0	0	0	1530	827	225	2295	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.6	0.0	25.6	35.6	0.0	0.0	0.0	14.9	14.9	21.4	20.5	0.0
Incr Delay (d2), s/veh	31.2	0.0	235.4	13.7	0.0	0.0	0.0	1.2	2.3	1.8	14.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	0.0	43.2	1.4	0.0	0.0	0.0	4.7	5.4	0.7	14.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	260.9	49.3	0.0	0.0	0.0	16.2	17.2	23.1	35.1	0.0
LnGrp LOS	F	A	F	D	A	A	A	B	B	C	D	A
Approach Vol, veh/h		1927			62			1217			2290	
Approach Delay, s/veh		140.4			49.3			16.6			34.9	
Approach LOS		F			D			B			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.5		29.0		38.5		8.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		34.0		24.5		34.0		28.0				
Max Q Clear Time (g_c+I1), s		14.6		26.5		34.8		4.8				
Green Ext Time (p_c), s		8.3		0.0		0.0		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			68.0									
HCM 6th LOS			E									

Intersection	
Int Delay, s/veh	2.5

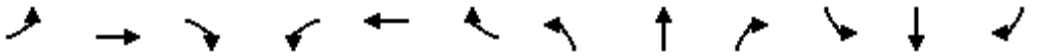
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	0	71	21	0	11	32	1194	11	21	2730	95
Future Vol, veh/h	18	0	71	21	0	11	32	1194	11	21	2730	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	0	77	23	0	12	35	1298	12	23	2967	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3654	4445	1535	2607	4490	655	3070	0	0	1310	0	0
Stage 1	3065	3065	-	1374	1374	-	-	-	-	-	-	-
Stage 2	589	1380	-	1233	3116	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	~ 5	1	90	26	1	350	35	-	-	277	-	-
Stage 1	~ 6	28	-	109	211	-	-	-	-	-	-	-
Stage 2	421	210	-	168	27	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	90	-	0	350	35	-	-	277	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 6	26	-	109	0	-	-	-	-	-	-	-
Stage 2	-	0	-	~ 22	25	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s			8.3	0.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	35	-	-	-	-	277	-	-
HCM Lane V/C Ratio	0.994	-	-	-	-	0.082	-	-
HCM Control Delay (s)	$ 320.9	-	-	-	-	19.2	-	-
HCM Lane LOS	F	-	-	-	-	C	-	-
HCM 95th %tile Q(veh)	3.6	-	-	-	-	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	1195	139	259	674	228	282	763	308	417	1295	1110
Future Volume (vph)	243	1195	139	259	674	228	282	763	308	417	1295	1110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lane Util. Factor	1.00	0.91		1.00	0.91		0.97	0.91		0.97	0.86	0.86
Frt	1.00	0.98		1.00	0.96		1.00	0.96		1.00	0.96	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	5006		1770	4893		3433	4866		3433	4590	1362
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	5006		1770	4893		3433	4866		3433	4590	1362
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	251	1232	143	267	695	235	291	787	318	430	1335	1144
RTOR Reduction (vph)	0	15	0	0	61	0	0	73	0	0	77	37
Lane Group Flow (vph)	251	1360	0	267	869	0	291	1032	0	430	1830	535
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	6.5	33.2		6.5	33.2		5.5	36.0		5.5	36.0	42.5
Effective Green, g (s)	6.5	33.2		6.5	33.2		5.5	36.0		5.5	36.0	42.5
Actuated g/C Ratio	0.07	0.33		0.07	0.33		0.06	0.36		0.06	0.36	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	115	1675		115	1637		190	1765		190	1665	645
v/s Ratio Prot	0.14	c0.27		c0.15	0.18		0.08	0.21		c0.13	c0.40	0.05
v/s Ratio Perm												0.34
v/c Ratio	2.18	0.81		2.32	0.53		1.53	0.58		2.26	1.10	0.83
Uniform Delay, d1	46.4	30.2		46.4	26.7		46.9	25.6		46.9	31.6	25.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	559.6	3.1		621.1	0.3		263.9	1.4		584.9	54.4	8.7
Delay (s)	606.0	33.3		667.5	27.0		310.8	27.0		631.8	86.0	33.8
Level of Service	F	C		F	C		F	C		F	F	C
Approach Delay (s)		121.7			169.9			86.1			156.4	
Approach LOS		F			F			F			F	

