1. INTRODUCTION

This section describes the existing transportation conditions, applicable laws and regulations associated with transportation, and analysis of the potential effects resulting from implementation of the Project. Information from the Traffic Impact Analysis, prepared by Fehr & Peers dated March 2021 (Appendix IV.M.1), is incorporated into this section.

2. ENVIRONMENTAL SETTING

Existing Conditions

Regional Access

Primary regional access to the Project Site is provided by Interstate 405 (I-405) and Interstate 710 (I-710). The roadway network in the vicinity of the Project Site is shown in Figure IV.M-1: Local Highway and Roadway Connections. The Project Site is bounded by I-405 on the north, Golden Avenue on the east, the Los Angeles River on the west, and Wardlow Road to the south. The I-710 (Long Beach Freeway) connects from Harbor Scenic Drive near Wilmington north along the Los Angeles River to East Los Angeles. It continues north away from the river before ending near Interstate 10 (I-10) at Alhambra. The I-405 is the main north/south freeway in the western portion of Los Angeles County.

Additionally, the Los Angeles (LA) Metro also provides bus and rail service in the vicinity of the Project Site. The Metro rail system operates exclusively within LA County and includes a transportation hub located in Downtown Los Angeles at Union Station. LA Metro bus routes 60 and 2020, as well as the LA Metro Blue/A Rail line serve the Project vicinity. LA Metro Rail provides a connection between Downtown Long Beach and Downtown Los Angeles.
Highways and Local Streets

Highways

Interstate 405 (I-405) is a major north-south highway that extends for seventy-two miles through Los Angeles and Orange Counties, from Irvine to the south and San Fernando to the north. It’s also known as the northern portion of the San Diego Freeway. The number of lanes on the I-405 varies between 4 and 5 travel lanes in each direction. Access to the Project Site from I-405 is provided via North Pacific Place.

Interstate 710 (I-710) is a major north-south highway that extends for approximately 23 miles through Los Angeles County from the Port of Long Beach to the south and Alhambra/Pasadena to the north. It’s also known as the Los Angeles River Freeway. The number of lanes on the I-710 varies between 3 and 4 travel lanes in each direction. The facility serves a large number of trucks and freight facilities, including the Ports of Los Angeles and Long Beach (or the San Pedro Bay Ports). Access to the Project Site from I-710 is provided via Wardlow Road.

Local Streets

Wardlow Road is a four-lane undivided roadway west of Cherry Avenue and a four-lane divided roadway east of Cherry Avenue. Wardlow Road provides east–west connectivity between Cherry Avenue and Walnut Avenue. Wardlow Road also extends to the eastern portion of the Project Site, and bisects buildings 1 and 2, and terminates at the LGB airport. Wardlow Road continues just east of the Lakewood Boulevard. On-street parking is generally permitted on both sides of the street west of Cherry Avenue. The posted speed limit on Wardlow Road is 35 mph west of Cherry Avenue and 30 mph east of Cherry Avenue. Sidewalks are generally provided on both sides of the roadway within the Projects’ vicinity. Crosswalks are generally provided at all signalized intersections. The City’s Mobility Element designates Wardlow Road as a Major Avenue west of Long Beach Boulevard and a Minor Avenue east of Long Beach Boulevard.

Magnolia Avenue is a two-lane, north/south running avenue, with a shared left-turn center median. Magnolia Avenue, which provides on-street parking south of Wardlow Road, connects to the Wrigley Heights neighborhood north of Wardlow Road. The posted speed limit along Magnolia Avenue, south of Wardlow Road, is 35 mph. The adjacent land use of this section of Magnolia Avenue is primarily residential. The City’s Mobility Element designates Magnolia Avenue as a Neighborhood Connector north of Pacific Coast Highway and a Minor Avenue south of Pacific Coast Highway.

Pacific Place/Pacific Avenue is a minor avenue that extends from Spring Street in the South (where it converts to Pacific Avenue) to the I-405/I-710 on-off ramps in the north. Pacific Place/Pacific Avenue is a four-lane roadway that runs parallel with the LA Metro light-rail A Line. On-street parking is provided along some of the segments, with a posted speed limit is 40 mph. At Wardlow Road, Pacific Place runs in a
northwest/southeast diagonal direction, with a horizontal roadway curvature as it approaches Spring Street to the south. The City’s Mobility Element designates Pacific Place/Pacific Avenue as a Major Avenue south of Pacific Coast Highway and a Minor Avenue north of Pacific Coast Highway.

**Spring Street** is designated by the City’s Mobility Element as a Neighborhood Connector west of Pacific Avenue, a Minor Avenue between Pacific Avenue and Long Beach Boulevard, and a Major Avenue east of Long Beach Boulevard. Between Long Beach Boulevard and Pacific Avenue there is an at-grade rail crossing for the LA Metro A Line with gates that stop traffic along Spring Street.

**Long Beach Boulevard** is a Regional Truck Route that runs adjacent to the I-710 corridor from Downtown Long Beach in the south to the 91 and 105 freeways in the north. There are on/off ramps for the I-405 freeway at Long Beach Boulevard & Wardlow Road. Long Beach Boulevard is primarily a four-lane Boulevard, that opens up to a six-lane roadway for a short section south and north of Wardlow Road. The City’s Mobility Element designates Long Beach Boulevard as a Boulevard.

**Atlantic Avenue** is a four-lane boulevard that extends from Downtown Long Beach in the south to the 91 and 105 freeways in the north. There are on/off ramps for the I-405 freeway on Atlantic Avenue, south of Wardlow Road. The adjacent land uses along Atlantic Avenue in the study area is primarily commercial. The City’s Mobility Element designates Atlantic Avenue as a Major Avenue.

**Site Access**

The Project Site is located in the Wrigley Heights community, bounded by Wardlow Road to the south, the Los Angeles River to the west, the I-405 freeway to the north, and Golden Avenue to the east. Existing access to the Site is provided at the intersection of Baker Street and Golden Avenue. The access is currently gated and is accessed occasionally by City maintenance vehicles. Baker Street is also designated as an additional access point for emergency vehicles.
Intersections

The study area and analyzed intersections were determined based on trip generation, trip distribution, and trip assignment estimates developed for the proposed Project. Traffic operations were evaluated, for Site access and circulation purposes, at the following seven intersections in the vicinity of the Project Site (see Figure IV.M-2: Project Study Area Intersection Locations). The following study locations were selected in consultation with the City of Long Beach staff:

1. Santa Fe Avenue and Wardlow Road (signalized)
2. Magnolia Avenue and Wardlow Road (signalized)
3. Pacific Place and Wardlow Road (signalized)
4. Long Beach Boulevard and Wardlow Road (signalized)
5. Atlantic Avenue and Wardlow Road (signalized)
6. Magnolia Avenue and Spring Street (signalized)
7. Pacific Avenue and Spring Street (signalized)

Public Transportation

Long Beach Transit (LBT) and LA Metro provide public transit services in the vicinity of the Project Site. Although Wardlow Road is classified as a Secondary Transit Route, there are no stops or routes fronting the Project Site. The nearest bus stop is located east of the Project Site at southeast Magnolia Avenue & Wardlow Road, where LBT Route 181 operates.

