

DRAFT

INITIAL STUDY & MITIGATED NEGATIVE DECLARATION

CITY OF SOUTH GATE URBAN ORCHARD DEMONSTRATION PROJECT



**LEAD AGENCY:
CITY OF SOUTH GATE
PUBLIC WORKS DEPARTMENT
8650 CALIFORNIA AVENUE
SOUTH GATE, CALIFORNIA 90280**

**REPORT PREPARED BY:
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JUNE 26, 2019

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MITIGATED NEGATIVE DECLARATION

PROJECT NAME: Urban Orchard Demonstration Project.

APPLICANT: City of South Gate, 8650 California Avenue, South Gate, California 90280.

LOCATION: The proposed project will involve the establishment of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east).

CITY/COUNTY: South Gate, Los Angeles County.

DESCRIPTION: The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The on-site Union Pacific railroad track will be widened and a train station will be built on-site in the future to accommodate the proposed West Santa Ana Branch Line. The West Santa Ana Branch Line is a project by The Los Angeles County Metropolitan Transportation Authority (Metro) that involves the construction and operation of a light rail transit line that would connect downtown Los Angeles to southeast LA County. It is important to note that the widening of the railroad track and the construction of the train station for the West Santa Ana Branch Line are not a part of this environmental analysis.

FINDINGS: The environmental analysis provided in the attached Initial Study indicates that the proposed project will not result in any significant adverse unmitigable environmental impacts. For this reason, it has been determined that a *Mitigated Negative Declaration* is the appropriate CEQA document for the proposed project. The following findings may also be made based on the analysis contained in the attached Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially 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, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

The environmental analysis is provided in the attached Initial Study prepared for the proposed project. The project is also described in greater detail in the attached Initial Study.

Marc Blodgett – Consultant to the City of South Gate

Date

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SECTION 1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The on-site Union Pacific railroad track will be widened and a train station will be built on-site in the future to accommodate the proposed West Santa Ana Branch Line. The West Santa Ana Branch Line is a project by The Los Angeles County Metropolitan Transportation Authority (Metro) that involves the construction and operation of a light rail transit line that would connect downtown Los Angeles to southeast LA County. It is important to note that the widening of the railroad track and the construction of the train station for the West Santa Ana Branch Line are not a part of this environmental analysis.¹

As part of the proposed project's environmental review, the City of South Gate authorized the preparation of this Initial Study.² Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgment and analysis of the City of South Gate, in its capacity as the Lead Agency. The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental impacts of the proposed project and that decision-makers have considered such impacts before considering approval of the project. Pursuant to the CEQA Guidelines, purposes of this Initial Study include the following:

¹ Studio-MLA. *Site Plan, Urban Orchard, 9475 West Frontage Road, South Gate, CA*. November 16, 2018.

² California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act*. As Amended 1998 (CEQA Guidelines). §15050.

- To provide the City information to use as the basis for deciding whether to prepare an environmental impact report (EIR), mitigated negative declaration, or negative declaration;
- To facilitate the project's environmental assessment early in the design and development of the project;
- To eliminate unnecessary EIRs;
- To determine the nature and extent of any impacts associated with the proposed project; and,
- To enable modification of the project to mitigate adverse impacts of the project.

It has been determined, as part of this Initial Study's preparation, that a Mitigated Negative Declaration is the appropriate environmental document for the project's environmental review pursuant to CEQA. This Initial Study and the *Notice of Intent to Adopt a Mitigated Negative Declaration* will be forwarded to responsible agencies, trustee agencies, and the public for review and comment. A 30-day public review period will be provided to allow these agencies and other interested parties to comment on the proposed project and the findings of this Initial Study.³ Questions and/or comments should be submitted in writing to the following individual:

Gladis Deras, Senior Engineer
City of South Gate
8650 California Avenue
South Gate, California 90280
gderas@sogate.org
323-563-9576

1.2 INITIAL STUDY'S ORGANIZATION

The following annotated outline summarizes the contents of this Initial Study:

- *Section 1 Introduction*, provides the procedural context surrounding this Initial Study's preparation and insight into its composition. This section also includes a checklist that summarizes the findings of this Initial Study.
- *Section 2 Project Description*, provides an overview of the existing environment as it relates to the project site and describes the proposed project's physical and operational characteristics.
- *Section 3 Environmental Analysis*, includes an analysis of potential impacts associated with the proposed project's construction and the subsequent operation.
- *Section 4 Conclusions* indicates the conclusions of the environmental analysis and the Mandatory Findings of Significance.
- *Section 5 References*, identifies the sources used in the preparation of this Initial Study.

³ California, State of. *Title 14. California Code of Regulations. Chapter 3. Guidelines for the Implementation of the California Environmental Quality Act. As Amended 1998 (CEQA Guidelines). §15060 (b).*

1.3 INITIAL STUDY CHECKLIST

The environmental analysis provided in Section 3 of this Initial Study indicates that the proposed project will not result in any unmitigable, significant impacts on the environment. For this reason, it has been determined that a Mitigated Negative Declaration is the appropriate CEQA document for the proposed project. The findings of this Initial Study are summarized in Table 1-1 provided below.

**Table 1-1
Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
SECTION 3.1 AESTHETICS.				
3.1.A. Would the project have a substantial adverse effect on a scenic vista?				X
3.1.B. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				X
3.1.C. In non-urbanized areas, would the project 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 a 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?				X
3.1.D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
SECTION 3.2 AGRICULTURE & FORESTRY RESOURCES				
3.2.A. Would the project 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 uses?				X
3.2.B. Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract?				X
3.2.C. Would the project 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))?				X
3.2.D. Would the project result in the loss of forest land or conversion of forest land to a non-forest use?				X
3.2.E. Would the project 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 a non-forest use?				X
SECTION 3.3 AIR QUALITY				
3.3.A. Would the project conflict with or obstruct implementation of the applicable air quality plan?				X

**Table 1-1
Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
3.3.B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?		X		
3.3.C. Would the project expose sensitive receptors to substantial pollutant concentrations?		X		
3.3.D. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	
SECTION 3.4 BIOLOGICAL RESOURCES				
3.4.A. Would the project 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 Wildlife or U.S. Fish and Wildlife Service?		X		
3.4.B. Would the project 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 Wildlife or U.S. Fish and Wildlife Service?				X
3.4.C. Would the project 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?				X
3.4.D. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites?				X
3.4.E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
3.4.F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				X
SECTION 3.5 CULTURAL RESOURCES				
3.5.A. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines?				X
3.5.B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines?			X	
3.5.C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?			X	

**Table 1-1
Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
SECTION 3.6 ENERGY				
3.6.A. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?		X		
3.6.B. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?				X
SECTION 3.7 GEOLOGY & SOILS				
3.7.A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or, landslides?			X	
3.7.B. Would the project result in substantial soil erosion or the loss of topsoil?			X	
3.7.C. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
3.7.D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property?			X	
3.7.E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
3.7.F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
SECTION 3.8 GREENHOUSE GAS EMISSIONS				
3.8.A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
3.8.B. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?				X
SECTION 3.9 HAZARDS & HAZARDOUS MATERIALS				
3.9.A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X

**Table 1-1
Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
3.9.B. Would the project 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?		X		
3.9.C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
3.9.D. Would the project 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?				X
3.9.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 a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
3.9.F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
3.9.G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X
SECTION 3.10 HYDROLOGY & WATER QUALITY				
3.10.A. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				X
3.10.B. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
3.10.C. Would the project 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 result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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, impede or redirect flood flows?				X
3.10.D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?				X
3.10.E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

**Table 1-1
 Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
SECTION 3.11 LAND USE & PLANNING				
3.11.A. Would the project physically divide an established community?				X
3.11.B. Would the project 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?				X
SECTION 3.12 MINERAL RESOURCES				
3.12.A. Would the project 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?				X
3.12.B. Would the project 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?				X
SECTION 3.13 NOISE				
3.13.A. Would the project result in 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?		X		
3.13.B. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?		X		
3.13.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, would the project expose people residing or working in the project area to excessive noise levels?				X
SECTION 3.14 POPULATION & HOUSING				
3.14.A. Would the project 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)?				X
3.14.B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X
SECTION 3.15 PUBLIC SERVICES				
3.15.A. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for <i>fire protection</i> ?			X	

**Table 1-1
Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
3.15.B. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for <i>police protection</i> ?			X	
3.15.C. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for <i>schools</i> ?				X
3.15.D. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for <i>parks</i> ?			X	
3.15.E. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for <i>other public facilities</i> ?				X
SECTION 3.16 RECREATION				
3.16.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?			X	
3.16.B. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	
SECTION 3.17 TRANSPORTATION				
3.17.A. Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
3.17.B. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?			X	
3.17.C. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
3.17.D. Would the project result in inadequate emergency access?				X

**Table 1-1
 Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
SECTION 3.18 TRIBAL CULTURAL RESOURCES				
3.18.A. 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 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)?		X		
3.18.B. 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 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 Resource Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe.			X	
SECTION 3.19 UTILITIES & SERVICE SYSTEMS				
3.19.A. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
3.19.B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
3.19.C. Would the project 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?			X	
3.19.D. Would the project 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?			X	
3.19.E. Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				X
SECTION 3.20 WILDFIRE				
3.20.A. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?				X

**Table 1-1
 Initial Study Checklist**

Description of Issue	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
3.20.B. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?				X
3.20.C. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?				X
3.20.D. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?				X
SECTION 3.21 MANDATORY FINDINGS OF SIGNIFICANCE				
3.21.A. Does the project have the potential to substantially degrade the quality of the environment, substantially 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, substantially 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?				X
3.21.B. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a 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)				X
3.21.C. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X



SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The on-site Union Pacific railroad track will be widened and a train station will be built on-site in the future to accommodate the proposed West Santa Ana Branch Line. The West Santa Ana Branch Line is a project by The Los Angeles County Metropolitan Transportation Authority (Metro) that involves the construction and operation of a light rail transit line that would connect downtown Los Angeles to southeast LA County. It is important to note that the widening of the railroad track and the construction of the train station for the West Santa Ana Branch Line are not a part of this environmental analysis.⁴ The project is described in greater detail in Section 2.3.

2.2 PROJECT LOCATION

The project site is located within the eastern portion of the City of South Gate. The City of South Gate is located approximately seven miles southeast of downtown Los Angeles and 13 miles north of the port of Long Beach. The City of South Gate is bounded by the cities of Huntington Park, Cudahy, and Bell Gardens on the north; unincorporated county areas to the west; Lynwood and Paramount on the south; and Downey to the east.⁵ Regional access to South Gate is possible from two area freeways: the Long

⁴ Studio-MLA. *Site Plan, Urban Orchard, 9475 West Frontage Road, South Gate, CA*. November 16, 2018.

⁵ Google Earth. Website Accessed December 17, 2018.

Beach Freeway (I-710) and Century Freeway (I-105). The I-710 Freeway extends along the City's eastern portion in a north-south orientation and the I-105 Freeway extends in an east-west orientation approximately one mile south of the City. The location of South Gate in a regional context is shown in Exhibit 2-1. A citywide map is provided in Exhibit 2-2. A local map is provided in Exhibit 2-3.

The project area includes a 7-acre parcel, located to the north of the Thunderbird Villa Mobile Home Park, and a 23-acre strip of land that extends for approximately 1.1 miles along the east side of the Los Angeles River, owned by various utility companies and the City. The 7-acre parcel is owned by the City of South Gate (and the Los Angeles County Flood Control District [LACFCD] access road). The 23-acre strip of land is located on land owned by the Los Angeles County Flood Control District (LACFCD), Metropolitan Water District, Southern California Edison, the Los Angeles Department of Water & Power, and the City of South Gate. The project site is located on the following Assessor Parcel Numbers (APNs): 6222-001-916, 6222-001-906, 6222-001-277, 6222-001-003, 6222-001-908, 6222-001-278, 6222-001-904, 6222-001-907, 6222-001-901, 6222-001-801, 6222-001-020, 6222-001-21, 6222-041-270, 6222-042-900, 6222-040-912, 6233-001-272, 6233-002-900, 6233-002-901, 6233-001-901, 6233-001-903, 6233-001-275, 6233-001-902.⁶

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. Five trees are located on-site and include palm trees and deciduous trees. All five trees are of species commonly used in urban landscaping and are not protected by any regional or local policy or ordinance. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area. The Old South Gate Train Bridge was constructed in 1932 and currently handles very little train traffic.⁷ However, the on-site railroad track will be widened and a train station will be built on-site in the future to accommodate the proposed West Santa Ana Branch Line. The West Santa Ana Branch Line is a project by The Los Angeles County Metropolitan Transportation Authority (Metro) that involves the construction and operation of a light rail transit line that would connect downtown Los Angeles to southeast LA County. It is important to note that the widening of the railroad track and the construction of the train station for the West Santa Ana Branch Line are not a part of this environmental analysis. An aerial image for Phases I through III is shown in Exhibit 2-4. The project site is shown in Exhibits 2-5 through 2-7.

⁶ Los Angeles County Office of the Assessor. *Property Assessment Information System*. Website accessed December 17, 2018.