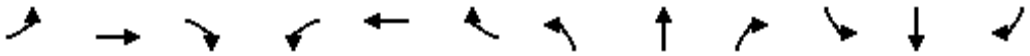
Intersection Summary			
HCM 2000 Control Delay	137.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	99.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	954	79	207	316	80	118	1068	460	225	1252	89
Future Volume (vph)	70	954	79	207	316	80	118	1068	460	225	1252	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.95		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3499		1770	3432		1770	4856		1770	5035	
Flt Permitted	0.50	1.00		0.11	1.00		0.13	1.00		0.12	1.00	
Satd. Flow (perm)	934	3499		205	3432		235	4856		217	5035	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1037	86	225	343	87	128	1161	500	245	1361	97
RTOR Reduction (vph)	0	6	0	0	22	0	0	78	0	0	8	0
Lane Group Flow (vph)	76	1117	0	225	408	0	128	1583	0	245	1450	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	36.3	31.9		45.6	36.7		39.1	31.7		44.5	34.4	
Effective Green, g (s)	36.3	31.9		45.6	36.7		39.1	31.7		44.5	34.4	
Actuated g/C Ratio	0.36	0.32		0.45	0.36		0.39	0.31		0.44	0.34	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	372	1106		235	1248		203	1525		251	1716	
v/s Ratio Prot	0.01	0.32		c0.09	0.12		0.05	0.33		c0.10	0.29	
v/s Ratio Perm	0.06			c0.35			0.20			c0.33		
v/c Ratio	0.20	1.01		0.96	0.33		0.63	1.04		0.98	0.85	
Uniform Delay, d1	21.6	34.5		25.3	23.2		23.1	34.6		26.2	30.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	29.5		46.4	0.2		6.2	33.5		49.6	5.3	
Delay (s)	21.9	64.0		71.7	23.3		29.3	68.1		75.8	36.1	
Level of Service	C	E		E	C		C	E		E	D	
Approach Delay (s)		61.3			39.9			65.3			41.8	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	1453	143	149	714	144	172	1010	133	259	950	149
Future Volume (vph)	173	1453	143	149	714	144	172	1010	133	259	950	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	5017		1770	4957		1770	4996		1770	4982	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	5017		1770	4957		1770	4996		1770	4982	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	177	1483	146	152	729	147	176	1031	136	264	969	152
RTOR Reduction (vph)	0	11	0	0	30	0	0	17	0	0	21	0
Lane Group Flow (vph)	177	1618	0	152	846	0	176	1151	0	264	1100	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.5	33.0		6.5	33.0		6.5	34.0		8.5	36.0	
Effective Green, g (s)	6.5	33.0		6.5	33.0		6.5	34.0		8.5	36.0	
Actuated g/C Ratio	0.06	0.33		0.06	0.33		0.06	0.34		0.08	0.36	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	115	1655		115	1635		115	1698		150	1793	
v/s Ratio Prot	c0.10	c0.32		0.09	0.17		0.10	c0.23		c0.15	0.22	
v/s Ratio Perm												
v/c Ratio	1.54	0.98		1.32	0.52		1.53	0.68		1.76	0.61	
Uniform Delay, d1	46.8	33.1		46.8	27.1		46.8	28.3		45.8	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	281.2	16.9		193.0	0.3		277.5	2.2		367.8	1.6	
Delay (s)	327.9	50.0		239.8	27.3		324.3	30.5		413.6	27.9	
Level of Service	F	D		F	C		F	C		F	C	
Approach Delay (s)		77.2			58.8			69.0			101.4	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	77.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX C – OPENING YEAR 2026 TRAFFIC VOLUMES

Opening Year 2026 Without Project Volumes - AM Peak Hour

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Hawthorne Blvd / Lennox Blvd	0	0	0	6	0	0	0	83	0	0	46	4
2	Hawthorne Blvd / Imperial Hwy	213	741	202	154	864	332	161	546	92	140	903	161
3	I-105 EB On-ramp / Imperial Hwy	37	104	14	0	0	0	327	467	14	17	1,259	559
4	Prairie Ave / Lennox Blvd	190	1,759	5	0	1,445	243	273	0	228	0	10	10
5	Prairie Ave / I-105 EB & WB Off-ramps	0	1,146	23	25	1,868	0	691	36	303	72	0	53
6	Prairie Ave / 113th St	11	1,131	11	21	2,219	11	0	0	11	21	0	11
7	Prairie Ave/ Imperial Hwy	408	780	190	218	900	1,134	153	386	66	322	1,609	219
8	Prairie Ave / 120th St	0	57	0	0	35	0	0	0	0	0	0	0
9	Crenshaw Blvd / Imperial Hwy	154	608	57	184	935	200	150	569	116	127	1,413	170