LA Metro provides bus and rail service in the vicinity of the Project Site. LA Metro bus routes 60 and 2020, as well as the LA Metro Blue/A Rail line. LA Metro Rail provides a connection between Downtown Long Beach and Downtown Los Angeles. The Wardlow A line station is approximately 0.5-mile east of the Project Site at Pacific Place & Wardlow Road. Figure IV.M-3: Existing Transit Routes illustrates the existing Metro transit, Metro Bus, and LB Transit routes in the Project vicinity.

Public Transportation Site Access

Near the Project Site, at the Wardlow Metro Station on Pacific Place, is the Wardlow Station Bay 3. Bus Routes 181 and 182 operate at this Bay. LBT bus routes that serve routes in the vicinity of Project Site include the following:

- Route 192: This route operates daily via Santa Fe Avenue
- Route 131: This route operates daily along Wardlow Road, east of Pacific Place
- Route 181: This route operates daily via Magnolia Avenue
Multimodal

Bike

The City has an extensive network of bicycle facilities consisting of 15 miles of bike routes, 19 miles of bike lanes, and 29 miles of bike paths. The City also has priority “8-to-80” bike facilities. Per the City’s 2040 Bicycle Master plan, these bikeways are designed so that anyone between the ages of 8 and 80 years of age can ride in the facility safely and comfortably. In addition to the on-street bicycle network, the City of Long Beach has over 60 miles of off-street bike and pedestrian paths within its boundaries. In total, the city has approximately 156 miles of bikeways. Figure IV.M-4: Existing and Proposed Bikeways shows the existing and proposed bikeways within the Project vicinity.

Bicycle facilities in the City of Long Beach are as follows:

- **Class I Bikeways (Bike Paths)**

  Class I bicycle facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed. A Class I Bike Path may parallel a roadway (within the parkway) or may be a separate right-of-way that meanders through a neighborhood or along a flood control channel or utility right-of-way.

- **Class II Bikeways (Bike Lanes)**

  Class II bicycle facilities are striped lanes that provide bike travel and can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a bike lane adjacent to a parking lane can be four feet in width. Bike lanes are exclusively for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.

- **Class III Bikeways (Bike Routes)**

  Class III Bikeways are streets providing for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage both by the side of the street and stenciled on the roadway surface alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route.

- **Class IV Bikeways (Cycle Tracks)**

  Class IV bicycle facilities, sometimes called cycle tracks or separated bikeways, provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and are protected from vehicular traffic via separations (e.g. grade separation, flexible posts, inflexible physical barriers, on-street parking). California Assembly Bill 1193 (AB 1193) legalized and established design standards for Class IV bikeways in 2015.
FIGURE IV.M-2

Project Study Area Intersection Locations

Existing and Proposed Bikeways

Existing Class III-A Bikeway
(Bike Boulevard)

Existing Class I Bikeway
(Shared-Use Path)

Existing Class II Bikeway
(Bicycle Lane)

Existing Class III Bikeway
(Bicycle Route)

Proposed Class III-A Bikeway
(Bike Boulevard)

Proposed Class I Bikeway
(Shared-Use Path)

Proposed Class II Bikeway
(Bicycle Lane)

Proposed Class III-B Bikeway
(Sharrows)

Proposed Class III Bikeway
(Bicycle Route)

To Be Determined

Source: River Park Traffic Impact Analysis – Fehr & Peers - 2020

Figure IV.M-4
**Bike Share Program**

The City of Long Beach launched the “Long Beach Bike Share Program” in March 2016 as part of its effort to enhance mobility options and bicycle infrastructure. The bike share program includes approximately 472 bikes and 82 stations, with the nearest stations located just over 1-mile east of the Project Site on Bixby Road, Wardlow Road and Atlantic Avenue. Users have the option of renting the bike on an hourly basis for $7.00 or purchasing either of the following plans—a membership monthly plan for $15, which includes 90 minutes of daily use time, or an annual plan for $120, which includes 90 minutes of daily use. Up to six persons can share one membership account. Prospective users can assess availability of bicycles at a station via a mobile phone app. Within the vicinity of the proposed Project, stations are located at the following intersections:

- Bixby Road & Long Beach Boulevard
- Wardlow Road & Pacific Avenue
- Atlantic Avenue & Carson Street

**Pedestrian**

The City has goals, policies, and implementation measures designed to create a system of complete streets that support and encourage all mobility users, regardless of age or ability, including pedestrians, bicyclists, and transit riders. Pedestrian facilities in the study area include sidewalks, crosswalks, and pedestrian signals. The major streets that provide access to the proposed Project include Wardlow Road, Magnolia Avenue, and Baker Street. Sidewalks are provided on both sides of these streets, except for portions of Wardlow Road (between Magnolia Avenue and the Project Site). Although, this section does have an adjacent local access road with sidewalk that is separated by a concrete, landscaped median, as well as a sidewalk on the south side of Wardlow Road between Maine Avenue and the Project Site. At the signalized intersections in the area, crosswalks, and pedestrian push-button actuated signals are provided.

The proposed Project is located immediately east of the LA River, which provides an eastern walking path adjacent to the river itself and pedestrian access to local greenspace amenities (for example, the Dominguez Gap Wetlands located approximately one-half mile north of the proposed Project). There are no walking trails on the western side of the LA River, which is parallel to the 710 freeway. The closest existing pedestrian entrance to the LA River (Wrigley Greenbelt) is situated at the northwestern corner of De Forest Avenue and West 34th Street, located south of the proposed Project and Wardlow Road. Pedestrians departing from the Project Site must walk approximately 0.7 miles to reach the Wrigley Greenbelt entrance, crossing at Magnolia Avenue (east of the Project Site and the LA River). Other pedestrian access points within approximately a mile of the Project Site include: the Del Mar Avenue &
North Virginia Avenue entrance (north of the Project Site and the 405 freeway) and the De Forest Avenue and 26th Way entrance (south of the Project Site, immediately north of Willow Street). Within the Project Site, there is an unpaved path along Baker Street that provides direct access to the LA River walking path.

There also currently exists a public dog park on the north side of Wardlow Road, adjacent to the Project Site. The Wrigley Heights dog park, located at 3401 Golden Avenue, is approximately two acres in size and can be accessed via Golden Avenue. Existing mulch makes up the surface material, while the perimeter and division of the Site is identified by painted chain link fencing. The park is separated by Wardlow Road by an enclosed chain link fence. There is no existing sidewalk on the north side of Wardlow Road at this location. The dog park is accessed via the Golden Avenue south parking driveway, which parallels Wardlow Road. Additionally, a second gated pedestrian access point is provided to the north, along Golden Avenue -approximately at the mid-point of the dog park. The existing neighborhood Baker Street park at Baker Street & Golden Avenue is located east of the Project Site, adjacent to the proposed open space portion of the Project.

**Multimodal Site Access**

There currently exists Class IV protected bike lane facilities along Wardlow Road, in both directions, east of the Project Site. The bike lane on the south side of Wardlow Road, in the eastbound direction, begins east of the Project’s main driveway -east of 34th Street and continues east past Wardlow Road. The bike lane on the north side of Wardlow Road, in the westbound direction, begins east of Pacific Place and ends at Magnolia Avenue. Within the study area, Class II bikeways are planned along Wardlow Road, fronting the Project Site, per the City’s Bike Master Plan. Other bike facilities are planned for Magnolia Avenue, but the type of classification is still too be determined.