⁷ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

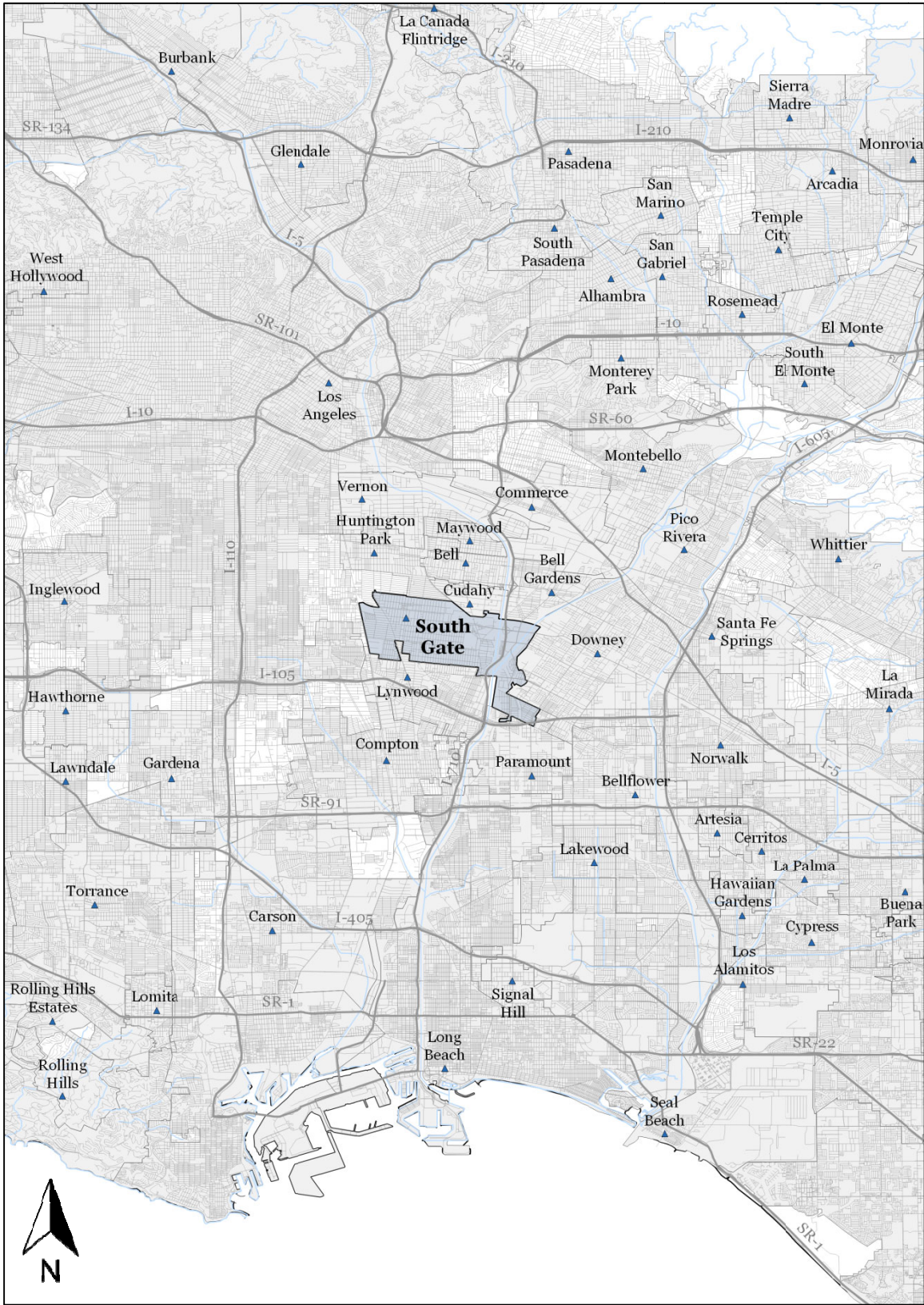


EXHIBIT 2-1
REGIONAL MAP
SOURCE: QUANTUM GIS

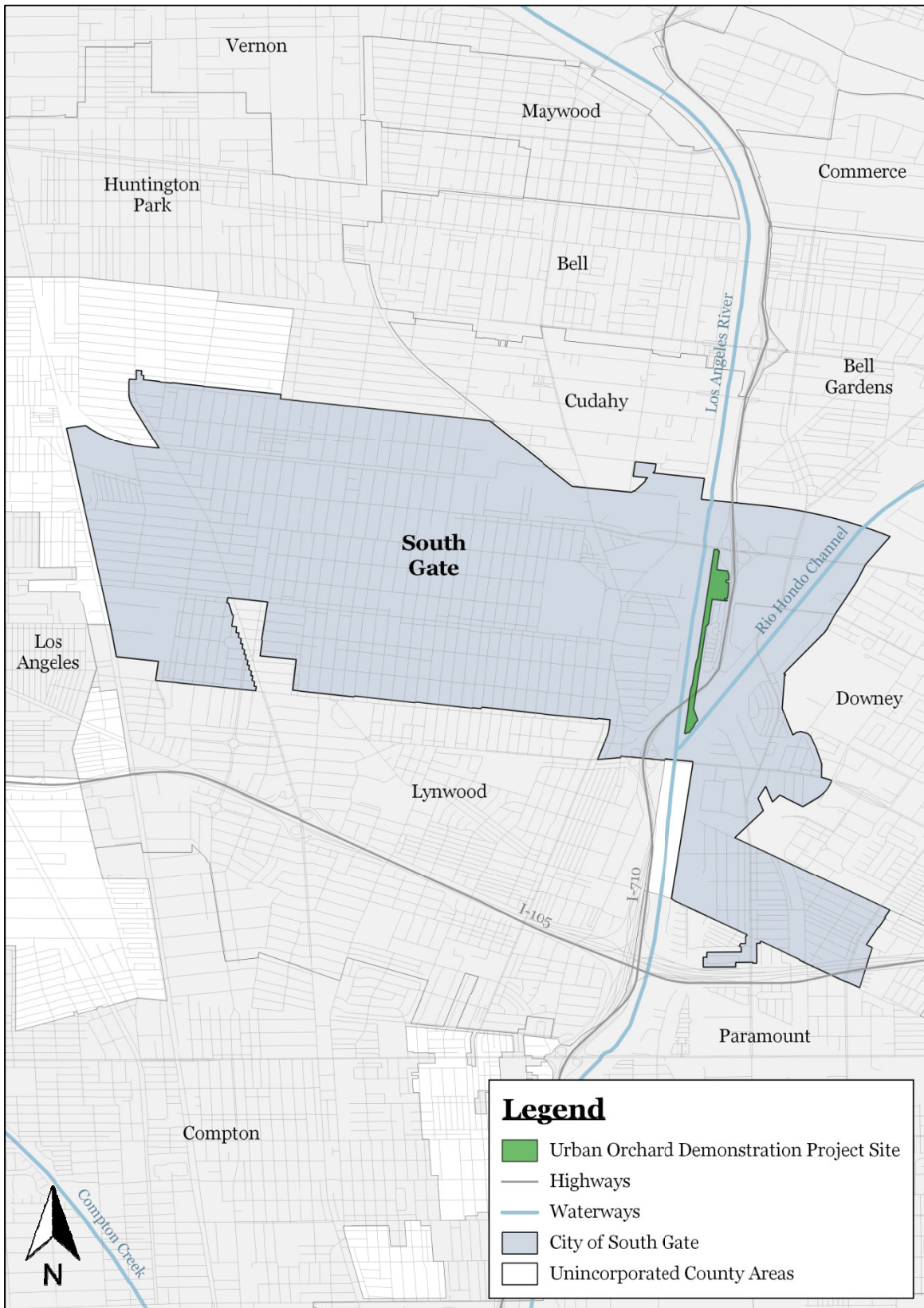


EXHIBIT 2-2
CITYWIDE MAP
SOURCE: QUANTUM GIS



EXHIBIT 2-3
LOCAL MAP
SOURCE: QUANTUM GIS

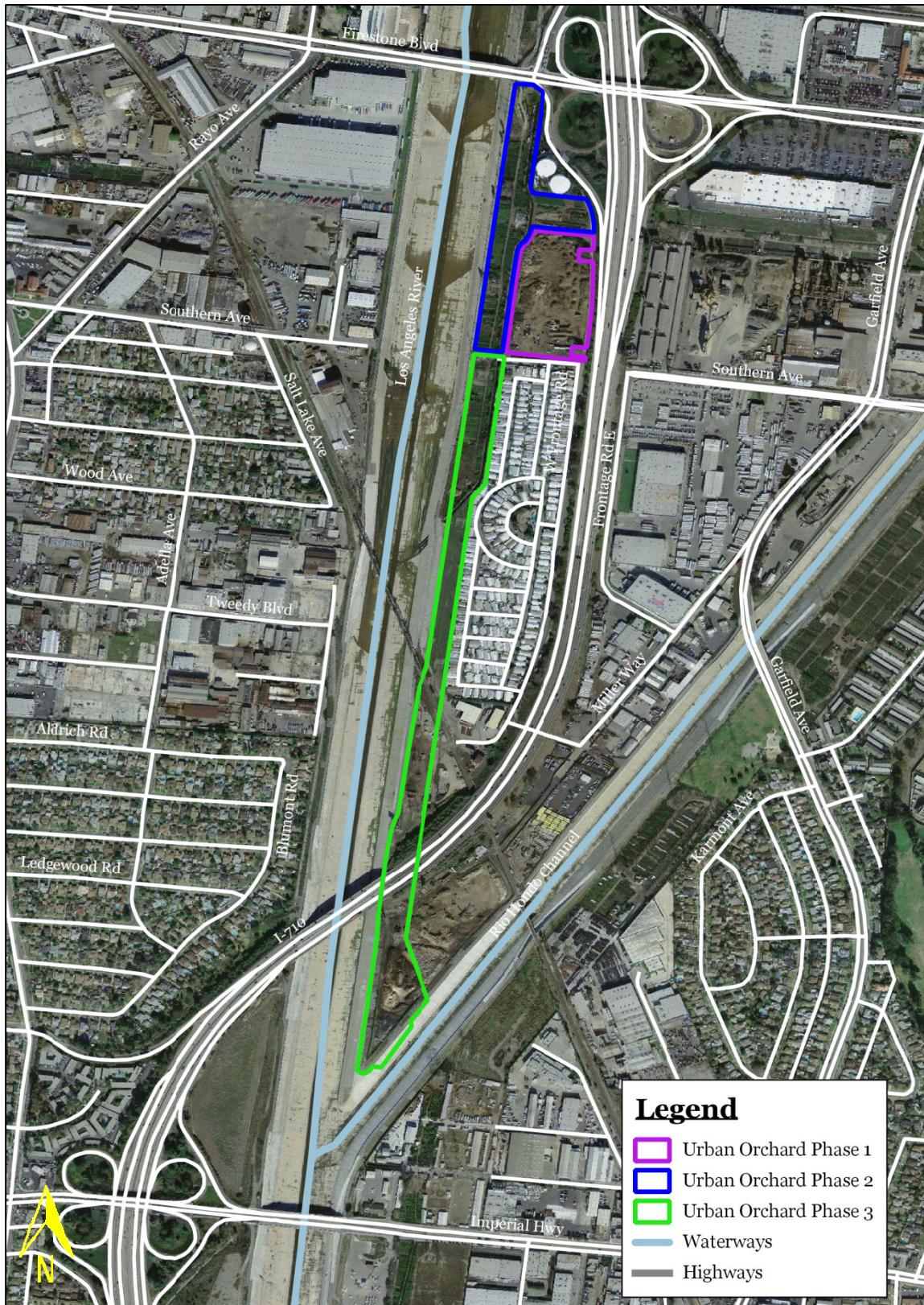


EXHIBIT 2-4
AERIAL PHOTOGRAPH
SOURCE: GOOGLE EARTH

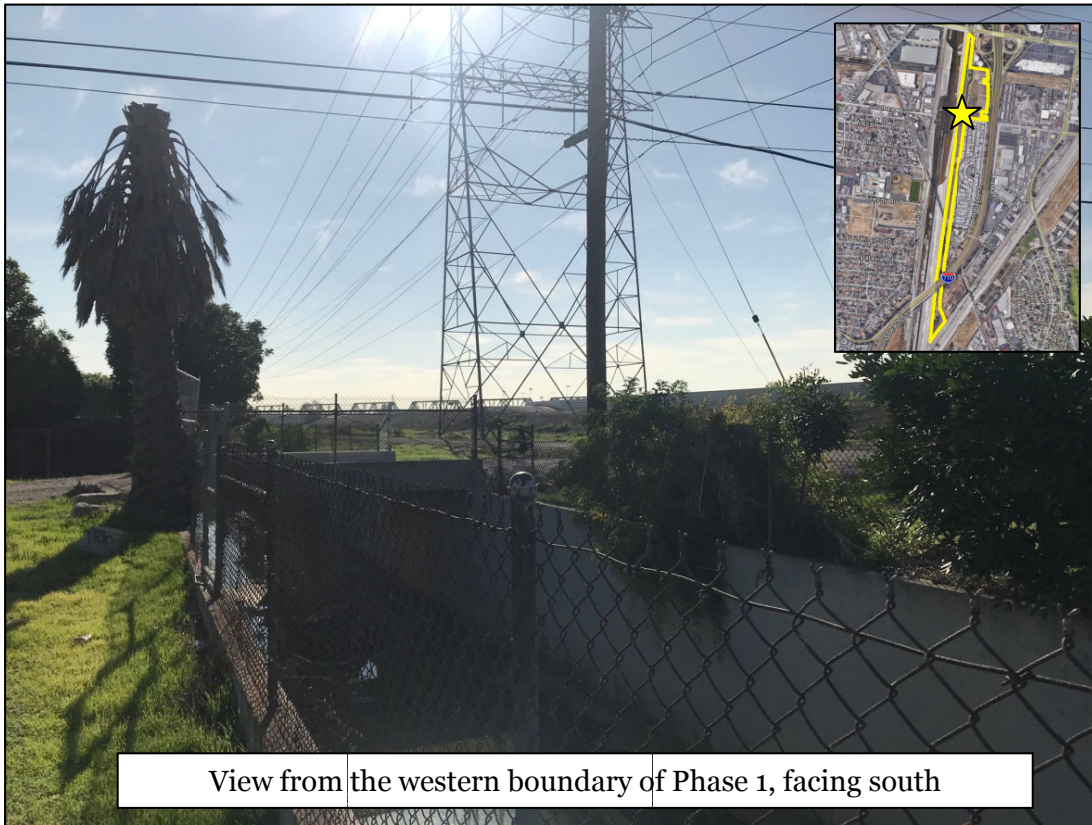


EXHIBIT 2-5
PHOTOGRAPHS OF THE PROJECT SITE

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



View from the western boundary of Phase 1, facing east



View from the western boundary of Phase 1, facing north

EXHIBIT 2-6
PHOTOGRAPHS OF THE PROJECT SITE

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



View from the western boundary of Phase 1, facing the mobile home park to the south



View from the northwestern corner of Phase 1, facing the water tanks to the north

EXHIBIT 2-7 PHOTOGRAPHS OF THE SURROUNDING USES

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

2.3 PROJECT DESCRIPTION

2.3.1 PHYSICAL CHARACTERISTICS OF THE PROPOSED PROJECT

The Urban Orchard Demonstration Project is a 30-acre passive recreational park project in the City of South Gate. The project site will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park. The final concept site plan for Phase 1 and Phase 2 is shown in Exhibit 2-8.

The proposed project will be completed in three phases. Phase 1 will involve seven acres owned by the City of South Gate (and the Los Angeles County Flood Control District [LACFCD] access road). Phase 1 will involve the construction of the following elements:⁸

- Educational Garden;
- Natural play area;
- Fruit tree orchards;
- Tree screen buffer along the I-710 Freeway;
- Parking lot;
- Community/maintenance building, which will include restrooms and offices to support maintenance of the site;
- Plaza and picnic area;
- Wetland overlook plaza with educational signage and appropriate cultural representations selected by the community;
- Water well (which will require excavation beyond 1,350 feet) and water building;
- Channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage structure;
- Water quality pre-treatment hydrodynamic separator with an operational flow capacity of up to five cubic feet per second;
- Stormwater harvesting system includes additional filtration and a pump to provide irrigation for the orchard and buffer trees;
- Sub-surface storage reservoir with minimum storage volume of two acre-feet;
- Exercise equipment located at various stages along the walking and bicycle paths; and,
- Emergency access road to provide a security route through the project site to Firestone Boulevard.

⁸ Studio-MLA. *Site Plan, Urban Orchard, 9475 West Frontage Road, South Gate, CA*. November 16, 2018.