Opening Year 2026 Without Project Volumes - PM Peak Hour

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Hawthorne Blvd / Lennox Blvd	274	1,068	138	180	1,228	105	86	577	355	76	376	104
2	Hawthorne Blvd / Imperial Hwy	150	726	333	223	1,201	183	116	1,425	122	134	349	115
3	I-105 EB On-ramp / Imperial Hwy	28	206	37	0	0	0	496	1,419	23	40	586	758
4	Prairie Ave / Lennox Blvd	117	1,780	3	6	2,207	303	315	18	325	1	1	11
5	Prairie Ave / I-105 EB & WB Off-ramps	0	1,147	38	40	2,194	0	1,115	119	582	31	0	29
6	Prairie Ave / 113th St	11	1,194	11	21	2,730	11	11	0	11	21	0	11
7	Prairie Ave/ Imperial Hwy	282	758	308	410	1,292	1,060	238	1,195	139	259	674	218
8	Prairie Ave / 120th St	118	1,063	460	225	1,249	89	70	954	79	207	316	80
9	Crenshaw Blvd / Imperial Hwy	167	1,010	133	259	950	149	173	1,450	140	149	709	144

Opening Year 2026 With Project Volumes - AM Peak Hour

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Hawthorne Blvd / Lennox Blvd	0	0	0	8	0	0	0	83	0	0	46	10
2	Hawthorne Blvd / Imperial Hwy	213	741	204	154	864	332	161	546	92	146	903	161
3	I-105 EB On-ramp / Imperial Hwy	37	104	14	0	0	0	327	469	14	17	1,265	584
4	Prairie Ave / Lennox Blvd	196	1,765	5	0	1,447	243	273	0	230	0	10	10
5	Prairie Ave / I-105 EB & WB Off-ramps	0	1,159	23	25	1,872	0	691	36	329	72	0	53
6	Prairie Ave / 113th St	18	1,131	11	21	2,219	41	13	0	124	21	0	11
7	Prairie Ave/ Imperial Hwy	408	782	190	231	906	1,228	155	386	66	322	1,609	223
8	Prairie Ave / 120th St	0	59	0	0	41	0	0	0	0	0	0	0
9	Crenshaw Blvd / Imperial Hwy	156	608	57	184	935	200	150	575	122	127	1,415	170

Opening Year 2026 With Project Volumes - PM Peak Hour

#	Intersection	Northbound			Southbound			Eastbound			Westbound		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Hawthorne Blvd / Lennox Blvd	274	1,068	138	185	1,228	105	86	577	355	76	376	107
2	Hawthorne Blvd / Imperial Hwy	150	726	338	223	1,201	183	116	1,425	122	137	349	115
3	I-105 EB On-ramp / Imperial Hwy	28	206	37	0	0	0	496	1,424	23	40	589	771
4	Prairie Ave / Lennox Blvd	120	1,783	3	6	2,212	303	315	18	330	1	1	11
5	Prairie Ave / I-105 EB & WB Off-ramps	0	1,154	38	40	2,204	0	1,115	119	655	31	0	29
6	Prairie Ave / 113th St	32	1,194	11	21	2,730	95	18	0	71	21	0	11
7	Prairie Ave/ Imperial Hwy	282	763	308	417	1,295	1,110	243	1,195	139	259	674	228
8	Prairie Ave / 120th St	118	1,068	460	225	1,252	89	70	954	79	207	316	80
9	Crenshaw Blvd / Imperial Hwy	172	1,010	133	259	950	149	173	1,453	143	149	714	144

APPENDIX D – CUMULATIVE PROJECT TRIP GENERATION

Cumulative Projects Trip Generation

	Land Use (ITE Code)	Size	Trip Generation Rates							Trip Generation						
			AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total	
1	1050 South Prairie Ave		Trip Generation acquired from Hollywood Park traffic study													
	Hollywood Park Project									1,416	856	2,272	2,290	2,996	5,286	N/A
2	11111 South Prairie Ave	120														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	33	23	56	37	35	72	1,003
3	Prairie/Century		Trip Generation acquired from Murphy Bowl traffic study													
	Murphy Bowl (non-event)									231	63	294	161	248	409	4,706
4	1050 South Prairie Ave	5,750	Shoping Center (820) use, fitted curve equations, assuming 30% internal trip capture													
	Hollywood Park Phase II	tsf								1,314	805	2,119	3,661	3,966	7,627	66,175
5	3700 102nd St	79.415														
	Self Storage Facility*	tsf	71%	29%	0.26	47%	53%	0.52	6.30	15	6	21	19	22	41	500
6	3820 West 102nd St	300														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	83	58	141	92	88	180	2,508
7	4041 West Century Blvd	145														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	40	28	68	44	43	87	1,212
8	4200 West Century Blvd	129														
	Multifamily Housing Mid Rise (221)	du	23%	77%	0.37	61%	39%	0.39	4.54	11	37	48	31	20	50	586
		175														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	49	34	82	54	51	105	1,463
9	11143 South Prairie Ave	104														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	29	20	49	32	31	62	869
10	3846 West Century Blvd	79.415														
	Self Storage Facility*	tsf	71%	29%	0.26	47%	53%	0.52	6.30	15	6	21	19	22	41	500
11	3624 West Century Blvd	150														
	Hotel (310)	room	59%	41%	0.47	51%	49%	0.6	8.36	42	29	71	46	44	90	1,254