The major roads within the Project vicinity—Wardlow Road, Magnolia Avenue, and Baker Street—provide sidewalks on either side of the road for pedestrian access. The proposed Project is also located adjacent to the Los Angeles River which provides an eastern walking path adjacent to the river itself and pedestrian access to local greenspace amenities such as the Dominguez Gap Wetlands located approximately one-half mile north of the Project Site. Other pedestrian access points to the Los Angeles River, within approximately a mile of the Project Site include: the Del Mar Avenue & North Virginia Avenue entrance (north of the Project Site and the 405 freeway) and the De Forest Avenue and 26th Way entrance (south of the Project Site, immediately north of Willow Street). Within the Project Site, there is an informal path along Baker Street that provides direct access to the LA River walking path. There are two parks located north and south of the Project Site that include access by roadway.
3. REGULATORY SETTING

State

SB 743

As a result of SB 743, the new recommended metric in the CEQA guidelines for transportation impacts is Vehicle Miles Traveled (VMT) per capita. The legislative intent of SB 743 is to balance the needs of congestion management with Statewide goals for infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

Vehicle Miles Traveled (VMT)

On December 28, 2018, the California Natural Resources Agency adopted revised CEQA Guidelines. Among the changes to the guidelines was the removal of vehicle delay and LOS from consideration for transportation impacts under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project’s effect on vehicle miles traveled. Lead agencies are allowed to continue using their current impact criteria, or to opt into the revised transportation guidelines. However, the new guidelines must be used starting July 1, 2020, as required in CEQA section 15064.3.

Local

Traffic Impact Analysis Guidelines

The City of Long Beach Department of Public Works requires Applicants to analyze the traffic and circulation impacts of proposed development projects, General Plan Amendments (GPAs), Specific Plans (SPs), and other planned development to comply with the California Environmental Quality Act (CEQA) and City regulations. These requirements shall be satisfied through the preparation of a Traffic Impact Analysis (TIA) document prepared in conformance with the Department of Public Works, Traffic Engineering Division requirements as described in the TIA.

The City of Long Beach Traffic Impact Analysis Guidelines provide direction for review consistent with the General Plan Mobility Element vision that “Plans, maintains, and operates mobility systems consistent with the principles of complete streets, active living, and sustainable community design.” The TIA Guidelines identify the suggested format and methodology that is generally required to be utilized in the study preparation, subject to amendment. The purpose of these guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented regarding the proposed development project.
City of Long Beach General Plan – Mobility Element

The City of Long Beach General Plan Mobility Element, updated in 2013, establishes the vision, goals, policies, and implementation measures required to improve and enhance the city’s local and regional transportation networks. The Mobility Element describes LOS as the system the City of Long Beach uses to measure the efficiency and performance of traffic operations at a specific location.

City of Long Beach Municipal Code

Construction Traffic

Chapter 8.80.202 of the Long Beach Municipal Code (LBMC) limits construction activities to occur between the hours of 7:00 A.M. and 7:00 P.M. on weekdays and from 9:00 A.M. to 6:00 P.M. on Saturdays and national holidays. No construction is permitted on Sundays.

4. ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assess whether a project would have a significant effect on the environment, the Project would be analyzed using vehicle miles traveled (VMT) per capita and would be determined to have a significant impact to traffic and transportation if it would:

Threshold TRA-1: Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Threshold TRA-2: Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

Threshold TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Threshold TRA-4: Result in inadequate emergency access?

5. METHODOLOGY

The methodology and base assumptions used in this analysis were established in consultation with the City of Long Beach and in accordance with the Long Beach TIA Guidelines. The City of Long Beach has developed several screening thresholds for land development projects. The State Office of Planning and Research (OPR) finalized the revisions to the CEQA Guidelines in accordance with Senate Bill (SB) 743, which replaces automobile delay and Level of Service (LOS) with Vehicle Miles Traveled (VMT) as the new metric of analysis. With implementation of the SB 743 guidelines, the LOS analysis requirements would not affect the CEQA transportation impacts analysis and would be fully separate from CEQA except where
deemed necessary to determine whether a proposed project would result in hazards due to geometric design features or inadequate emergency access.¹ The screening criteria, VMT analysis, thresholds and mitigation presented below are in accordance with the City’s TIA guidelines adopted in July, 2020.

**Vehicle Miles Traveled (VMT)**

OPR finalized the revisions to the CEQA Guidelines in accordance with SB 743, which replaces automobile delay and LOS with VMT as the new metric of analysis. The screening criteria, VMT analysis, thresholds and mitigation are in accordance with the City’s TIA guidelines adopted in July, 2020. Both a Project-level and cumulative assessment was performed using the SCAG adopted 2016 RTP/SCS Travel Demand Model. The Project VMT impact analysis includes: (1) Determining the appropriate metric and corresponding threshold of significance, (2) Calculating the Project VMT, (3) Determining the impact significance, and, if applicable, (4) Recommend appropriate mitigation measures.

Based on the proposed residential land use of the Project, the metric of analysis would include the following:

- Residential Uses – VMT per capita calculated as the total home-based productions VMT divided by the population of the proposed Project.

Based on the City’s TIA guidance, a project generating 1,000 average daily trips (ADT) or more should use a traffic-forecasting tool, such as the SCAG’s 2016 RTP/SCS travel demand model. Such a tool can more appropriately define the select links used and the total VMT generated by the proposed Project. For this study, the SCAG 2016 base year travel demand model was utilized to estimate the residential VMT per capita for the proposed Project.

**Level of Service (LOS)**

Pursuant to CEQA, VMT is now the only metric used to identify transportation impacts under CEQA. Analysis of the prior metric of LOS is no longer required under CEQA. However, the City continues to require an analysis of a project’s impacts on the operations of roadway facilities, which are described in terms of the volume-to capacity ratios (the volume of traffic compared to the capacity of the roadway to accommodate traffic) and corresponding LOS for each of the study intersections during the weekday AM and PM peak hours in order to confirm acceptable operations of the roadway facilities and identify LOS deficiencies. Accordingly, even though no longer required by CEQA, this EIR includes an analysis of the

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proposed Project’s impacts on LOS on area roadways for purposes of transportation planning and to ensure that no hazardous conditions are created by the Project, as discussed under threshold TRA-3.

**Traffic Impact Analysis Guidelines**

The City of Long Beach Department of Public Works requires Applicants to analyze the traffic and circulation impacts of proposed development projects, GPPAs, SPs, and other planned development to comply with the CEQA and City regulations. These requirements shall be satisfied through the preparation of a TIA document prepared in conformance with the Department of Public Works, Traffic Engineering Division requirements as described in the TIA.

The City of Long Beach Traffic Impact Analysis Guidelines provide direction for review consistent with the General Plan Mobility Element vision that “Plans, maintains, and operates mobility systems consistent with the principles of complete streets, active living, and sustainable community design.” The TIA Guidelines identify the suggested format and methodology that is generally required to be utilized in the study preparation, subject to amendment. The purpose of these guidelines is to establish procedures to ensure consistency of analysis and the adequacy of information presented regarding the proposed development project.