EXHIBIT 2-8
FINAL CONCEPT SITE PLAN FOR PHASES 1 AND 2

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

Phases 2 and 3 of the project will involve the remaining 23 acres, which are located on land owned by the Los Angeles County Flood Control District (LACFCD), Metropolitan Water District, Southern California Edison, the Los Angeles Department of Water & Power, and the City of South Gate. Phases 2 and 3 will include:

- 1.1 miles of walking and bicycle paths made of decomposed granite;
- Community-based artwork including murals, mosaics and sculptures;
- Native plant educational loop; and,
- Permeable pavement, which will capture and clean dry-weather flow and stormwater which will be used to water the urban orchard.

2.3.2 CONSTRUCTION CHARACTERISTICS

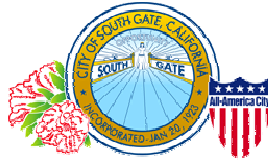
The construction for Phase 1 of the proposed project would take approximately 18 months to complete. Phases 2 and 3 will also take approximately the same amount of time to construct. None of the three phases will be constructed concurrently with each other. A start time is not yet known for the construction of Phases 2 and 3. The key construction elements for Phase 1 are outlined below:

- *Demolition.* The site will need to be cleared of the existing trees and other on-site improvements in order to accommodate the proposed project. Equipment used during this phase will include concrete/industrial saws, excavators, and rubber tired dozers. The four static billboards, cellular telephone tower, eight electrical transmission towers and the Bandini Channel will remain on-site. This phase will take approximately two months to complete.
- *Site Preparation.* The project site will be readied for the construction of the proposed project. Equipment used during this phase will include graders, scrapers, tractors, loaders, and backhoes. This phase will take approximately two months to complete.
- *Grading.* This phase will involve the grading of the site. Any underground infrastructure such as utility lines will be placed during this phase. Equipment used during this phase will include graders, rubber tired dozers, tractors, loaders, and backhoes. This phase will take approximately two months to complete.
- *Construction.* Phase 1 of the new Urban Orchard Demonstration Project will be constructed during this phase. Equipment used during this phase will include cranes, forklifts, generator sets, tractors, loaders, backhoes, and welders. This phase will take approximately eight months to complete.
- *Paving.* The project site will be paved during this phase. Equipment used during this phase will include cement and motor mixers, pavers, rollers, other paving equipment. This phase will take approximately two months to complete.

- *Finishing.* This phase will involve the painting and completion of the on-site structures and other on-site improvements. Equipment used during this phase will include air compressors. This phase will last approximately two months.

2.4 DISCRETIONARY ACTIONS

A Discretionary Action is an action taken by a government agency (for this project, the government agency is the City of South Gate) that calls for an exercise of judgment in deciding whether to approve a project. The proposed project will not require a zone change or general plan amendment, as the proposed use is permitted within the project site. The only discretionary action for this project is the approval of the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP).



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SECTION 3 ENVIRONMENTAL ANALYSIS

This section of the Initial Study prepared for the proposed project analyzes the potential environmental impacts that may result from the proposed project's implementation. The issue areas evaluated in this Initial Study include the following:

- Aesthetics (Section 3.1);
- Agriculture & Forestry Resources (Section 3.2);
- Air Quality (Section 3.3);
- Biological Resources (Section 3.4);
- Cultural Resources (Section 3.5);
- Energy (Section 3.6);
- Geology & Soils (Section 3.7);
- Greenhouse Gas Emissions (Section 3.8);
- Hazards & Hazardous Materials (Section 3.9);
- Hydrology & Water Quality (Section 3.10);
- Land Use & Planning (Section 3.11);
- Mineral Resources (Section 3.12);
- Noise (Section 3.13);
- Population & Housing (Section 3.14);
- Public Services (Section 3.15);
- Recreation (Section 3.16);
- Transportation (Section 3.17);
- Tribal Cultural Resources (Section 3.18);
- Utilities & Service Systems (Section 3.19);
- Wildfire (Section 3.20); and,
- Mandatory Findings of Significance (Section 3.21).

Under each issue area, a description of the thresholds of significance is provided. These thresholds will assist in making a determination as to whether there is a potential for significant impacts on the environment. The analysis considers both the short-term (construction-related) and long-term (operational) impacts associated with the proposed project's implementation, and where appropriate, the cumulative impacts. To each question, there are four possible responses:

- *No Impact.* The proposed project will not result in any adverse environmental impacts.
- *Less than Significant Impact.* The proposed project may have the potential for affecting the environment, although these impacts will be below levels or thresholds that the City of South Gate or other responsible agencies consider to be significant.
- *Less than Significant Impact with Mitigation.* The proposed project may have the potential to generate a significant impact on the environment. However, the level of impact may be reduced to levels that are less than significant with the implementation of the recommended mitigation measures.
- *Potentially Significant Impact.* The proposed project may result in environmental impacts that are significant. This finding will require the preparation of an environmental impact report (EIR).

3.1 AESTHETICS

3.1.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse aesthetic impact if it results in any of the following:

- A substantial adverse effect on a scenic vista;
- Substantial damage to scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In non-urbanized areas, a substantial degradation to the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly accessible vantage point); in an urbanized area, a conflict with the applicable zoning and other regulations governing scenic quality; or,
- A new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project have a substantial adverse effect on a scenic vista? • No Impact.

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁹ The proposed project involves the construction of a 30-acre passive recreational park area with walking trails, a community/maintenance building, an educational garden, a plaza and artistic elements, among other elements. Once complete, the proposed project will not negatively impact any scenic vistas because the proposed project does not involve the construction of any structures that will obstruct scenic views. As a result, the proposed project will not have an impact on a scenic vista.

B. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? • No Impact.

Approximately five trees are located on-site and include palm trees and deciduous trees. The existing trees will be removed and replaced as part of the proposed project. The proposed plan calls for installation of grass, native and fruit bearing trees and other landscaping and, therefore, will not

⁹ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

damage trees as a scenic resource. There are neither rock outcroppings nor historic buildings located on-site.¹⁰ According to the California Department of Transportation, none of the surrounding roadways are designated scenic highway and there are no State or County designated scenic highways in the vicinity of the project site.¹¹ As a result, no impacts on scenic resources will result from the proposed project's implementation.

C. In non-urbanized areas, would the project 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 a 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?

• *No Impact.*

As indicated previously, the majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. Five trees are located on-site and include palm trees and deciduous trees. All five trees are of species commonly used in urban landscaping and are not protected by any regional or local policy or ordinance. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.¹² Once constructed, the proposed project will improve the quality of the site and the surrounding areas because the recreational park area will provide natural and artistic elements that will be aesthetically pleasing. The proposed project will represent an improvement over the existing conditions. Furthermore, the project site is located in an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality. As a result, no impacts are expected to result.

D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? • *Less than Significant Impact.*

The project area is located in a largely underutilized area that is adjacent to the vacant land, industrial uses, the I-710 Freeway and the Los Angeles River; however, a mobile home park is located adjacent to the project site to the east. The mobile home park will not be affected by the introduction of additional sources of light because the lighting will be used to illuminate the parking area and the pedestrian and bicycle trails and will be directed downward. In addition, the majority of the lighting will be off when the park is closed after sundown. Only a portion of the security lighting will remain after park closure. Furthermore, as a standard practice for new developments, the City of South Gate will approve the photometric plan as a condition of approval. As a result, less than significant impacts will result upon the implementation of the proposed project.

¹⁰ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

¹¹ California Department of Transportation. *Official Designated Scenic Highways*. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

¹² Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

3.1.3 MITIGATION MEASURES

The analysis determined that less than significant impacts related to scenic vistas, scenic resources, and light and glare are anticipated upon the implementation of the proposed project, therefore no mitigation measures are required.

3.2 AGRICULTURE & FORESTRY RESOURCES

3.2.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant impact on agriculture and forestry resources if it results in any of the following:

- The conversion of 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 uses;
- A conflict with existing zoning for agricultural uses, or a Williamson Act Contract;
- A 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));
- The loss of forest land or conversion of forest land to a non-forest use; or,
- 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 a non-forest use.

3.2.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project 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 uses? • No Impact.

According to the California Department of Conservation, the City of South Gate does not contain any areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.¹³ The entire City is urban and not classified as having Important Farmland. The southern portion of the project site and the seven-acre portion of the project site on the northern side (Phase 1) are currently zoned as M2 (*Light Manufacturing*). A small portion of the northern portion of the project site is zoned as CV (*Civic*). The remainder of the project site is not zoned. The General Plan Existing Land Uses Map indicates that the majority of the project site has an existing land use designation of *Water Bodies*,

¹³ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping, and Monitoring Program. *California Important Farmland Finder*. <https://maps.conservation.ca.gov/DLRP/CIFF/>.

Easements and Public Works. The northern portion of the project site (Phase 1) also has existing land use designations of *Civic and Institutional* and *Vacant Land*.

The City's General Plan does not identify any agricultural uses within City boundaries.¹⁴ The proposed project will not require a zone change or general plan amendment, as the proposed use is permitted within the project site (refer to Section 3.11.2.A). Since no zone change or general plan amendment will occur, no loss of land zoned for/or permitting agricultural uses will occur. There are no agricultural uses currently located within the site that would be affected by the project's implementation. Furthermore, the proposed project will serve agricultural purposes as it will feature an orchard that will contain fruit trees. Since the implementation of the proposed project will not involve the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to urban uses, no impacts will occur.

B. Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract? • No Impact.

The southern portion of the project site and the seven-acre portion of the project site on the northern side (Phase 1) are currently zoned as M2 (*Light Manufacturing*). A small portion of the northern portion of the project site is zoned as CV (*Civic*). The remainder of the project site is not zoned. The General Plan Existing Land Uses Map indicates that the majority of the project site has an existing land use designation of *Water Bodies, Easements and Public Works*. The northern portion of the project site (Phase 1) also has existing land use designations of *Civic and Institutional* and *Vacant Land*.

The City's General Plan does not identify any agricultural uses within City boundaries. The proposed project will not require a zone change or general plan amendment, as the proposed use is permitted within the project site (refer to Section 3.11.2.A). Since no zone change or general plan amendment will occur, no loss of land zoned for/or permitting agricultural uses will occur. There are no agricultural uses located within the site that would be affected by the project's implementation. In addition, according to the California Department of Conservation Division of Land Resource Protection, the project site is not subject to a Williamson Act Contract.¹⁵ Furthermore, the proposed project will serve agricultural purposes as it will feature an orchard that will contain fruit trees. As a result, no impacts on existing Williamson Act Contracts will result from the proposed project's implementation.

¹⁴ South Gate, City of. *South Gate General Plan 2035*. Community Design Element. December 2009.

¹⁵ California Department of Conservation. *State of California Williamson Act Contract Land*. ftp://ftp.consrv.ca.gov/pub/dlrp/WA/2012%20Statewide%20Map/WA_2012_8x11.pdf.

C. *Would the project 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))?* • *No Impact.*

The City of South Gate is located in the midst of a larger urban area and no forest lands are located within the City. The City's General Plan does not provide for any forest land preservation.¹⁶ As a result, no impacts on forest land or timber resources will result from the proposed project's implementation.

D. *Would the project result in the loss of forest land or conversion of forest land to a non-forest use?* • *No Impact.*

No forest lands are located in the vicinity of the project site. As a result, no loss or conversion of forest lands to urban uses will result from the proposed project's implementation and no impacts will occur.

E. *Would the project 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 a non-forest use?* • *No Impact.*

The project would not involve the disruption or damage of the existing environment that would result in a loss of farmland to non-agricultural use or conversion of forest land to non-forest use because the project site is not located in close proximity to farmland or forest land. As a result, no impacts will result from the implementation of the proposed project.

3.2.3 MITIGATION MEASURES

The analysis of agricultural and forestry resources indicated that no impacts on these resources would occur as part of the proposed project's implementation. As a result, no mitigation is required.

3.3 AIR QUALITY

3.3.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse environmental impact on air quality, if it results in any of the following:

- A conflict with or an obstruction of the implementation of the applicable air quality plan;
- A cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard;
- The exposure of sensitive receptors to substantial pollutant concentrations; or,
- Other emissions adversely affecting a substantial number of people.

¹⁶ South Gate, City of. *South Gate General Plan 2035*. Community Design Element. December 2009.

Air quality impacts may occur during the construction or operation phase of a project, and may come from stationary (e.g., industrial processes, generators), mobile (e.g., automobiles, trucks), or area (e.g., residential water heaters) sources. The South Coast Air Quality Management District (SCAQMD) is the main regulatory authority in the region (the South Coast Air Basin, which includes the City of South Gate) with regard to air quality issues. In April 1993, the SCAQMD adopted a CEQA Air Quality Handbook that provides guidance for the CEQA analysis of potential air quality impacts of new projects.

The topic of air quality can be divided into three categories: construction emissions, operational emissions, and toxic air contaminants. Construction of new projects has the potential to create air quality impacts through excavation and grading activities and through the use of heavy-duty equipment. Fugitive dust emissions result from land clearing, demolition, excavation, and equipment traffic over unpaved roads at construction sites. Mobile source emissions, primarily nitrogen oxides (NO_x), result from the use of diesel-powered construction equipment such as bulldozers and trucks. Mobile source emissions also result from vehicle trips by construction workers to and from the project site. A great percentage of fugitive dust emissions can be mitigated through the implementation of measures within Rule 403, Fugitive Dust, by SCAQMD.¹⁷

Operational emissions are produced by the occupants of a facility or development and by both mobile and stationary sources connected to the facility or development. Depending on the characteristics of the individual project, operational activities have the potential to generate emissions of criteria and/or toxic air contaminants. Stationary source emissions include point source emissions that have an identifiable location, such as a smokestack, as well as area source emissions, such as fumes or minor sources of exhaust, which are emitted by multiple, small sources. Mobile source emissions occur as a result of motor vehicle travel.

The California Health and Safety Code (HSC) Section 39655 defines a toxic air contaminant as "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health."¹⁸ Impacts from toxic air contaminants can occur during either the construction or operational phases of a project. During certain construction activities, potential releases of toxic air contaminants could occur during site remediation activities, or during building demolition. Toxic air contaminants may also be released during industrial or manufacturing processes, or other activities that involve the use, storage, processing, or disposal of toxic materials.¹⁹ The SCAQMD has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants:

- *Ozone (O₃)* is a nearly colorless gas that irritates the lungs, damages materials, and vegetation. Ozone is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).

¹⁷ South Coast Air Quality Management District. *Rule 403, Fugitive Dust*. As amended June 3, 2005.

¹⁸ California, State of. *Health and Safety Code*. Division 26 Air Resources, Part 2 State Air Resources Board, Chapter 3.5 Toxic Air Contaminants, Article 2 Definitions, Section 39655 (a).

¹⁹ Los Angeles, City of. *Los Angeles CEQA Thresholds Guide*. 2006.

- *Carbon monoxide* (CO) is a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain and is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.
- *Nitrogen dioxide* (NO₂) is a yellowish-brown gas, which at high levels can cause breathing difficulties. NO₂ is formed when nitric oxide (a pollutant from burning processes) combines with oxygen.
- *Sulfur dioxide* (SO₂) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- *PM₁₀ and PM_{2.5}* refers to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation.