**Project Trip Generation Forecast**

Trip generation refers to the process of estimating the amount of vehicular traffic a proposed project would add to the local roadway network. For this analysis, trip generation was estimated for typical daily, weekday AM peak and PM peak hours. Trip generation rates from Trip Generation, 10th Edition (Institute of Transportation Engineers, 2017) were used to estimate the number of peak hour trips associated with the Project. With implementation of the SB743 guidelines, the LOS analysis requirements would not affect the CEQA transportation impacts analysis previously presented and would be fully separate from CEQA. The development of peak hour vehicular traffic estimates for the Project involves the use of a three-step process: trip generation, trip distribution, and traffic assignment.

The proposed Project includes the following land uses:

- A total of 226 dwelling units: 53 Carriage Townhouses, 99 Row Townhouses, and 74 Individual Condominium Units. The total Site area is 20.34 acres, which includes 15.53 acres of developed area and 4.81 acres of open space. A total of 514 parking stalls would be provided, including 452 off-street parking (i.e., garage), 59 on-street parking (on private streets within the development) for visitors/guests and 3 van accessible ADA (Americans with Disabilities Act) stalls. Internal circulation would be provided via several newly constructed private streets, along with pedestrian sidewalk infrastructure.
The total number of trips generated by the new development were adjusted to account for transit, given the Project Site’s close proximity (0.5-mile) to the LA Metro Wardlow A Line station.

**Project Trip Distribution and Assignment**

The geographic distribution of trips generated by the proposed Project is dependent on characteristics of the street system serving the Project Site; the level of accessibility of routes to and from the Project Site; and location of employment areas for which residents of the housing units would be drawn. A select zone analysis was conducted for the proposed uses to inform the general distribution pattern for this study. The road network assignment of Project traffic volumes took into consideration the locations of the proposed Project driveways on Wardlow Road and Baker Street and the north Baker Street gated driveway for occasionally City maintenance vehicles. Additionally, this driveway is designated for emergency vehicle access. The trip distribution and assignment process is used to estimate how the trips generated by a project would be distributed.

**Analysis Years and Scenarios**

Pursuant to California Public Resources Code Section 21099(b)(2) and CEQA Guidelines Section 15064.3, “a project’s effect on automobile delay shall not constitute a significant environmental impact.” Nevertheless, this analysis provides a discussion of the proposed Project’s effects on background, proposed Project and cumulative LOS conditions for informational purposes, because they are relevant to consistency with City standards for the performance of the circulation system.

**Table IV.M-1: Intersection Level of Service Thresholds** represents the intersection level of service thresholds, as defined in the Highway Capacity Manual, 6th Edition, for both signalized and unsignalized intersections.

**Baseline (2020) Conditions**

Per the City’s TIA guidelines, the most recent available traffic conditions and physical geometry were used to determine existing conditions. Given the COVID-19 pandemic, and stay-at-home orders from the County, historical traffic counts were retrieved for several of the study intersections in coordination with the City.
### Table IV.M-1
Intersection Level of Service Thresholds

<table>
<thead>
<tr>
<th>#</th>
<th>Signalized Intersection Average Control Delay (sec/veh)</th>
<th>Unsignalized Intersection Average Control Delay (sec/veh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤ 10.0</td>
<td>≤ 10.0</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 10.1 to 20.0</td>
<td>&gt; 10.0 to 15.0</td>
</tr>
<tr>
<td>C</td>
<td>&gt; 20.1 to 35.0</td>
<td>&gt; 15.0 to 25.0</td>
</tr>
<tr>
<td>D</td>
<td>&gt; 35.1 to 55.0</td>
<td>&gt; 25.0 to 35.0</td>
</tr>
<tr>
<td>E</td>
<td>&gt; 55.1 to 80.0</td>
<td>&gt; 35.0 to 50.0</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 80.0</td>
<td>&gt; 50.0</td>
</tr>
</tbody>
</table>


Turning movement intersection counts for the AM and PM peak periods were collected at the 7 study intersections as follows:

- Intersection #1 – Santa Fe Avenue & Wardlow Road on May 23, 2018
- Intersection #2 – Magnolia Avenue & Wardlow Road on September 23, 2020
- Intersection #3 – Pacific Place & Wardlow Road on September 23, 2020
- Intersection #4 – Long Beach Boulevard & Wardlow Road on May 10, 2018
- Intersection #5 – Atlantic Avenue & Wardlow Road on September 23, 2020
- Intersections #6 – Magnolia Avenue & Spring Street on September 23, 2020
- Intersections #7 – Pacific Avenue & Spring Street on September 23, 2020

While the counts conducted in September of 2020 are not representative of typical weekday peak period traffic conditions, they provided a reasonable picture of the relative distribution of turning movement volumes at these locations. The 2020 counts were also adjusted accordingly by balancing the through movement volumes along Wardlow Road to match the observed through movements in 2018 (pre-COVID) at Long Beach Boulevard. A 0.4 percent annual growth rate factor was also applied to the 2018 counts at intersections #1 and #4 to reflect a 2020 existing baseline condition.

As part of the field inventory of the study area, Fehr & Peers also collected the following information:

- Lane configurations and signal phasing
- Adjacent land uses, as well existing pedestrian and bicycle facilities, including transit service
**Baseline Traffic Level of Service**

Traffic volumes, existing lane configurations, and signal timings were used to evaluate operations at the study intersections for Baseline AM and PM peak hour conditions. The results are summarized in Table IV.M-2, showing LOS and average delay per vehicle at the study intersections. All intersections operate at LOS D or better, except for Santa Fe Avenue & Wardlow Road in the PM peak hour (intersection #1), Long Beach Boulevard & Wardlow Road in the PM peak hour (intersection #4), and Atlantic Avenue & Wardlow Road in the PM peak hour (intersection #5).

According to Table IV.M-2: Existing Baseline Conditions Intersection Levels of Service of the City's Mobility Element 2035, Santa Fe Avenue & Wardlow Road (intersection #1) operates with LOS E during the PM peak hour. Moreover, the intersections specified in the City of Long Beach General Plan Mobility Element already operating at LOS E/F would be allowed to operate at existing levels.

**Opening Year (2026) Conditions**

To evaluate the potential effects of the proposed Project’s geometric design features and emergency access on opening year (2026) conditions, it was necessary to develop estimates of future traffic conditions in the area both without and with Project traffic. First, estimates of traffic growth were developed for the study area to forecast future conditions without the proposed Project. These forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the proposed Project (related projects).