Projects in the South Coast Air Basin (Basin) generating *construction-related* emissions that exceed any of the following emissions thresholds are considered to be significant under CEQA:

- 75 pounds per day of reactive organic compounds;
- 100 pounds per day of nitrogen dioxide;
- 550 pounds per day of carbon monoxide;
- 150 pounds per day of PM₁₀;
- 55 pounds per day of PM_{2.5}; or,
- 150 pounds per day of sulfur oxides.

A project would have a significant effect on air quality if any of the following *operational* emissions thresholds for criteria pollutants are exceeded:

- 55 pounds per day of reactive organic compounds;
- 55 pounds per day of nitrogen dioxide;
- 550 pounds per day of carbon monoxide;
- 150 pounds per day of PM₁₀;
- 55 pounds per day of PM_{2.5}; or,
- 150 pounds per day of sulfur oxides.

3.3.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project conflict with or obstruct implementation of the applicable air quality plan?* •
No Impact.

The project area is located within the South Coast Air Basin (Basin), which covers a 6,600 square-mile area within all of Orange County, the non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. Measures to improve regional air quality are outlined in the SCAQMD's Air Quality Management Plan (AQMP). The most recent 2016 AQMP was adopted in March 2017 and was

jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG).²⁰

The AQMP will help the SCAQMD maintain focus on the air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key areas of growth. Key elements of the 2016 AQMP include enhancements to existing programs to meet the 24-hour PM_{2.5} Federal health standard and a proposed plan of action to reduce ground-level ozone. The primary criteria pollutants that remain non-attainment in the local area include PM_{2.5} and ozone. Specific criteria for determining a project's conformity with the AQMP is defined in Section 12.3 of the SCAQMD's CEQA Air Quality Handbook. The Air Quality Handbook refers to the following criteria as a means to determine a project's conformity with the AQMP:²¹

- *Consistency Criteria 1* refers to a proposed project's potential for resulting in an increase in the frequency or severity of an existing air quality violation or its potential for contributing to the continuation of an existing air quality violation.
- *Consistency Criteria 2* refers to a proposed project's potential for exceeding the assumptions included in the AQMP or other regional growth projections relevant to the AQMP's implementation.

In terms of Criteria 1, the proposed project's long-term (operational) airborne emissions will be below levels that the SCAQMD considers to be a significant impact (refer to the analysis included in the next section where the long-term stationary and mobile emissions for the proposed project are summarized in Table 3-2). The proposed project will also conform to Consistency Criteria 2 since it will not significantly affect any regional population, housing, and employment projections prepared for the City of South Gate. Projects that are consistent with the projections of employment and population forecasts identified in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG are considered consistent with the AQMP growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP.

In terms of Criteria 2, the proposed project will not conflict with the regional population forecast and distribution in the 2016 AQMP. According to the 2016 AQMP, the Basin had a population of 16.4 million in 2012 and is projected to have a population of 17.6 million by the year 2023 (these numbers are derived from the 2016-2040 RTP/SCS prepared by SCAG). City-specific growth forecasts are listed within the RTP/SCS. According to the RTP/SCS Demographics and Growth Forecast Appendix, the City of South Gate had a population of 94,700 in 2012 and is projected to have a population of 111,800 by the year 2040.²² As of July 1, 2017, the population of the City of South Gate was estimated to be 95,430.²³ The proposed project will involve the construction and operation of a recreational park area and will not contribute to population growth within the City. According to the RTP/SCS Demographics

²⁰ South Coast Air Quality Management District. *Final 2016 Air Quality Plan*. Adopted March 2017.

²¹ South Coast Air Quality Management District. *CEQA Air Quality Handbook*. April 1993.

²² Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast*. April 2016.

²³ United States Census Bureau. *Quickfacts, South Gate City, California*.
<https://www.census.gov/quickfacts/fact/table/southgatecitycalifornia/PST045218>.

and Growth Forecast Appendix, the City of South Gate is projected to add a total of 3,600 new jobs through the year 2040.²⁴ The proposed project will result in the creation of 10-12 jobs. Since the project will result in the creation of only 10-12 new jobs and will not result in the introduction new residents, the project is well within SCAG's population and employment projections for the City of South Gate and the proposed project will not violate Consistency Criteria 2. As a result, no impacts related to the implementation of the AQMP are anticipated.

B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard? • Less than Significant Impact with Mitigation.

Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements. As indicated previously, the project area is located in a larger non-attainment area for ozone and particulates (PM_{2.5}); therefore, the proposed project will be required to comply with the requirements of SCAQMD Rule 403, *Fugitive Dust*, which requires the implementation of Best Available Control Measures (BACM) for all fugitive dust sources, and the 2016 *Air Quality Management Plan (AQMP)*, which identifies BACMs and Best Available Control Technologies (BACT) for area sources and point sources, respectively. According to SCAQMD Rule 403, *Fugitive Dust*, all unpaved demolition and construction areas shall be regularly watered up to three times per day during excavation, grading, and construction as required (depending on temperature, soil moisture, wind, etc.). Watering could reduce fugitive dust by as much as 55 percent. Rule 403 also requires that temporary dust covers be used on any piles of excavated or imported earth to reduce wind-blown dust. In addition, all clearing, earthmoving, or excavation activities must be discontinued during periods of high winds (i.e. greater than 15 mph) so as to prevent excessive amounts of fugitive dust. Finally, the contractors must comply with other SCAQMD regulations governing equipment idling and emissions controls. The aforementioned SCAQMD regulations are standard conditions required for every construction project undertaken in the City as well as in the cities and counties governed by the SCAQMD.

The potential construction-related emissions from the proposed project were estimated using the computer model CalEEMod (V.2016.3.2) developed for the SCAQMD. Since none of the three phases will be constructed simultaneously and a start time is not yet known for the construction of Phases 2 and 3, Phase 1 construction will be analyzed alone for environmental and air quality analysis purposes. The construction period for Phase 1 is expected to last for approximately 18 months.

²⁴ Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast.* April 2016.

**Table 3-1
 Estimated Daily Construction Emissions for Phase 1**

Construction Phase	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Demolition (on-site)	3.51	35.78	22.06	0.04	1.79	1.67
Demolition (off-site)	0.07	0.05	0.67	--	0.17	0.05
Total Demolition	3.58	35.83	22.73	0.04	1.96	1.72
Site Preparation (on-site)	4.34	45.57	22.06	0.04	20.46	12.13
Site Preparation (off-site)	0.10	0.06	0.81	--	0.20	0.05
Total Site Preparation	4.44	45.63	22.87	0.04	20.66	12.18
Grading (on-site)	2.58	28.35	16.29	0.03	7.67	4.62
Grading (off-site)	0.07	0.05	0.67	--	0.17	0.05
Total Grading	2.65	28.40	16.96	0.03	7.84	4.67
Building Construction (on-site)	2.12	19.19	16.85	0.03	1.12	1.05
Building Construction (off-site)	0.74	5.64	6.48	0.03	1.79	0.51
Total Building Construction	2.86	24.83	23.33	0.06	2.91	1.56
Paving	1.36	14.07	14.65	0.02	0.75	0.69
Paving	0.07	0.05	0.61	--	0.17	0.05
Total Paving	1.43	14.12	15.26	0.02	0.92	0.74
Architectural Coatings (on-site)	0.24	1.68	1.83	--	0.11	0.11
Architectural Coatings (off-site)	0.12	0.08	1.06	--	0.29	0.08
Total Architectural Coatings	0.36	1.76	1.89	--	0.40	0.19
Maximum Daily Emissions	4.44	45.63	23.33	0.06	20.66	12.18
Daily Thresholds	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod V.2016.3.2.

As shown in Table 3-1, daily construction emissions will not exceed the SCAQMD thresholds of significance. Therefore, the construction-related impacts associated with the proposed project would be less than significant. Nevertheless, in order to ensure that all construction staging occurs on-site and that the proposed project does not cause off-site particulate emissions, the following mitigation is required:

- The project contractors must submit a construction and staging plan to the City for approval before commencing any construction activity. The construction and staging plan must establish an on-site construction equipment staging area and construction worker parking lot, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments.

Long-term emissions refer to those air quality impacts that will occur once the proposed project has been constructed and is operational. These impacts will continue over the operational life of the project. The two main sources of operational emissions include mobile emissions and off-site emissions related to the production and consumption of energy. Table 3-2 depicts the estimated project operational emissions related to the project's operation.

Table 3-2
Estimated Operational Emissions in lbs/day

Emission Source	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Area-wide (lbs/day)	0.02	--	--	--	--	--
Energy (lbs/day)	--	--	--	--	--	--
Mobile (lbs/day)	0.29	1.37	3.47	0.01	0.98	0.27
Total (lbs/day)	0.29	1.37	3.47	0.01	0.98	0.27
Daily Thresholds	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod V.2016.3.2.

As indicated in Table 3-2, the projected long-term emissions are well below thresholds considered to represent a significant impact. Since the project area is located in a non-attainment area for ozone and particulates, the contractors will be required to adhere to all pertinent provisions of SCAQMD Rule 403 pertaining to the generation of fugitive dust during grading and/or the use of equipment on unpaved surfaces.²⁵ The contractors will be responsible for being familiar with, and implementing any pertinent best available control measures. As a result, less than significant impacts will occur with the implementation of the above-mentioned mitigation measure.

C. Would the project expose sensitive receptors to substantial pollutant concentrations? • Less than Significant Impact with Mitigation.

Sensitive receptors refer to land uses and/or activities that are especially sensitive to poor air quality and typically include residences, board and care facilities, schools, playgrounds, hospitals, parks, childcare centers, and outdoor athletic facilities, and other facilities where children or the elderly may congregate.²⁶ These population groups are generally more sensitive to poor air quality. The nearest sensitive receptors to the project site include the mobile home park located adjacent to the project site to the east; residential uses located 600 feet west of the project site just west of the Los Angeles River; residential uses located approximately one-quarter mile east of the southern portion of the project site; and, Legacy Visual and Performing Arts High School, located 600 feet west of the center portion of the project site just west of the Los Angeles River.²⁷ These nearby sensitive receptors are shown in Exhibit 3-1.

The SCAQMD requires that CEQA air quality analyses indicate whether a proposed project will result in an exceedance of *localized emissions thresholds* or LSTs. LSTs only apply to emissions at a fixed location and do not include off-site or area-wide emissions. The pollutants that are the focus of the LST analysis include the conversion of NO_x to NO₂; carbon monoxide (CO) emissions; PM₁₀ emissions; and PM_{2.5} emissions. The use of the “look-up tables” is permitted since each of the construction phases that include grading, site preparation, and building erection will involve the disturbance of less than

²⁵ South Coast Air Quality Management District. *Rule 403, Fugitive Dust*. As Amended June 3, 2005.

²⁶ South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. As amended 2017.

²⁷ Google Earth. Website accessed December 21, 2018.

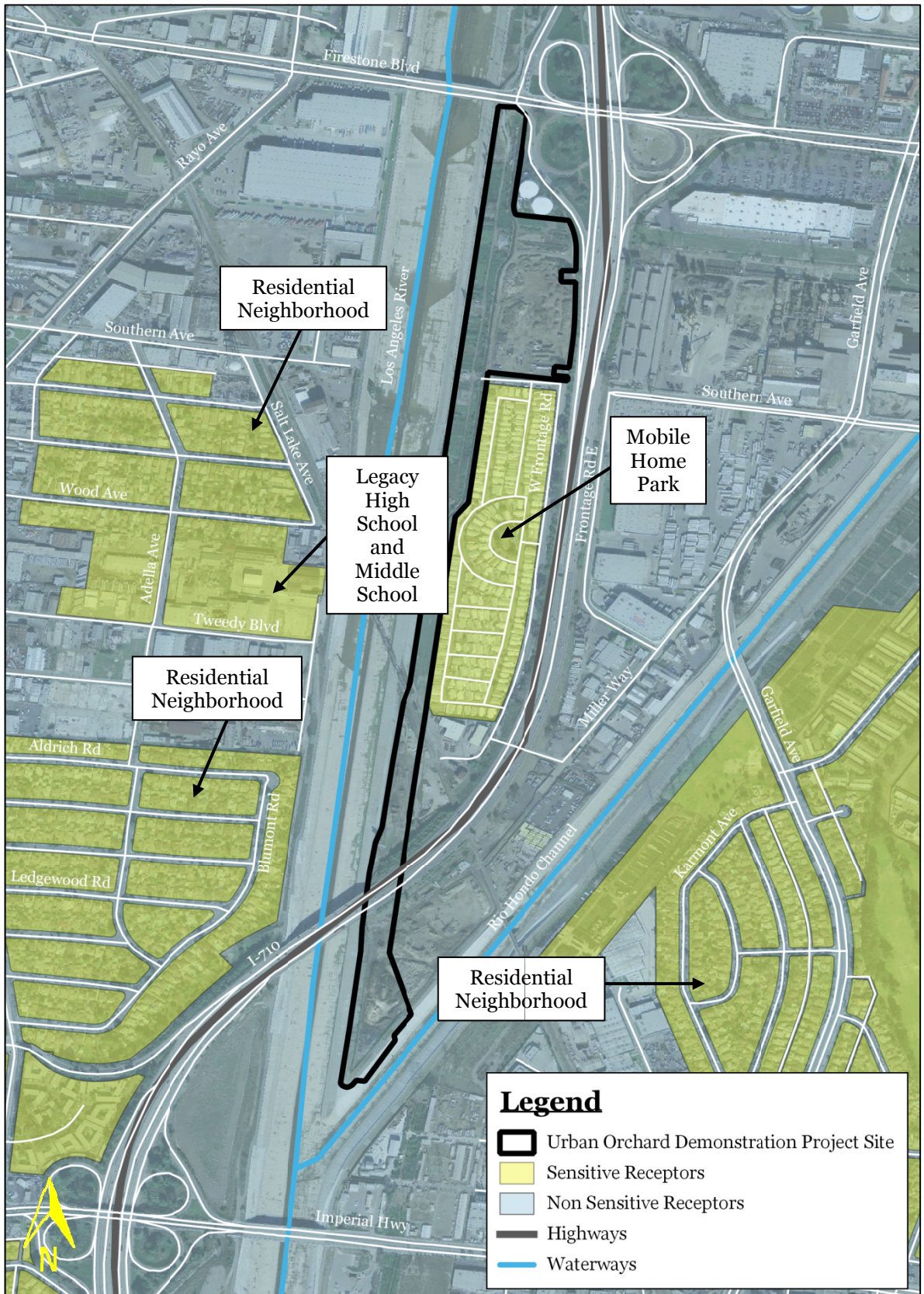


EXHIBIT 3-1
NEARBY SENSITIVE RECEPTORS

SOURCE: QUANTUM GIS

five acres of land area on any given day. For purposes of the LST analysis, the receptor distance used was 25 meters since the nearest sensitive receptor (the mobile home park) is located adjacent to the project site.