These projected traffic volumes, identified herein as the Opening Year No Project conditions, represent the future baseline conditions without the proposed Project. The traffic generated by the proposed Project was then estimated and assigned to the surrounding street system. Project traffic was added to the Opening Year No Project conditions to form Opening Year Plus Project traffic conditions, which were analyzed to determine the incremental traffic effects attributable to the proposed Project itself. The assumptions and analysis methodology used to develop each of the future year scenarios discussed above are described in more detail in the following sections.
Table IV.M-2  
Existing Baseline Conditions Intersection Levels of Service

<table>
<thead>
<tr>
<th>#</th>
<th>Study Intersection</th>
<th>AM Peak Hour</th>
<th></th>
<th>PM Peak Hour</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Santa Fe Avenue &amp; Wardlow Road</td>
<td>31.8</td>
<td>C</td>
<td>76.6</td>
<td>E</td>
</tr>
<tr>
<td>2</td>
<td>Magnolia Avenue &amp; Wardlow Road</td>
<td>13.6</td>
<td>B</td>
<td>16.4</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>Pacific Place &amp; Wardlow Road</td>
<td>18.6</td>
<td>B</td>
<td>35.3</td>
<td>D</td>
</tr>
<tr>
<td>4</td>
<td>Long Beach Boulevard &amp; Wardlow Road</td>
<td>52.7</td>
<td>D</td>
<td>57.7</td>
<td>E</td>
</tr>
<tr>
<td>5</td>
<td>Atlantic Avenue &amp; Wardlow Road</td>
<td>32.6</td>
<td>C</td>
<td>&gt;120</td>
<td>F</td>
</tr>
<tr>
<td>6</td>
<td>Magnolia Avenue &amp; Spring Street</td>
<td>15.5</td>
<td>B</td>
<td>19.0</td>
<td>B</td>
</tr>
<tr>
<td>7</td>
<td>Pacific Avenue &amp; Spring Street</td>
<td>12.2</td>
<td>B</td>
<td>17.0</td>
<td>B</td>
</tr>
</tbody>
</table>

Notes: Intersection operations below LOS D are shown in **bold**.
Source: Fehr & Peers, River Park TIA, (March 2021). Refer to Appendix IV.M-1

**Background and Ambient Growth**

Based on the direction of City’s TIA guidelines, an ambient growth factor of 0.4 percent per year was applied to adjust the baseline year traffic volumes to reflect the effects of regional growth and development. This adjustment was applied to the baseline year (2020) traffic volume data to reflect the effect of ambient growth by the opening year 2026. Note, a 0.4 percent growth factor was also applied to the two study locations where 2018 historical counts were retrieved to adjust them to the baseline year (2020).

**Related Project Traffic Generation and Assignment**

Opening Year traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the Project Site prior to the buildout date of the proposed Project. The list of related projects was prepared based on data from the City.

- Self-Storage/RV Storage Facility at 3701 Pacific Place.
- Laserfiche Office Building at 3435 Long Beach Boulevard

**Trip Distribution**

The geographic distribution of the traffic generated by the related projects is dependent on several factors. These factors include the type and density of the proposed land uses, the geographic distribution of

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2 Delay (second per vehicle) and LOS estimated using HCM 6th Edition.
population from which employees and potential patrons of proposed commercial developments may be drawn, the locations of employment and commercial centers to which residents of residential projects may be drawn, and the location of the projects in relation to the surrounding street system. Additionally, if the traffic study or environmental document for a related project was available, the trip distribution from that study was used.

**Traffic Assignment**

Using the estimated trip generation and trip distribution patterns described above, traffic generated by the related projects was assigned to the street network.

**Opening Year No Project Traffic Volumes**

The Opening Year No Project traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and related projects traffic.

**Opening Year Operational Analysis**

The 2026 Opening Year No Project and Plus Project peak hour traffic volumes were analyzed to determine the projected LOS and queue lengths for the turn pockets for each of the analyzed intersections. The Project traffic volumes were added to the Opening Year No Project traffic projections, resulting in Opening Year (2026) Plus Project AM and PM peak hour traffic volumes. The Opening Year (2026) Plus Project scenario presents future traffic conditions with the completion of the proposed Project. Per the City’s TIA guidelines for project traffic analysis, the City has identified LOS D as the threshold for acceptable operating conditions for intersections. The following criteria was used to determine if the addition of Project traffic would be responsible for LOS deficiencies and whether feasible roadway modifications should be identified to improve performance:

- A signalized intersection to degrade from LOS D or better under baseline conditions to LOS E or LOS F with the addition of project trips in the opening year. On occasion, LOS E may be allowed for peak periods in very dense urban conditions (according to City guidelines) per the City’s discretion. The intersections specified in the City of Long Beach General Plan Mobility Element already operating at LOS E/F would be allowed to operate at existing levels, including intersection #1 -Santa Fe Avenue & Wardlow Road.
- The average delay to increase by 2.5 seconds or more at a signalized intersection operating at LOS E or LOS F under baseline conditions.
- Under project conditions, the 95th percentile queue length exceeds the available storage length at any turn bay.
Opening Year (2026) No Project Traffic Level of Service

Four of the seven study intersections are projected to operate at LOS D or better during the morning and afternoon peak hours under Opening Year (2026) No Project conditions. The following signalized intersections are projected to operate at LOS E or F under Opening Year (2026) No Project conditions:

1. Santa Fe Avenue & Wardlow Road – PM peak hour only
2. Long Beach Boulevard & Wardlow Road – AM and PM peak hours
3. Atlantic Avenue & Wardlow Road – PM peak hour only

Opening Year (2026) Plus Project Traffic Analysis

Four of the seven study intersections are projected to operate at LOS D or better during the morning and afternoon peak hours under Opening Year (2026) Plus Project conditions. The following signalized intersections are projected to operate at LOS E or F under Opening Year (2026) Plus Project conditions:

1. Santa Fe Avenue & Wardlow Road – PM peak hour only
2. Long Beach Boulevard & Wardlow Road – AM and PM peak hours
3. Atlantic Avenue & Wardlow Road – PM peak hour only

Per the City’s intersection performance criteria and LOS thresholds, the addition of Project traffic would be responsible for LOS deficiencies if a signalized intersection would degrade from LOS D or better under baseline conditions to LOS E or LOS F with the addition of Project trips in the opening year. As shown above, none of the study intersections are projected to degrade from LOS D or better with the addition of Project trips. Furthermore, at locations already operating with LOS E or LOS F under opening year baseline conditions, the average delay increases by less than 2.5 seconds with the addition of Project trips. Additionally, none of the study locations are projected to experience a deficient queuing movement at the turn bays with the addition of Project traffic in the opening year per the City’s performance criteria. Therefore, the addition of Project traffic would not be responsible for LOS deficiencies with respect to average delay the intersections, or queuing at the turn bays and thus no hazard or safety impacts would occur.
### Table IV.M-3
Opening Year (2026) With and Without Project Intersection Levels of Service

<table>
<thead>
<tr>
<th>Intersection No.</th>
<th>Study Intersection</th>
<th>AM Peak Hour</th>
<th>Future Base (2026)</th>
<th>PM Peak Hour</th>
<th>Future Base (2026) Plus Project</th>
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<td></td>
<td>Delay</td>
<td>LOS</td>
<td>Delay</td>
<td>LOS</td>
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<td>2</td>
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<td>3</td>
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<td>D</td>
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<td>6</td>
<td>Magnolia Avenue &amp; Spring Street</td>
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<td>7</td>
<td>Pacific Avenue &amp; Spring Street</td>
<td>12.3</td>
<td>B</td>
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### 6. PROJECT IMPACTS

#### Threshold TRA-1: Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Under CEQA, a project is considered consistent with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable plan, ordinance or policy is only a significant impact under CEQA if the plan, ordinance, or policy was adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

The City of Long Beach Mobility Element guides the operations and design of streets and other public right of way. It lays out a vision for improving the way people, goods, and resources move from place to place. The Mobility Element addresses all modes of travel, and in addition to improving mobility and accessibility to opportunities, the plan is about enhancing the quality of life for today’s generation, as well as generations to come. Strategies within the Mobility Element and the corresponding consistency analysis is included below:

**Mobility Element**

**Strategy No. 1:** Establish a network of complete streets that complements the related street type.
The Project includes internal sidewalk infrastructure for pedestrians, along with connectivity to Wardlow Road and Golden Avenue. Additionally, on-site bicycle parking would be provided to encourage active transportation. The Project does not conflict with or prevent the City from pursuing this program.

**Strategy No. 2:** Establish a network of complete streets that complements the related street type.

The Project does not conflict with or prevent the City from pursuing this program.

**Strategy No. 3:** Strategically improve congested intersections and corridors.

The Project does not conflict with or prevent the City from pursuing this program.

**Strategy No. 5:** Reduce the environmental impacts of the transportation system.

The Project does not result in a VMT impact, which is the CEQA metric aligned with achieving the State’s goal of reducing GHG emissions. The Project does not conflict with or prevent the City from pursuing this program.

**Strategy No. 6:** Manage the supply of parking.

The Project includes on-street parking, with the majority of supply dedicated to off-street (garage) parking. The Project does not conflict with or prevent the City from pursuing this program.

Additionally, the City’s Mobility Element describes several projects that would exist within the vicinity of the Project and be consistent with the implementation of the Project:

- **The Metro A Line (formerly Blue Line) Wardlow Station Park and Ride capital project.** This project would develop increased vehicle capacity at the station to encourage ridesharing, transit use, and multimodal connectivity.

- **Signal improvements along Magnolia Avenue.** This project includes video detection, signal coordination, and wireless communications; from Wardlow Road to Ocean Boulevard.

- **Long Beach Boulevard/Wardlow Road and the I-405 ramp reconfiguration.** This project includes ramp reconfiguration to improve connections to Long Beach Boulevard and reduce congestion at Pacific Place & Wardlow Road.

- **Wardlow Road Corridor Improvements.** Design and implement corridor improvements on Wardlow Road between Long Beach Boulevard and Cherry Avenue, including freeway ramp access configuration, sidewalk improvements, and signal system upgrades.

- **Santa Fe Avenue Streetscape Enhancements.** Design and implement streetscape enhancements on Santa Fe Avenue from Pacific Coast Highway to Wardlow Road.
Overall, the proposed Project was reviewed and compared to existing and future conditions resulting from implementation of the Project, including access, high injury corridor identification, and pedestrian, bicycle and transit accessibility. The proposed Project features are intended to minimize impacts to the public right-of-way and enhance the user experience by integrating multimodal transportation options which aligns with the Strategies of the Mobility Element, including on-site pedestrian infrastructure and trails to the 4.81 acres of dedicated open space north of the developed Site area.

Additionally, the Housing Element includes policies and programs related to multimodal transportation, public facilities, and roadway infrastructure. The goal of the Housing Element is to provide a clean, safe, healthy and prosperous City where residents, business and government are partners in balancing growth, the environment, cultural and neighborhood interests; and creating places for people of all lifestyles, cultures and perspectives to flourish, live, love, learn and contribute. Policies and programs within the Housing Element and the corresponding consistency analysis is included below:

**Housing Element**

**Policy 3.5:** Continue to improve streets and drainage, sidewalks and alleys, green spaces and park, street trees, and other public facilities, amenities and infrastructure.

The Project would include new drainage, sidewalks, public green space, and street trees an area that is not currently in use and make it available to new residents and existing residents of the City, making the Project consistent with this policy.

**Policy 4.5:** Encourage residential development along transit corridors, in the downtown and close to employment, transportation and activity centers; and encourage infill and mixed-use developments in designated districts.

The Project would be consistent with this policy since it is less than a mile away from an existing transit corridor and is considered an in-fill Project.

**Program 2.5 Universal Design:** Universal Design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The City promotes these principles by enforcing the American’s With Disabilities Act (ADA), providing a visibility ordinance for City-assisted new construction of single family homes and duplexes, and sponsoring a City Disability Commission.
The Project would be consistent with this program through the inclusion of ADA parking on-site and the implementation of paved walkways throughout the public Open Space allowing any and all people to participate in the public amenities available within the Project Site.

Overall, the proposed Project’s transportation elements would be generally consistent with the policies and programs outlined within the Housing Element by providing improved streets, sidewalks, in close proximity to existing transit, and provide ADA access for the disabled population.

Further, the proposed Project would incorporate LEED requirements into the Project design, which include specifications for bicycle facilities. The requirements include functional entry or bicycle storage within a 200-yard walking distance or bicycling distance from a bicycle network that connects to either at least 10 diverse uses; a school or employment center if the Project total floor area is 50 percent or more residential; or a bus rapid transit stop, passenger rail station, or ferry terminal. Short-term bicycle storage is required for at least 2.5 percent of all peak visitors and long-term storage for at least 15 percent of all regular building occupants.

The proposed Project would also encourage bicycle use to and from the Project Site by providing bicycle parking in accordance with the City requirements and in proximity to existing bicycle facilities along Wardlow Road, as well as future planned bicycle facilities within the vicinity of the proposed Project, including along Magnolia Avenue south of Wardlow Road. The proposed Project would encourage pedestrian activity because it concentrates the development near public transit, which provides residences and visitors access to the Site that can be conveniently accessed by walking, biking, or taking transit. The proposed Project would also accommodate pedestrian activity with its access locations and open space, which would be designed to City standards to provide adequate sight distance and pedestrian movement controls that would meet the City’s requirements to protect pedestrian safety.

The Safe Streets Long Beach Plan is a plan that strives to eliminate traffic-related fatalities and serious injuries in Long Beach by 2026 through multiple strategies, such as modifying streets to better serve vulnerable road users. The plan uses data analysis, community input, and best practice research to identify programs and policies that can make the streets safer for everyone. The Project meets the goals and objectives set forth in the Vision Zero plan. The pedestrian points of access would be provided along Wardlow Road and Baker Street, and bicycle parking would be provided on-site. The Project is located in the vicinity of the Los Cerritos safe route to school map area. Projects located on the High Injury Corridor (HIC) should make improvements or fund them. The proposed Project is not located on a High Injury Corridor.

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Corridor, as identified in the plan. No specific Vision Zero projects are planned for Wardlow Road next to the proposed Project, and the proposed Project would not conflict with the implementation of future Vision Zero projects in the public right-of-way.

The proposed Project features, location, and design generally support multimodal transportation options and would be consistent with policies, plans, and programs that support alternative transportation, including the Mobility Element 2035, the Housing Element and the Safe Streets Action Plan. The proposed Project design and features would not substantially increase hazards, conflicts, or preclude City action to fulfill or implement projects associated with these networks and would contribute to overall walkability through enhancements to the Project Site and streetscape. Consistency impacts relating to existing policies, plans, and programs would be less than significant.