**Table 3-3
 Local Significance Thresholds Exceedance SRA 12**

Emissions	Project Emissions (lbs/day)	Type	Allowable Emissions Threshold (lbs/day) and a Specified Distance from Receptor (in meters)				
			25	50	100	200	500
NO _x	45.63	Construction	98	94	101	111	139
CO	23.33	Construction	630	879	1,368	2,514	7,389
PM ₁₀	9.64	Construction	13	41	55	83	166
PM _{2.5}	6.13	Construction	7	10	15	27	86

Source: CalEEMod V.2016.3.2.

As previously mentioned, the contractors will be required to adhere to all pertinent provisions of SCAQMD Rule 403 pertaining to the generation of fugitive dust during grading and/or the use of equipment on unpaved surfaces.²⁸ In addition, fugitive dust emission, which is responsible for PM₁₀ and PM_{2.5} emissions, will further be reduced through the implementation of SCAQMD regulations related to fugitive dust generation and other construction-related emissions. These SCAQMD regulations are standard conditions required for every construction project undertaken in the City as well as in the cities and counties governed by the SCAQMD. The figures for NO_x and CO within Table 3-3 are the emissions *before* mitigation and the figures for PM₁₀ and PM_{2.5} emissions are the emissions *after* mitigation. Since only one Rule 403 mitigation measure is included and calculated within the CalEEMod air quality model (watering of dirt surfaces three times daily), emissions will be lower than those listed in Table 3-3. Furthermore, the non-fruit bearing tree species that are proposed to be planted on-site have been selected to sequester carbon thereby improving air quality for sensitive receptors in the region. Nevertheless, in order to reduce particulate emissions, the following mitigation measure is required to reduce localized PM₁₀ and PM_{2.5} impacts:

- Contractors must use off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during project construction. Such equipment will be outlined with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions.

A list of CARB verified DPFs are available on the CARB website. These requirements shall be included in applicable bid documents and successful contractor(s) must demonstrate the ability to supply such equipment. A copy of each unit's certified tier specification or model year specification and CARB or SCAQMD operating permit (if applicable) shall be available upon request at the time of mobilization of each applicable unit of equipment. In the event that construction equipment cannot meet the Tier 4

²⁸ South Coast Air Quality Management District. *Rule 403, Fugitive Dust*. As Amended June 3, 2005.

engine certification, the project representative or contractor must demonstrate through future study with written findings supported by substantial evidence that is approved by the Lead Agency before using other technologies/strategies. Alternative applicable strategies may include, but would not be limited to, reduction in the number and/or horsepower rating of construction equipment, limiting the number of daily construction haul truck trips to and from the project, using cleaner vehicle fuel, and/or limiting the number of individual construction project phases occurring simultaneously.

Most vehicles generate carbon monoxide (CO) as part of the tail-pipe emissions, therefore, high concentrations of CO along busy roadways and congested intersections are a concern. The areas surrounding the most congested intersections are often found to contain high levels of CO that exceed applicable standards. These areas of high CO concentration are referred to as “hot-spots”. Two variables influence the creation of a hot-spot and these variables include traffic volumes and traffic congestion. Typically, a hot-spot may occur near an intersection that is experiencing severe congestion (a LOS E or LOS F).²⁹ The SCAQMD stated in its CEQA Handbook that a CO hot-spot would not likely develop at an intersection operating at LOS C or better. Since the Handbook was written, there have been new CO emissions controls added to vehicles and reformulated fuels are now sold in the Basin. These new automobile emissions controls, along with the reformulated fuels, have resulted in a lowering of both ambient CO concentrations and vehicle emissions. The proposed project will generate approximately 57 daily trips, with 6 trips occurring during the AM and PM peak hours (refer to Section 3.17.2.A herein).³⁰ The projected peak hour traffic will not significantly degrade any local intersection’s level of service (LOS E or F). In addition, project-generated traffic will not result in the creation of a carbon monoxide hot-spot. Furthermore, the proposed project will include walking and biking trails, therefore encouraging the use of alternative forms of transportation. As a result, the potential impacts are considered to be less than significant with the implementation of the above-mentioned mitigation measure.

D. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? • Less than Significant Impact.

The SCAQMD has identified those land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants, composting activities, refineries, landfills, and businesses involved in fiberglass molding.³¹ The proposed project involves the construction and operation of a 30-acre passive recreational park area and will not involve odor-generating uses. Furthermore, construction truck drivers must adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel powered vehicles to less than five minutes.³² Adherence to the aforementioned regulation will minimize odor impacts from diesel trucks. In addition, the project’s contractors must adhere to SCAQMD Rule 403

²⁹ “LOS” refers to “Level of Service.” Refer to Section 3.2.17.A.

³⁰ Crown City Engineers, Inc. *Traffic Impact Study, Warehouse Development, 8201 Sorensen Avenue, South Gate, California.* October 2018.

³¹ South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9.* As amended 2017.

³² California, State of. *California Code of Regulations, Title 13, Section 2485 Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.*

regulations, which significantly reduce the generation of fugitive dust. As a result, the potential impacts will be less than significant.

3.3.3 MITIGATION MEASURES

In order to ensure that all construction staging occurs on-site and that the proposed project does not cause off-site particulate emissions, the following mitigation is required:

Mitigation Measure No. 1 (Air Quality). The project contractors must submit a construction and staging plan to the City for approval before commencing any construction activity. The construction and staging plan must establish an on-site construction equipment staging area and construction worker parking lot, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments.

Mitigation Measure No. 2 (Air Quality). Contractors must use off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during project construction. Such equipment will be outlined with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions.

3.4 BIOLOGICAL RESOURCES

3.4.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on biological resources if it results in any of the following:

- 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 Wildlife or U.S. Fish and Wildlife Service;
- 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 Wildlife or U.S. Fish and Wildlife Service;
- 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;
- A substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or the impedance of the use of native wildlife nursery sites;

- A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or,
- A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

3.4.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project 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 Wildlife or U.S. Fish and Wildlife Service?* • *Less than Significant Impact with Mitigation.*

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. Five trees are located on-site and include palm trees and deciduous trees. All five trees are of species commonly used in urban landscaping and are not protected by any regional or local policy or ordinance. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.³³ The project site is partially enclosed with chain-link fencing and is bounded to the west by the Los Angeles River.³⁴ Due to the current state of the project site and the level of development in the surrounding area, the project site is not a suitable environment for any candidate, sensitive, or special status species. There are no local or regional plans, policies, or regulations that identify candidate, sensitive, or special status species except those identified by the California Department of Fish and Wildlife.

The South Gate General Plan 2035 states that “there are no known threatened or endangered species and very sparse wildlife, though migratory or native birds may be found in natural areas such as South Gate Park or areas around the Los Angeles River.”³⁵ A review of the California Department of Fish and Wildlife Bios Viewer for the South Gate Quadrangle indicated that there are five threatened or endangered species located within the South Gate Quadrangle.³⁶ These species are identified below:

- The *coastal California gnatcatcher* is not likely to be found on-site due to the existing surrounding development and the lack of habitat suitable for the California gnatcatcher. The

³³ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

³⁴ Ibid.

³⁵ South Gate, City of. *South Gate General Plan 2035*. Green City Element. December 2009.

³⁶ California Department of Fish and Wildlife. *Bios Viewer*. <https://map.dfg.ca.gov/bios/?tool=cnddbQuick>. Website Accessed on December 21, 2018.

absence of coastal sage scrub, the coastal California gnatcatcher's primary habitat, further diminishes the likelihood of encountering such birds.³⁷

- The *southwestern willow flycatcher* is not likely to be found on-site due to the surrounding urban development and the lack of habitat suitable riparian habitat for this bird species. The adjacent Los Angeles River channel is concrete-lined and is used for flood control.³⁸
- The *least Bell's vireo* also lives in a riparian habitat, with a majority of the species living in San Diego County. As a result, it is not likely that any least Bell's vireos will be encountered in the project area due to the lack of riparian natural habitat in the surrounding area.³⁹
- The *western yellow-billed cuckoo* is an insect-eating bird found in riparian woodland habitats. The likelihood of encountering a western yellow-billed cuckoo is low due to the level of development present within the City. Furthermore, the lack of riparian natural habitat further diminishes the likelihood of encountering populations of western yellow-billed cuckoos.⁴⁰
- *California Orcutt grass* is found near vernal pools throughout Los Angeles, Riverside, and San Diego Counties.⁴¹ As indicated previously, the project site is located in the midst of an urban area. There are no bodies of water located within the project site that would be capable of supporting populations of California Orcutt grass nor does the site have the capacity to form vernal pools during wet seasons.

The proposed project will not have an impact on the aforementioned species because the project site is located in the midst of an urban area. The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area. The park will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The

³⁷ Audubon. *California Gnatcatcher (Poliophtila californica)*. <https://www.audubon.org/field-guide/bird/california-gnatcatcher>.

³⁸ United State Geological Survey. *Southwestern Willow Flycatcher Habitat*. <http://sbosc.wr.usgs.gov/cprs/research/projects/swwf/wiflhab.asp>.

³⁹ California Partners in Flight Riparian Bird Conservation Plan. *Least Bell's Vireo (Vireo bellii pusillus)*. http://www.prbo.org/calpif/htmldocs/species/riparian/least_bell_vireo.htm.

⁴⁰ US Fish and Wildlife Service. *Sacramento Fish and Wildlife Office, Public Advisory*. http://www.fws.gov/sacramento/outreach/Public-Advisories/WesternYellow-BilledCuckoo/outreach_PA_Western-Yellow-Billed-Cuckoo.htm.

⁴¹ County of Los Angeles Department of Public Works. *Listed Species in the County of Los Angeles*. http://dpw.lacounty.gov/pdd/bikepath/bikeplan/docs/App_C_Bio.pdf.

proposed project will also feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. Approximately five on-site trees will be removed and replaced. In order to reduce any potential impact to avian species, the following mitigation measure is required:

- If clearing and/or construction activities will occur during the raptor or migratory bird nesting season (February 15–August 15), the project contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before construction activities. The qualified biologist shall survey the construction zone and a 500-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist.

With the above-mentioned mitigation measure, less than significant impacts on candidate, sensitive, or special status species will result from proposed project's implementation.

B. Would the project 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 Wildlife or U.S. Fish and Wildlife Service? ● No Impact.

Due to the current state of the project site and the level of development in the surrounding area, the project site does not offer a suitable habitat for any of the aforementioned rare and/or endangered species. There are no local or regional plans, policies, or regulations that identify any riparian habitat or other sensitive natural community, nor does the California Department of Fish and Wildlife identify any such habitat. The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are concrete-lined and do not offer suitable riparian vegetation for the aforementioned species. The project site does not offer many trees (five trees are currently located on-site) to endangered or threatened bird species. A review of the U.S. Fish and Wildlife Service National Wetlands Inventory, Wetlands Mapper classifies the Los Angeles River and the Rio Hondo Channel as riverines but does not identify any wetlands in the vicinity of the project site (refer to Exhibit 3-2).⁴² The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are

⁴² United States Fish and Wildlife Service. *National Wetlands Inventory*. <https://www.fws.gov/Wetlands/data/Mapper.html>.

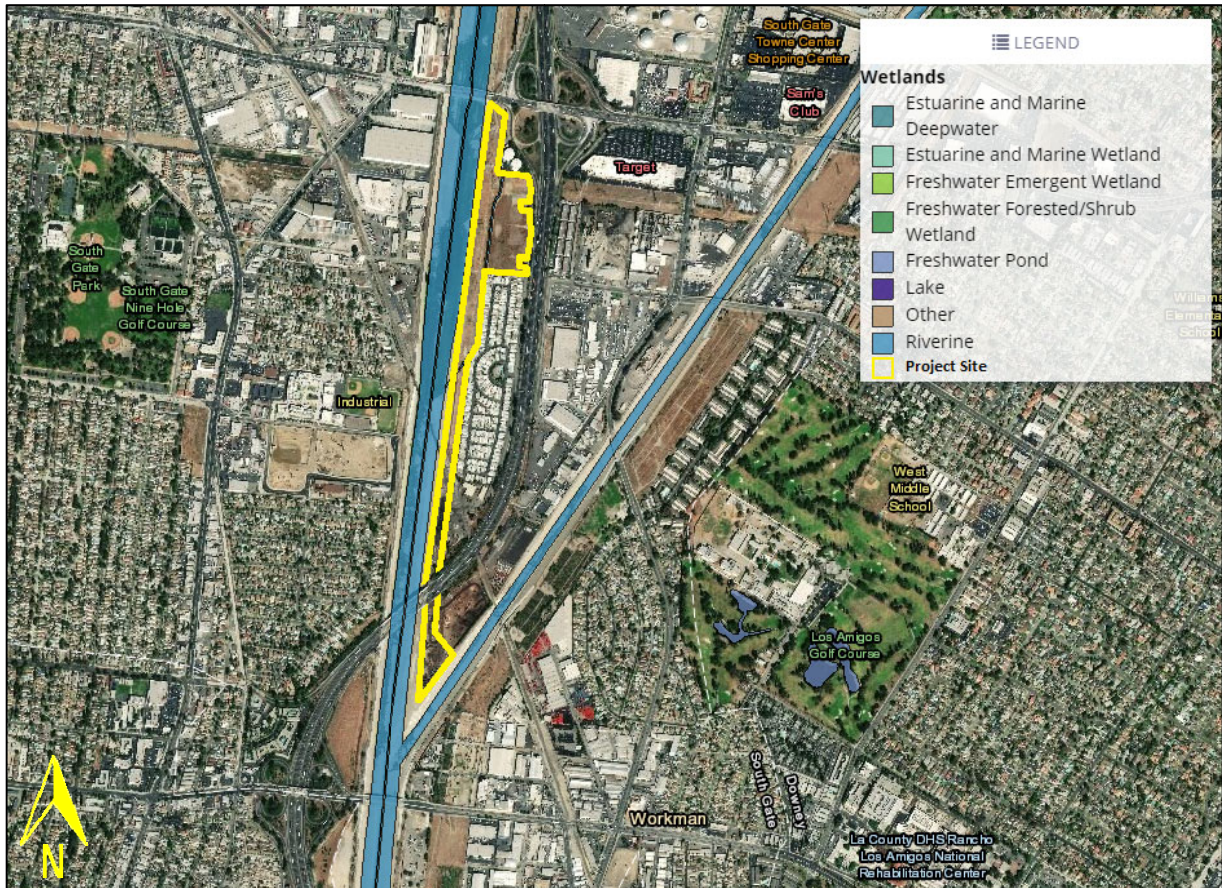


EXHIBIT 3-2
WETLANDS MAP
SOURCE: NATIONAL WETLANDS INVENTORY

fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. As a result, no impacts on natural or riparian habitats will result from the proposed project's implementation.