**Threshold TRA-2:** Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

According to CEQA Guidelines Section 15064.3,

> (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

Transit priority areas (TPAs) in Long Beach are identified based on the California PRC definitions for major transit stops⁴ or high-quality transit corridors.⁵ The *OPR Technical Advisory on Evaluating Transportation Impacts in CEQA* identifies the following four criteria for which the presumption would not apply. Any project located in a TPA would be presumed to have a less than significant transportation impact related to CEQA Guidelines Section 15064.3, subdivision (b), unless the project:

- Has an overall Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required (if parking minimums pertain to the Site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the Site);

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⁴ A “major transit stop” is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (CA Public Resources Code, Section 21064.3).

⁵ “High-quality transit corridor” (HQTC) means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (CA Public Resources Code, Section 21155).
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- Is inconsistent with the Long Beach Land Use Element or the SCAG RTP/SCS; or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project Site is located within 0.5-mile of a major transit stop at Wardlow Road & Pacific Place; the LA Metro Blue Line (or “A” Line) Wardlow station. The Project VMT impact would therefore be presumed to be less than significant, and no further analysis would be required according to the City’s TIA guidelines. However, given the secondary conditions listed above, the proposed Project includes more parking for use by residents and visitors than required (by 5 parking spaces). As a result, the proposed Project cannot be presumed to have a less than significant impact due to the Project Site’s proximity to a major transit station and additional analysis was completed.

The Project VMT impact analysis includes: (1) Determining the appropriate metric and corresponding threshold of significance, (2) Calculating Project VMT, (3) Determining the impact significance, and, if applicable, (4) Recommend appropriate mitigation measures. For the purposes of SB 743, VMT to be analyzed is generated by on-road passenger vehicles, specifically cars and light-duty trucks. Based on the proposed residential land use of the proposed Project, the metric of analysis would include VMT per capita calculated as the total home-based productions VMT divided by the population of the proposed Project.

The City’s VMT threshold of significance for the residential uses is 15 percent below the existing regional average VMT per capita, or 11.8 VMT per capita. The region for Long Beach is Los Angeles County. As calculated from the 2016 SCAG RTP/SCS travel demand model, the average daily VMT per capita in Los Angeles County is 13.9 VMT.

Based on the City’s TIA guidance, a project generating 1,000 average daily trips (ADT) or more should use a traffic-forecasting tool. For this study, the SCAG 2016 RTP/SCS travel demand model was utilized as the most recently available to estimate the residential VMT per capita. The Project VMT was determined based on the SCAG 2016 RTP/SCS travel demand model resulting in 10.2 residential VMT per capita. Since the proposed Project VMT metric of 10.2 is less than the significance threshold of 11.8 residential VMT per capita, the proposed Project is presumed to create a less than significant VMT impact and no further VMT analysis is required.

In addition to this analysis, the proposed Project is in close proximity to the Wardlow Metro light-rail station and the traffic analysis zone is a borderline low-VMT area based on the City’s VMT mapping. These factors contribute to the proposed Project’s overall transportation use and would help reduce VMT by the residents of the development. The Project design would also include contiguous routes to support multimodal transportation throughout the community and surrounding neighborhoods. Based on the
information provided, the proposed Project is consistent with CEQA Guidelines Section 15064.3, subdivision (b) and impacts would be less than significant.

**Threshold TRA-3:** Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Pedestrian access to the Project Site would be provided via sidewalks around the perimeter of the Project Site. Residents and visitors arriving to the Project Site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking facilities as discussed in an earlier threshold. The proposed Project’s access locations would be designed to the City standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City’s requirements to protect pedestrian safety. Street trees and other potential impediments to adequate driver and pedestrian visibility would be minimal. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets.

While there are two driveways proposed as part of the proposed Project, one would be placed on Baker Street, a nonarterial road. The main access driveway would be located on Wardlow Road, with right-in/right-out and left-in/left-out turn movements allowed. The driveways would be designed to comply with City standards, including required signalization by the Department of Public Works. The driveways would not require the removal or relocation of existing passenger transit stops and would be designed and configured to avoid or minimize potential conflicts with transit services, pedestrians, and bicyclists. The proposed Project is not located on a HIC. There currently exists protected, Class IV bike lanes along Wardlow Road, in both directions, east of the Project Site. The bike lane on the north block of Wardlow Road (in the westbound direction) ends at Magnolia Avenue, approximately one quarter mile from the proposed main access driveway. Vehicles entering/exiting the Site would be concentrated along the Wardlow Road main Project driveway, and the Baker Street secondary driveway would be limited to City maintenance vehicles and emergency vehicle access.

The proposed Project was also evaluated to determine if the proposed Project would have a significant impact on the I-710 and I-405 north and south off-ramps. Given the proposed Project access is confined to the Wardlow Road driveway and designed for left-in and right-in/right-out movements, the I-710 northbound on-ramp were analyzed for potential freeway impacts. The proposed Project is projected to result in a less than 1 percent increase in trips based on the freeway mainline capacity in both the AM and PM peak hours on the I-710 northbound on-ramp. Therefore, this location will have a less than significant impact on hazard and safety issues. In addition, impacts to the I-405 northbound off-ramp to Long Beach Boulevard will result in a less than significant hazard and safety impact given that it is projected to result
in a less than 1 percent increase in trips based on the capacity of the freeway off-ramp (based on an assumed ramp capacity of 850 vehicles per hour per lane).

Both the I-710 southbound off-ramp to eastbound Wardlow Road and the I-405 southbound off-ramp to southbound Pacific Place are projected to result in a 1 percent increase or more in trips based on the capacity of the respective freeway off-ramp. However, the I-405 southbound off-ramp to southbound Pacific Place includes an uncontrolled, two-lane off-ramp from the southbound I-405 to southbound Pacific Place, which screens it from further freeway impact analysis per the City’s LOS/delay criteria. The I-710 southbound off-ramp to eastbound Wardlow Road includes an existing yield control, which results in a projected LOS of A in the PM peak hour for the southbound off-ramp. Given the City’s criteria for LOS/delay on the off-ramp, this location was also screened from further freeway impact analysis. As such, the Project would not have a significant impact on the freeway ramps.

In addition to freeway traffic analysis, potential effects on bicycle and pedestrian circulation was also assessed. Wardlow Road contains Class IV protected bike lane facilities, in both directions, east of the Project Site. The bike lane on the south side of Wardlow Road, in the eastbound direction, begins east of the proposed Project’s main driveway -east of 34th Street and continues east past Wardlow Road. The bike lane on the north side of Wardlow Road, in the westbound direction, begins east of Pacific Place and ends at Magnolia Avenue. There also exists a City Bike Share program, with the nearest stations located just over 1-mile east of the Project Site on Bixby Road, Wardlow Road and Atlantic Avenue.

The proposed Project is not expected to negatively affect or degrade bicycle modes or facilities within the study area, including the existing bicycle lane facilities on Wardlow Road east of the Project Site. The proposed Project related traffic is not expected to add substantial automobile delay to the nearby intersections in the AM and PM peak hours. Additionally, the limited access design of the main proposed driveway on Wardlow Road, with left-out turns prohibited, would minimize the amount of project related eastbound traffic through the Magnolia Avenue and Pacific Place intersections along Wardlow Road.