C. Would the project 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? • No Impact.

As indicated in the previous subsection, the project site and adjacent developed properties do not contain any natural wetland and/or riparian habitat.⁴³ The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. As a result, the proposed project will not impact any protected wetland area or designated blue-line stream and no impacts will occur.

D. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites? • No Impact.

The site is surrounded by development and lacks suitable habitat for wildlife habitat. Furthermore, the site contains no natural hydrological features. Constant disturbance (noise and vibration) from

⁴³ United States Fish and Wildlife Service. *National Wetlands Inventory*. <https://www.fws.gov/Wetlands/data/Mapper.html>. Website accessed December 21, 2018.

vehicles traveling on the adjacent roadways and the I-710 freeway limits the site's utility as a migration corridor. Furthermore, the project site is partially enclosed with chain-link fencing and is bounded on the west by the Los Angeles River.⁴⁴ Since the site is surrounded by development on all sides and lacks suitable habitat, the site's utility as a migration corridor is restricted.

The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. Therefore, no impacts will result from the implementation of the proposed project.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? • No Impact.

Five trees are located on-site and include palm trees and deciduous trees. All of the trees to be removed are of species commonly used in urban landscaping and are not protected by any regional or local policy or ordinance. The proposed project will include an educational garden and an orchard that will contain fruit trees. In addition, other landscaping and trails will be provided along the entire length of the park area. The proposed plan calls for extensive installation of grass, native and fruit bearing trees and other landscaping and, therefore, will not damage trees as a scenic resource.

The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries

⁴⁴ United States Fish and Wildlife Service. *National Wetlands Inventory*. <https://www.fws.gov/Wetlands/data/Mapper.html>. Website accessed December 21, 2018.

to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. As a result, no impacts will occur.

F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan? • No Impact.

The proposed project will not impact an adopted or approved local, regional, or State habitat conservation plan because the proposed project is located in the midst of an urban area. The City's General Plan does not identify any conservation plans that are applicable to the City. In addition, no Significant Ecological Area (SEA) is located near the City of South Gate.⁴⁵ The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. Therefore, no impacts will occur.

3.4.3 MITIGATION MEASURES

In order to reduce any potential impact to avian species, the following mitigation measure is required:

Mitigation Measure No. 3 (Biological Resources). If clearing and/or construction activities will occur during the raptor or migratory bird nesting season (February 15–August 15), the project contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before construction activities. The qualified biologist shall survey the construction zone and a 500-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist.

⁴⁵ County of Los Angeles Department of Regional Planning. *Significant Ecological Areas and Coastal Resource Areas Policy Map*. February 2015.

3.5 CULTURAL RESOURCES

3.5.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may have a significant adverse impact on cultural resources if it results in any of the following:

- A substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines;
- A substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines;
- The disturbance of any human remains, including those interred outside of dedicated cemeteries.

3.5.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines? • No Impact.*

A search of the National and State Historic Register indicated that no historical resources are located within the site or in the immediate area.⁴⁶ In addition, the project site does not meet, or contain any structures that meet, any of the aforementioned criteria. The proposed project will be limited to the project site and will not affect any existing resources listed on the National or State Register or those identified as being eligible for listing on the National or State Register. As a result, no impacts are associated with the proposed project's implementation.

B. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines? • Less than Significant Impact.*

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁴⁷

⁴⁶ U. S. Department of the Interior, National Park Service. *National Register of Historic Places*. <http://focus.nps.gov/nrhp>. Secondary Source: California State Parks, Office of Historic Preservation. *Listed California Historical Resources*. Website accessed December 27, 2018.

⁴⁷ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

Although the project area and the surrounding areas have been subject to disturbance, the project site is situated in an area of high archaeological significance. In addition, the project will require grading. As a result, a mitigation measure is provided in Section 3.18 (Tribal Cultural Resources) to ensure that a tribal representative is present during construction-related ground-disturbing activities. Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. As a result, the impacts will be less than significant.

C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries? • Less than Significant Impact.

The nearest potential cemetery location is located on the east side of the Rio Hondo Channel approximately 1,700 feet to the east of the project site. This cemetery was affiliated with the “Poor Farm” which did have its own cemetery. Most references indicated the burials had been moved following a major flood along the Rio Hondo through there was one reference that stated the following, “When many patients died, they were buried in paupers’ graves at the southwest corner of what is now Downey, between Garfield Avenue and the Union Pacific Railroad tracks.” This area generally includes the Los Angeles County Public Works facility. Two potential village sites are found in the area: Chokiishnga and Huutnga. Often, the Europeans burials were in close proximity to older Indian burial sites. Finally, the 1888 and 1902 topographic maps did not identify any cemetery.

There are no dedicated cemeteries located within or adjacent to the project site project site boundaries.⁴⁸ The proposed project will be restricted to the designated project site and will not affect any dedicated cemeteries. In addition, the proposed construction is not likely to neither discover nor disturb any on-site burials due to the level of urbanization present and the amount of disturbance sustained to accommodate the surrounding development. Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements.

Notwithstanding, in the unlikely event that remains are uncovered by construction crews, all excavation and grading activities shall be halted and the City of South Gate Police Department will be contacted (the Department will then contact the County Coroner). In addition, a mitigation measure is provided in Section 3.18 (Tribal Cultural Resources) to ensure that a tribal representative is present during construction-related ground-disturbing activities. As a result, the proposed construction activities are not anticipated to impact any interred human remains and the impacts are considered to be less than significant.

3.5.3 MITIGATION MEASURES

The analysis of potential cultural resources impacts indicated that no significant adverse impacts would result from the proposed project’s implementation. As a result, no mitigation is required.

⁴⁸ Google Earth. Website accessed December 27, 2018.

3.6 ENERGY

3.6.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on the environment if it results in the following:

- A potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation; or,
- A conflict with or obstruction of a State or local plan for renewable energy or energy efficiency.

3.6.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? • Less than Significant Impact with Mitigation.

The proposed project will involve the construction and operation of a 30-acre passive recreational park area. The project will not involve energy consumption with the exception of limited lighting. The project will include new light standards and fixtures that will be used as operational and security lighting. The lighting will be used to illuminate the parking area and the pedestrian and bicycle trails and will be directed downward. In addition, the majority of the lighting will be off when the park is closed after sundown. Only a portion of the lighting will remain after park closure. In order to prevent inefficient consumption of energy, the following mitigation is required:

- The project contractor must install ENERGY STAR rated light emitting diodes (LEDs) for outdoor and parking lot lighting.

Adherence to the above-mentioned mitigation will reduce potential impacts to levels that are less than significant.

B. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency? • No Impact.

The California Public Utilities Commission prepared an updated Energy Efficiency Strategic Plan in 2011 with the goal of promoting energy efficiency and a reduction in Greenhouse Gases (GHG). Assembly Bill 1109, which was adopted in 2007, also serves as a framework for lighting efficiency. This bill would require the State Energy Resources Conservation and Development Commission to adopt minimum energy efficiency standards structured to reduce average statewide electrical energy consumption by not less than 50% from the 2007 levels for indoor residential lighting and not less than 25% from the 2007 levels for indoor commercial and outdoor lighting by 2018. According to the Energy Efficiency Strategic Plan, lighting comprises approximately one-fourth of California's electricity use while non-residential sector exterior lighting (parking lot, area, walkway, and security lighting)

usage comprises 1.4% of California's total electricity use, much of which occurs during limited occupancy periods.⁴⁹

As indicated previously, the project will involve recreational uses. A majority of the energy that will be consumed by daily operations will be related to outdoor lighting. Therefore, mitigation was proposed in the previous subsection that would be effective in reducing wasteful energy consumption. Adherence to the aforementioned mitigation measures will ensure conformance with the State's goal of promoting energy and lighting efficiency. As a result, the project will not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and no impacts will occur.

3.6.3 MITIGATION MEASURES

The analysis determined that the following mitigation would be required:

Mitigation Measure No. 4 (Energy). The project contractor must install ENERGY STAR rated light emitting diodes (LEDs) for outdoor and parking lot lighting.

3.7 GEOLOGY & SOILS

3.7.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on the environment if it results in the following:

- Substantial adverse effects, including the risk of loss, injury, or death involving 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or, landslides;
- Substantial soil erosion or the loss of topsoil;
- Location of the project on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Location of the project on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property;
- The project having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or,

⁴⁹ California Public Utilities Commission. *Energy Efficiency Strategic Plan*. Plan updated January 2011.

- The direct or indirect destruction of a unique paleontological resource or site or unique geologic feature.

3.7.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or, landslides? • Less than Significant Impact.*

The City of South Gate is located in a seismically active region (refer to Exhibit 3-3). Many major and minor local faults traverse the entire Southern California region, posing a threat to millions of residents, including those who reside in the City. In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the damage sustained in the 1971 San Fernando Earthquake. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults.⁵⁰ A list of cities and counties subject to the Alquist-Priolo Earthquake Fault Zones is available on the State's Department of Conservation website. The City of South Gate is not on the list.⁵¹

The Avalon-Compton Fault is the closest known fault to the project site. This fault is located approximately 4.65 miles to the southwest.⁵² The project site is not located within the fault zone of the Avalon-Compton Fault (refer to Exhibit 3-3). The potential impacts in regards to ground shaking and fault rupture are less than significant since the risk is no greater in and around the project site than for the rest of the area. In addition, the proposed project involves the construction and operation of a 30-acre passive recreational park area and will only introduce a one-story community/maintenance building and a one-story water building.

According to the United States Geological Survey (USGS), liquefaction is the process by which water-saturated sediment temporarily loses strength and acts as a fluid. Essentially, liquefaction is the process by which the ground soil loses strength due to an increase in water pressure following seismic activity. Although the project site is located in an area that is subject to liquefaction (refer to Exhibit 3-3), the proposed project involves the construction and operation of a 30-acre passive recreational park area and will only introduce a one-story community/maintenance building and a one-story water

⁵⁰ California Department of Conservation. *What is the Alquist-Priolo Act.*
<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx>.

⁵¹ California Department of Conservation. *Table 4, Cities and Counties Affected by Alquist Priolo Earthquake Fault Zones as of January 2010.* <https://www.conservation.ca.gov/cgs/Pages/Earthquakes/affected.aspx>.

⁵² Toll-Free Airline. *Los Angeles County Public and Private Airports, California.*
<http://www.tollfreeairline.com/california/losangeles.htm>.

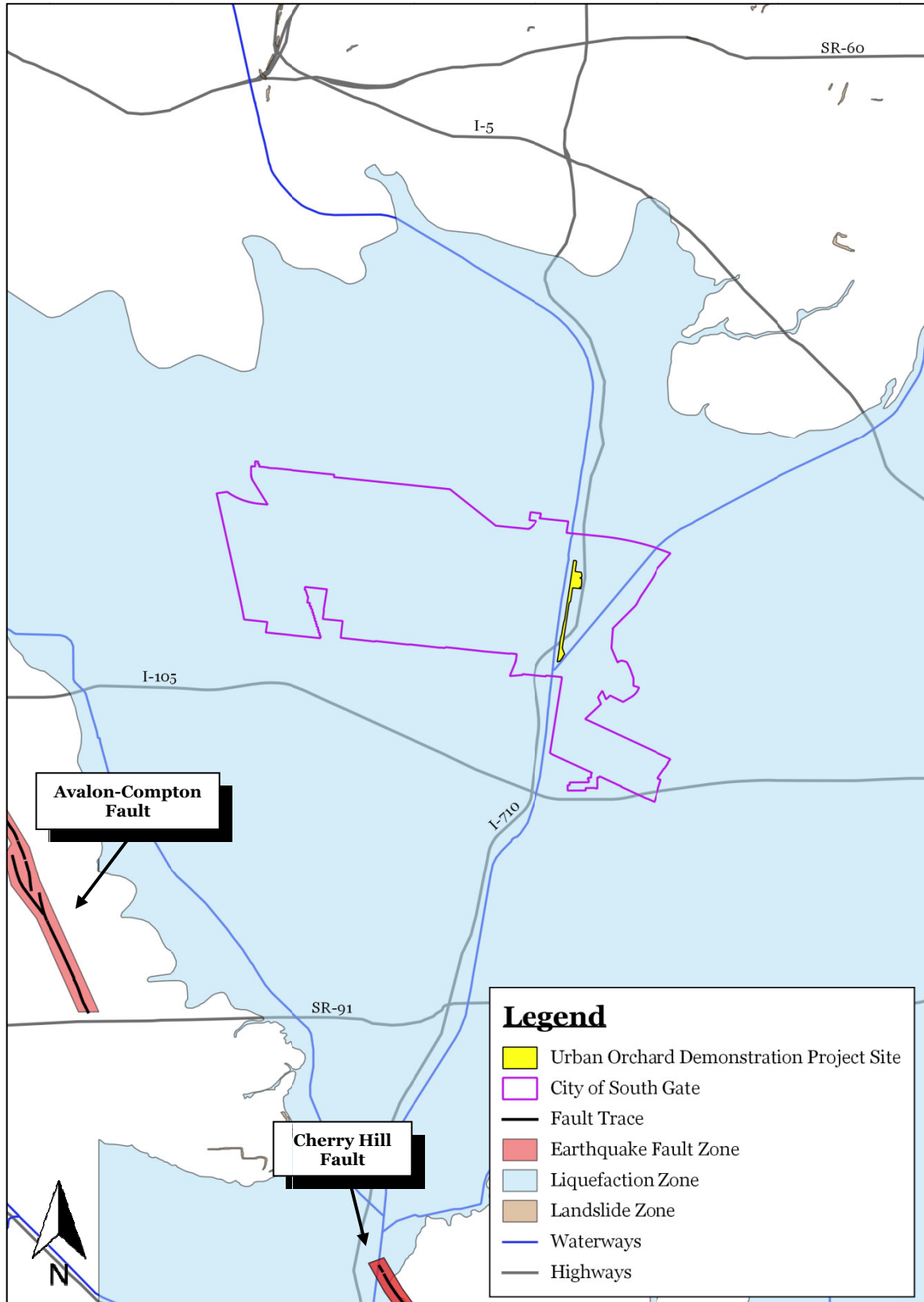


EXHIBIT 3-3
SEISMIC HAZARDS MAP
SOURCE: UNITED STATES GEOLOGICAL SURVEY

building. Lastly, the project site is not subject to the risk of landslides (refer to Exhibit 3-3) because there are no hills or mountains within the vicinity of the project site. As a result, the potential impacts in regards to ground-shaking, liquefaction, and landslides are less than significant since the project will only introduce a one-story community/maintenance building and a one-story water building and because the risk is no greater in and around the project site than for the rest of the area.

B. Would the project result in substantial soil erosion or the loss of topsoil? • Less than Significant Impact.

The United States Department of Agriculture's (USDA) Web Soil Survey was consulted to determine the nature of the soils that underlie the project site. According to the USDA Web Soil Survey, the site is underlain by soils of the Urban land–Metz–Pico complex association, 0 to 2 percent slopes. These soils have a moderate runoff and erosion hazard; however, construction activities and the placement of permanent vegetative cover will reduce the soil's erosion risk.⁵³ The site is, and will continue to be, level and no slope failure or landslide impacts are anticipated to occur. Furthermore, the proposed project involves the construction and operation of a 30-acre passive recreational park area and will introduce a minimal amount of impermeable surfaces. As a result, the impacts will be less than significant.

C. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? • Less than Significant Impact.

Lateral spreading is a phenomenon that is characterized by the horizontal, or lateral, movement of the ground. Lateral spreading could be liquefaction-induced or can be the result of excess moisture within the underlying soils. Subsidence occurs via soil shrinkage and is triggered by a significant reduction in an underlying groundwater table, thus causing the earth on top to sink.⁵⁴ Shrinking and swelling is influenced by the amount of clay present in the underlying soils. The Urban land–Metz–Pico soils that underlie the project site are composed of small amounts of clay, therefore a slight subsidence potential may exist. Liquefaction-induced lateral spreading and subsidence will not affect the proposed project because it will involve the operation of a recreational use and will only introduce a one-story community/maintenance building and a one-story water building. Therefore, less than significant impacts related to unstable soils and subsidence is expected.

D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property? • Less than Significant Impact.

As mentioned in the previous section (Section 3.7.2.C), the Urban land–Metz–Pico soils that underlie the project site are composed of small amounts of clay, therefore a slight subsidence potential may exist. The proposed project will not be significantly impacted because it will involve the operation of a

⁵³ United States Department of Agriculture. *Web Soil Survey*. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Website accessed January 4, 2019.

⁵⁴ Subsidence Support. *What Causes House Subsidence?* <http://www.subsidence-support.co.uk/what-causes-subsidence.htm>.

recreational use and will only introduce a one-story community/maintenance building and a one-story water building. Therefore, less than significant impacts related to expansive soils are expected.

E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? • No Impact.

No septic tanks will be used as part of proposed project. The on-site restrooms will connect to the existing sanitary sewer system. As a result, no impacts associated with the use of septic tanks will occur as part of the proposed project's implementation.

F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? • Less than Significant Impact with Mitigation.

The surrounding project area is fully developed and has undergone disturbance as part of previous development. For this reason, the likelihood of discovering near surface paleontological resources is considered remote. According to the State of California Geological Survey, the site's geology is classified as "Alluvium" (Qal). Alluvium soil deposits that are present in a natural and undisturbed condition may contain paleontological resources, though these resources are more typically found in marine terraces and shales. Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements.

Furthermore, the on-site soils that underlie the property are Holocene-aged deposits that have a low potential for the discovery of paleontological resources.⁵⁵ The likelihood of the discovery of such materials will increase where the excavations will extend into the Older Quaternary Alluvium. In the event that intact paleontological resources are located within the project site, ground-disturbing activities such as grading and excavation have the potential for destroying a unique paleontological resource or site. Therefore, the following mitigation is required:

- Prior to commencement of any grading activity on site, the contractor shall retain a qualified paleontologist, subject to the review and approval of the City's Engineer, or designee. The qualified paleontologist shall be on-site during grading and other significant ground disturbance activities that impact Pleistocene alluvial deposits, which could occur at depths below six feet. The monitoring shall apply to the areas of the site where excavation shall extend at depths of six feet or more.

The above mitigation will reduce the potential impacts to levels that are less than significant.

⁵⁵ Los Angeles, City of. *L.A. CEQA Thresholds Guide. Section D.1 Paleontological Resources.*
<http://www.environmentla.org/programs/Thresholds/D-Cultural>. Website accessed January 4, 2019.

3.7.3 MITIGATION MEASURES

In the event that intact paleontological resources are located within the project site, ground-disturbing activities such as grading and excavation have the potential for destroying a unique paleontological resource or site. Therefore, the following mitigation is required:

Mitigation Measure No. 5 (Geology & Soils). Prior to commencement of any grading activity on site, the contractor shall retain a qualified paleontologist, subject to the review and approval of the City's Engineer, or designee. The qualified paleontologist shall be on-site during grading and other significant ground disturbance activities that impact Pleistocene alluvial deposits, which could occur at depths below six feet. The monitoring shall apply to the areas of the site where excavation shall extend at depths of six feet or more.

3.8 GREENHOUSE GAS EMISSIONS

3.8.1 THRESHOLDS OF SIGNIFICANCE

A project may be deemed to have a significant adverse impact on greenhouse gas emissions if it results in any of the following:

- The generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or,
- A conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases.

3.8.2 ENVIRONMENTAL ANALYSIS

A. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* • *Less than Significant Impact.*

The proposed project will involve the construction and operation of a 30-acre passive recreational park area. The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park. The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and

water building will be owned and operated by the City’s Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The SCAQMD has established a single quantified threshold of 10,000 metric tons of CO₂E (MTCO₂E) per year for new development.⁵⁶ Table 3-4 summarizes annual greenhouse gas (CO₂E) emissions from build-out of the proposed project. Carbon dioxide equivalent, or CO₂E, is a term that is used for describing different greenhouse gases in a common and collective unit. As indicated in Table 3-4, the CO₂E total for the project is 1,256.52 pounds per day or 0.57 MTCO₂E per day. This translates into an annual emission of 208.05 MTCO₂E, which is below the aforementioned threshold of 10,000 MTCO₂E.

**Table 3-4
 Greenhouse Gas Emissions Inventory**

Source	GHG Emissions (Lbs/Day)			
	CO ₂	CH ₄	N ₂ O	CO ₂ E
Long-term Area Emissions	--	--	--	--
Long-term Energy Emissions	--	--	--	--
Long-term Mobile Emissions	1,254.99	0.06	--	1,256.52
Total Long-term Emissions	1,254.99	0.06	--	1,256.52
Total Long-term Emissions (MTCO ₂ E)				208.05 MTCO₂E per year
Thresholds of Significance				10,000 MTCO₂E per year

Source: CalEEMod V.2016.3.2

The project’s operational GHG emissions were calculated using the CalEEMod Version 2016.3.2. The type of activities that may be undertaken once the project is operational have been predicted and accounted for in the model for the selected land use type. It is important to note that the project is an infill development, which is seen as an important strategy in combating the release of GHG emissions. Infill development provides a regional benefit in terms of a reduction in Vehicle Miles Traveled (VMT) since the project is consistent with the regional and State sustainable growth objectives identified in the State’s Strategic Growth Council (SGC).⁵⁷ Infill development reduces VMT by recycling existing undeveloped or underutilized properties located in established urban areas. In addition, the proposed project will provide extensive landscaping and vegetation, which will be effective in reducing greenhouse gasses. The non-fruit bearing tree species that are proposed to be planted on-site have been selected to sequester carbon thereby improving air quality for sensitive receptors in the region.

⁵⁶ SCAQMD. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*. https://planning.lacity.org/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.39_SCAQMD%20GHG%20Meeting%2015.pdf.

⁵⁷ California Strategic Growth Council. <http://www.sgc.ca.gov/Initiatives/infill-development.html>. Promoting and enabling sustainable infill development is a principal objective of the SGC because of its consistency with the State Planning Priorities and because infill furthers many of the goals of all of the Council’s member agencies. Focusing growth toward infill areas takes development pressure off conservation lands and working lands; it increases transit rider-ship and reduces vehicle trips; it requires less per capita energy and water use than less space-efficient development; it improves public health by promoting active transportation and active lifestyles; and it provides a more equitable mix of housing choices, among other benefits.

Furthermore, the proposed project will include alternative forms of transportation such as pedestrian and bicycle trails. Since the project's operational emissions will be below the quantified threshold of significance, the potential impacts are considered to be less than significant.

B. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases? • No Impact.

The City of South Gate has not adopted a climate action plan. As indicated previously, the operation of the proposed project will result in less than significant GHG emissions. The proposed project will not introduce any conflicts with adopted initiatives that are designed to control future GHG emissions. The project is an infill development and is seen as an important strategy in reducing regional GHG emissions. Furthermore, the proposed project will provide extensive landscaping and vegetation, which will be effective in reducing greenhouse gasses. The proposed project will also include alternative forms of transportation such as pedestrian and bicycle trails. As a result, the proposed project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases and no impacts will occur.

3.8.3 MITIGATION MEASURES

The analysis of potential impacts related to GHG emissions indicated that the proposed project would not result in any adverse impacts. As a result, no mitigation measures are required.

3.9 HAZARDS & HAZARDOUS MATERIALS

3.9.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact regarding hazards or hazardous materials if it results in any of the following:

- The creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- The creation of 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;
- The emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- The location of the project 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, the creation of a significant hazard to the public or the environment;

- A safety hazard or excessive noise for people residing or working in the project area 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 a public use airport;
- The impairment of the implementation of or the physical interference with an adopted emergency response plan or emergency evacuation plan; or,
- The exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

3.9.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? • No Impact.

The proposed project will involve the construction and operation of a 30-acre passive recreational park area. The proposed project will not be involved in the transport, use, storage, and disposal of hazardous materials other than common commercial products used in routine landscaping, maintenance, and cleaning. As a result, no impacts will occur.

B. Would the project 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? • Less than Significant Impact with Mitigation.

A technical memorandum was prepared by Tetra Tech, Inc. in March 2019 for the City of South Gate regarding the project site.⁵⁸ The technical memorandum provided supplemental environmental soil characterization services for the project site and evaluated other soil studies that had previously been conducted on-site, including the Targeted Brownfields Assessment Report (TBA) prepared by Weston Solutions, Inc. in 2018 and the Infiltration Study prepared by Albus-Keefe and Associates in June 2016.

Based on a review of historical documents, Southeastern Disposal and By-Products (SDBP) operated a solid waste landfill on the project site until December 1949. Documents give the location of the landfill as the northwest corner of Southern Avenue and the I-710 Freeway. SDBP operated as an unpermitted solid waste disposal facility that reportedly accepted commercial, hazardous liquid, inert, and residential waste streams. Remediation occurred in May 1984. The Los Angeles County Solid Waste Management (LASWM) conducted project site inspections in 2007, 2008, and 2009. According to the 2007 Closed Disposal Site Inspection Report, an August 29, 1984 letter from Department of Health Services (DHS), Toxic Substances Control Division concluded that “the cleanup effectively mitigated waste constituents” at the project site, and thus, the project site was classified as a D priority in May 1984. No additional information regarding the cleanup assessment was provided. Additionally, neither the 2008 nor 2009 Closed Disposal Site Inspection Reports provided any additional information about the cleanup assessment.

⁵⁸ Tetra Tech, Inc. *Technical Memorandum, Supplemental Environmental Soil Characterization Services*. March 2019.

The project site was also used by GWS Nursery & Supplies (9475 West Frontage Road) from at least 2009 to 2012. The facility planned to composite green waste, wood shavings, and wood waste. Based on the historical use of the project site, there was a potential for waste materials to be encountered during construction and/or excavation activities.

As part of the Targeted Brownfields Assessment Report (TBA) prepared by Weston Solutions, Inc. in 2018, a Phase I/II Environmental Site Assessment (ESA) was completed to evaluate potential environmental impacts that may have resulted from the former landfill and/or nursery activities at the project site.⁵⁹ The objective of this assessment was to evaluate potential environmental concerns at the project site to facilitate redevelopment.

An Infiltration Study was conducted at the project site by Albus-Keefe and Associates in June 2016.⁶⁰ As part of the Infiltration Study, a geophysical survey was completed and identified approximately 13 feet of fill material of unknown origin beneath the project site. The focus of the Phase II Subsurface Investigation (Phase II) was to investigate potential contamination associated with the approximately 13 feet of fill identified during the Infiltration Study.

In May 2018, a total of 50 soil samples were collected by Weston Solutions from surface and subsurface locations throughout the project site. Weston Solutions collected 20 surface soil samples and 30 subsurface samples from 10 borings. Weston Solutions found fill material in project site borings at depths from 6 to 13 feet below ground surface (bgs) consistent with previous investigations. The collected subsurface soil samples were submitted for laboratory analysis of total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and California Title 22 metals. The collected surface soil samples were submitted for laboratory analysis of TPH-diesel range (TPH-d), TPH-motor oil range (TPH-mo), semi-volatile organic compounds (SVOCs), metals, and asbestos. Weston Solutions evaluated and compared the analytical results to the more conservative regulatory screening levels for residential properties. Based on this data, the Phase II identified the contaminants of concern (COCs) for the project site to be TPH-d, SVOCs, antimony, arsenic, lead, and thallium, all of which were observed in at least one soil samples at concentrations above regulatory screening levels for residential reuse. Contaminants of concern in surface soils at the project site were identified at eight locations, and in subsurface soils at two locations.

With the exception of arsenic exceedances in deep soils (approximately 20 feet below ground surface), contamination appears to be confined to near-surface soils. Contaminants of Concern in surface soils at the project site were identified at eight locations, and in subsurface soils at two locations. The subsurface soils with arsenic concentrations exceeding screening levels at two locations are found below the anthropogenic fill at both locations. It is unclear whether these are naturally occurring or leached from an unknown source; however, the lack of on-site source suggests the former. Given the depth and nature of the contaminant, Weston Solutions recommends no further action for this contaminant.

⁵⁹ Weston Solutions, Inc. *Final Phase I/II Investigation, Targeted Brownfields Assessment Report*. December 2018.

⁶⁰ Albus-Keefe & Associates, Inc. *Infiltration Study for Proposed Water Quality Improvements, Urban Orchard Project*. June 28, 2016.

Tetra Tech evaluated Weston's 2018 analytical data based on the anticipated redevelopment of the project site for non-residential use and determined that regulatory screening levels for commercial/industrial properties are more appropriate for the project site. As such, only benzo(a)pyrene, antimony, arsenic, and lead were observed in soil samples at concentrations exceeding their respective regulatory screening levels. Based on evaluation of the Phase II results, Tetra Tech recommended the preparation of a soil management plan (SMP) as a result of any COCs identified at concentrations exceeding their respective industrial/commercial screening criteria. The SMP should identify the contaminant impacts and locations and describe procedures to implement when performing intrusive work at the project site to address worker health and safety, soil handling and reuse, and disposal.

On January 21, 2019, Tetra Tech conducted a Supplemental Investigation at the project site by advancing ten soil borings to a terminal depth of 20 feet bgs and collecting soil samples. Five of the boring locations were selected based on evaluating areas of potential data gaps within the grid of the previous Phase II to further characterize the extent of potential COC impacts at the project site. The remaining five soil borings and the surface soil samples were step-out locations based on elevated detections of COC that were observed in the soil samples collected as part of the Weston Solutions 2018 TBA. At each of these previous soil borings, three step-out surface soil samples were collected in a triangular pattern around the original boring to delineate chemical impacts. Soil samples were collected from the soil borings and were submitted for laboratory analysis of TPH-g, TPH-d, SVOCs, metals, and organochlorine pesticides (OCPs). Based on the data from the Supplemental Investigation, it appears that isolated pockets of soil contain TPH-d and lead at concentrations at or above their respective regulatory screening levels. Additional STLC analysis identified lead present in the soil between 0 and 1-foot bgs in the vicinity of samples SG-03, SG-05B, and SG-14A at concentrations exceeding the leachate threshold. Consequently, the soil in these areas will be characterized as California hazardous once excavated.