Pedestrian facilities in the study area include sidewalks, crosswalks, and pedestrian signals. The major streets that provide access to the proposed Project include Wardlow Road, Magnolia Avenue, and Baker Street. These roadways have well-connected and maintained sidewalk networks near the Project Site. Sidewalks are provided on both sides of these streets, except for portions of Wardlow Road (between Magnolia Avenue and the Project Site). Although, this section does have an adjacent local access road with sidewalk that is separated by a concrete, landscaped median, as well as a sidewalk on the south side of Wardlow Road between Maine Avenue and the Project Site. There is also an existing Wrigley Heights dog park adjacent to the proposed Project, immediately to the east on Golden Avenue, with two pedestrian
points of access along Golden Avenue. The existing neighborhood Baker Street park at Baker Street & Golden Avenue is located east of the proposed Project, adjacent to the proposed open space area.

The proposed Project is not expected to negatively affect or degrade pedestrian modes or facilities within the study area. The Applicant would be required to construct a new 12-foot-wide walkway (consisting of a 6-foot-wide concrete sidewalk, curb and curb gutter and 6-foot wide irrigated and planted parkway) sidewalk along the portion of the north side of Wardlow Road where no sidewalk pavement currently exists. The limited access design of the main Project driveway on Wardlow Road, with left-out turns prohibited, would minimize potential conflicts.

However, line-of-sight analysis of vehicle movements at the proposed access driveway on Wardlow Road determined that vehicles at the proposed driveway would lack adequate sight distance along Wardlow Road. This could substantially increase hazards. As such, the Project could have a significant impact and therefore mitigation has been identified below.

**Threshold TRA-4: Result in inadequate emergency access?**

The proposed Project is situated east of the LA River and south of the I405 Freeway, immediately adjacent to residential land uses to the south and east. Emergency vehicles can access the Project Site at the two proposed driveways.

Wardlow Road is a major arterial immediately south of the proposed Project, with no on-street parking. The proposed Project driveway is situated at the southeastern corner of the Project Site and provides right-turn in and left-turn in access from Wardlow Road. The driveway entrance contains two travel lanes for inbound vehicles, with vehicular entry gates, along with one travel lane for outbound vehicles. At its narrowest point, the driveway is 20 feet wide for both lanes, which conforms to City standards.

Baker Street is a residential street spanning across the northern portion of the Project Site and is currently used intermittently by City maintenance vehicles. The Baker Street driveway is situated at the northeastern corner of the Project Site and is accessible via Golden Avenue or Baker Street. The driveway entrance contains one travel lane for each approach and has vehicular entry gates. At its narrowest point, the driveway lane is 14 feet wide, which conforms to City standards. This driveway would be gated, and only accessible by City maintenance vehicles, as well as emergency vehicles.

Within the Project Site, the narrowest streets are 26 feet wide, accounting for building overhangs. Not accounting for overhangs, these streets are 30 feet wide, which conform to City standards. There are 59 designated on-street parking stalls provided for guests, while the remainder of parking is off-street, thus limiting potential conflicts with emergency vehicles.
The proposed Project is close to several emergency service providers, as measured from the proposed Wardlow Road Driveway. The nearest fire station (Long Beach Fire Department Station 9) is located approximately 2.6 miles northeast of the Project Site on Long Beach Boulevard. The nearest police station (Long Beach Police Department – North Patrol) is located approximately 1.85 miles northeast of the Project Site on Atlantic Avenue. Long Beach Memorial Medical Center is the closest hospital, which is approximately 2.7 miles southeast of the Project Site.

The proposed Project is well-served by nearby emergency service providers and grants adequate emergency vehicle access to, from, and within the Project Site. As such, the proposed Project would provide adequate means of emergency access to the Project Site. Impacts related to emergency access would be considered less than significant.

7. CUMULATIVE IMPACTS

On December 28, 2018, the California Natural Resources Agency adopted revised CEQA Guidelines. Among the changes to the guidelines was the removal of vehicle delay and LOS from consideration for transportation impacts under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project’s effect on vehicle miles traveled.

In coordination with the City two proposed development projects were identified for inclusion in the opening year analysis. A four-story, mixed-use office building is planned for 3435 Long Beach Boulevard, east of the Project Site. The related project is approximately 35,000 square feet and is expected to generate 341 average daily trips, based on ITE’s Trip Generation 10th Edition. Additionally, the proposed self-storage and RV storage facility at 3701 Pacific Place. This related project would construct a 150,000-gross-squarefoot building with 1,100 self-storage units and 580 RV storage spaces on the currently vacant property. Based on the analysis included in the trip generation memorandum it was estimated that the self-storage and RV storage facility project would generate fewer than 50 trips per peak hour; approximately 16 trips in the AM peak hour and 31 trips in the PM peak hour. There are no transportation system infrastructure changes in the study area planned for implementation by year 2025 per confirmation by City staff. Therefore, network changes were not included in the analysis.

Based on the minimal increase of forecasted trips from the self-storage and RV storage facility projects and the less than significant VMT impact of the proposed Project, cumulative impact of the proposed Project based on VMT would be less than significant. Additionally, none of the study locations are projected to experience a deficient queuing movement at the turn bays with the addition of the proposed Project traffic in the opening year per the City’s performance criteria. Therefore, the addition of Project traffic would not be responsible for queuing at the turn bays. Cumulative transportation impacts within the City would be considered less than significant.
8. MITIGATION MEASURES

The proposed Project could have a significant impact due to an increase in hazard due to a geometric design feature. Therefore, the following mitigation measure shall be incorporated into the Project:

**MM Trans-1 Traffic Control**

The Subdivider shall install traffic signal related equipment to current CA MUTCD and/or City of Long Beach Standards, at the intersection of Wardlow Road and the proposed entry to the project, generally in conformance with the “Conceptual Traffic Signal Design” prepared by Subdivider, dated August 25, 2020. Installation of the traffic signal related equipment may include, but not be limited to the following:

i. Traffic Signal indicators to the most current City standard.

ii. Vehicular detection shall be installed on all approaches to the signalized intersection. This may include presence, mid or advance detection per City direction. Options will include standard Type E loops or video detection.

iii. All pedestrian push buttons and indicators shall be to the most current City Standards.

iv. The Subdivider shall install Emergency Vehicle Pre-Emption (EVPE) equipment. The equipment and installation must be completed per the most current City Standard.

v. The Subdivider shall install a GPS Module at the traffic signal. The GPS Modules create accurate time-based communications between nearby traffic signals.

vi. The Subdivider shall install a new traffic signal controller based on the most current City Standard [McCain 2070 Controllers].

vii. Subdivider shall install 96 count fiber interconnect cable to the satisfaction of the City’s Traffic Engineer, but at a minimum from the proposed traffic signal to Magnolia Avenue.

viii. Subdivider shall install flashing beacons, on overhead mast arms attached to utility poles, on both approaches to the proposed traffic signal, 450 feet from the stop limit line.

9. LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the mitigation identified above, the proposed Project would have a less than significant impact on transportation.