The results of the Weston Solutions investigation and the Supplemental Investigation prepared by Tetra Tech suggest that the project site has been generally characterized with regard to potential impacts of the identified COCs to the soil. While Tetra Tech does not recommend further investigatory action at this time, it is recommended that the lead-impacted soil in the vicinity of SG-03, SG-05B, and SG-14A, as well as the benzo(a)pyrene-, antimony-, arsenic-, and/or lead-impacted soil in the vicinity of former soil samples CSG-CS-005, CSG-CS-007, and CSG-CS-014 be properly removed as part of the redevelopment activities for the proposed Urban Orchard Demonstration Project. Additionally, Tetra Tech recommends that a SMP be prepared in support of the proposed Urban Orchard Demonstration Project. The SMP will provide specific guidelines to identify the contaminant impacts, depths, and locations and describe procedures to implement when performing intrusive work at the project site to address worker health and safety, soil handling and reuse, and disposal. Due to the previously described soil contamination, the following mitigation measure is required:

- The Applicant (City of South Gate) will be required to prepare a soil management plan (SMP), as recommended by Tetra Tech, Inc. The project contractors will then be required to adhere to the recommendations listed within the SMP. The project contractors must also adhere to the recommendations listed within the *Infiltration Study for Proposed Water Quality Improvements, Urban Orchard Project* prepared by Albus-Keefe & Associates, Inc.

With the implementation of the abovementioned mitigation measure, the impacts will be reduced to levels that are less than significant.

C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? • No Impact.

Legacy Visual and Performing Arts High School is located approximately 600 feet west of the center portion of the project site just west of the Los Angeles River.⁶¹ Although the high school is located within one-quarter mile of the proposed project site, the hazardous contamination is located within the on-site soil and will not affect the high school or any other nearby school. In addition, the implementation of the above-mentioned mitigation measure will reduce project site impacts related to soil contaminants to levels that are less than significant. In addition, the proposed project will be involved in recreational uses and will not involve the emission or handling of hazardous or acutely hazardous materials, substances, or waste. Therefore, no impacts to nearby schools will occur.

D. Would the project 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? • No Impact.

The *Cortese List*, also referred to as the Hazardous Waste and Substances Sites List or the California Superfund List, is a planning document used by the State and other local agencies to comply with CEQA requirements that require the provision of information regarding the location of hazardous materials release sites. California Government Code section 65962.5 requires the California Environmental Protection Agency to develop and update the Cortese List on annually basis. The list is maintained as part of the California Department of Toxic Substances Control (DTSC) Brownfields and Environmental Restoration Program referred to as EnviroStor. A search was conducted through the DTSC Envirostor website to identify whether the project site is listed in the database as a Cortese site. The project site is not identified as a Cortese site.⁶² Therefore, no impacts will occur.

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 a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? • No Impact.

The project site is not located within two miles of a public airport or a public use airport. The nearest public airport to the project site is the Compton/Woodley Airport, which is located approximately 4.65 miles to the southwest.⁶³ The proposed project is not located within the Runway Protection Zones (RPZ) of the Compton/Woodley Airport.

⁶¹ Google Earth. Website accessed January 9, 2019.

⁶² CalEPA. *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.

⁶³ Toll-Free Airline. *Los Angeles County Public and Private Airports, California*. <http://www.tollfreeairline.com/california/losangeles.htm>.

In addition, the proposed project will not introduce any new structures that could penetrate the designated slopes for any of the aforementioned airports. Essentially, the proposed project will not introduce a building that will interfere with the approach and take-off of airplanes utilizing the Compton/Woodley Airport and will not risk the safety of the people working in the project area. As a result, no impacts will occur.

F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? • No Impact.

At no time will any of the surrounding streets be completely closed to traffic. All construction staging areas will be located within the project site. As a result, the project would not impair the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan and no impacts are associated with the proposed project's implementation.

G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? • No Impact.

The area surrounding the project site is urban and there are no areas containing natural vegetation that could lead to a wildfire.⁶⁴ As a result, there are no impacts associated with potential wildfires from off-site locations.

3.9.3 MITIGATION MEASURES

Due to the on-site soil contamination, the following mitigation measure is required:

Mitigation Measure No. 6 (Hazards & Hazardous Materials). The Applicant (City of South Gate) will be required to prepare a soil management plan (SMP), as recommended by Tetra Tech, Inc. The project contractors will then be required to adhere to the recommendations listed within the SMP. The project contractors must also adhere to the recommendations listed within the *Infiltration Study for Proposed Water Quality Improvements, Urban Orchard Project* prepared by Albus-Keefe & Associates, Inc.

3.10 HYDROLOGY & WATER QUALITY

3.10.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse environmental impact on hydrology and water quality if it results in any of the following:

- A violation of any water quality standards or waste discharge requirements or an otherwise substantial degradation of surface or groundwater quality;

⁶⁴ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

- A substantial decrease of groundwater supplies or a substantial interference with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- A substantial alteration of 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 result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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, impede or redirect flood flows;
- The risk of release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or,
- A conflict with or an obstruction of implementation of a water quality control plan or sustainable groundwater management plan.

3.10.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?* • *No Impact.*

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is underutilized and covered-over in grass, dirt, and weedy vegetation. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁶⁵ The proposed project will involve the installation of a 30-acre passive recreational park area. Upon project completion, the majority of the project site will be covered-over in pervious surfaces (grass and landscaping). The majority of the paved areas (which will include the walking and bicycle paths, the plazas, the community/maintenance building and water building, the surface parking area, and an emergency access road) will be covered-over in permeable pavement.

The project contractors would also be required to prepare a Water Quality Management Plan (WQMP) utilizing Best Management Practices (BMPs) to control or reduce the discharge of pollutants to the maximum extent practicable. The WQMP will also identify post-construction BMPs that will be the responsibility of the City to implement over the life of the project. As part of the permitting process, the paving contractors will be required to adhere to all pertinent Clean Water Act regulation.

Prior to issuance of any grading permit for the project that would result in soil disturbance of one or more acres of land, the contractors will be required to demonstrate that coverage has been obtained

⁶⁵ Blodgett Baylois Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

under California's General Permit for Storm Water Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board, and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing shall be provided to the Chief Building Official and the City Engineer. In addition, the contractors will be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will be submitted to the Chief Building Official and City Engineer prior to the issuance of a grading permit.

Aside from the recreational features the proposed project will provide, other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. These new hydrological features will greatly improve water quality by cleaning, treating and re-using stormwater. The new hydrological features in combination with the above-mentioned regulations will result in no adverse impacts.

B. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? • No Impact.

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end. A search was conducted through the Regional Water Quality Control Board's on-line database Geotracker to identify the presence of any natural

underground water wells within the project site. The search yielded no results.⁶⁶ As a result, no impacts will occur.

C. Would the project 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 result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; 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, impede or redirect flood flows? • No Impact.

As previously mentioned, the proposed project will involve the installation of a 30-acre passive recreational park area. Upon project completion, the majority of the project site will be covered-over in pervious surfaces (grass and landscaping). The majority of the paved areas (which will include the walking and bicycle paths, the plazas, the community/maintenance building and water building, the surface parking area, and an emergency access road) will be covered-over in permeable pavement.

The proposed project involves the installation of a one-acre treatment wetland; a stream with native plants and native fish; a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage structure; a water quality pre-treatment hydrodynamic separator with an operational flow capacity of up to five cubic feet per second; a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees; and, permeable pavement.⁶⁷ All these combined elements will ensure that the project will be properly drained and will not result in erosion or siltation on- or off-site. The proposed project will be restricted to the project site and will not alter the course of the Los Angeles River or the Rio Hondo Channel, which are both concrete-lined.

The portions of the Los Angeles River and the Rio Hondo Channel that are near to the project site are fully channelized with concrete and do not offer suitable riparian vegetation for the aforementioned species. The proposed project will feature a wide range of natural and recreational amenities. The proposed project will also feature a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees.

The proposed project would create beneficial impacts to native species in the creation of native habitat historically found throughout the Los Angeles River and Rio Hondo watersheds such as southern willow scrub, oak and sycamore woodland, coastal sage scrub, and native wetland ponds, stream, and riparian habitat. The Bandini Channel diversion will cause the channel within the project boundaries to become dry during the dry weather periods. However, birds and wildlife species would benefit from the proposed project's native wetland ponds, stream, and riparian habitat described above. The

⁶⁶ Geotracker GAMA. <http://geotracker.waterboards.ca.gov/gama/gamamap/public/default.asp>. Website accessed January 9, 2019.

⁶⁷ Studio-MLA. *Site Plan, Urban Orchard, 9475 West Frontage Road, South Gate, CA*. November 16, 2018.

Bandini Channel diversion will be reviewed by the RWQCB 401, CDFW 1600, and Corps 404 permitting process. As a result, no impacts will occur.

D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? • No Impact.

According to the Los Angeles County Department of Public Works map provided in Exhibit 3-4, the project site is not located within a designated 500-year flood hazard area, as defined by the Federal Emergency Management Agency (FEMA).⁶⁸ According to the map obtained from the Los Angeles County Department of Public Works, the proposed project site is located in Zone X (0.2%) (refer to Exhibit 3-4).⁶⁹ Zones designated as X (0.2%) are not considered zones with a significant flood risk.

According to the United States Geological Survey (USGS) Earthquake Hazards Program, seiches are standing waves set up on rivers, reservoirs, ponds, and lakes when seismic waves from an earthquake pass through the area.⁷⁰ A seiche in the Los Angeles River or the Rio Hondo Channel is not likely to happen due to the current level of channelization and the low frequency in which a significant stream forms on these waterways. Furthermore, the proposed project site is not located in an area that is subject to inundation from a tsunami because the project site is located 11.50 miles inland from the Pacific Ocean.⁷¹ As a result, no impacts are expected.

E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? • No Impact.

The contractors would be required to prepare a Water Quality Management Plan (WQMP) utilizing Best Management Practices (BMPs) to control or reduce the discharge of pollutants to the maximum extent practicable. Prior to issuance of any grading permit for the project that would result in soil disturbance of one or more acres of land, the contractors will be required to demonstrate that coverage has been obtained under California's General Permit for Storm Water Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board, and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing shall be provided to the Chief Building Official and the City Engineer. In addition, the City will be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will be submitted to the Chief Building Official and City Engineer prior to the issuance of a grading permit. Compliance with the above-mentioned regulations ensures that the proposed project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. As a result, no impacts will occur.

⁶⁸ Federal Emergency Management Agency. *Flood Zones*. <http://www.fema.gov/flood-zones>.

⁶⁹ Los Angeles County Department of Public Works. *Flood Zone Determination Website*. <http://dpw.lacounty.gov/wmd/floodzone/>. Website accessed January 9, 2019.

⁷⁰ United States Geological Survey Earthquake Hazards Program. *Seismic Seiches*. <https://earthquake.usgs.gov/learn/topics/seiche.php>.

⁷¹ Google Earth. Website accessed January 15, 2019.

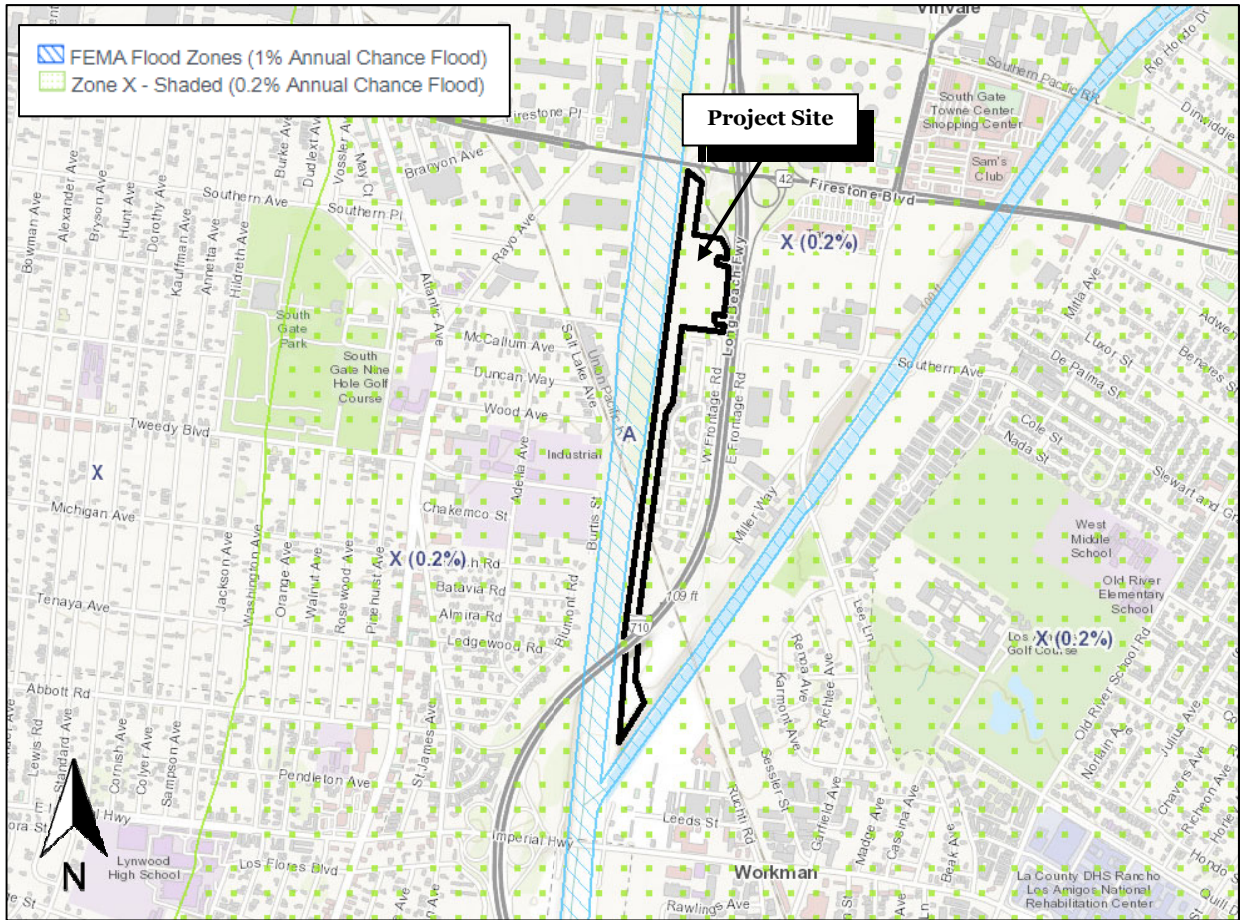


EXHIBIT 3-4
FLOOD HAZARDS MAP
SOURCE: LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS AND FEMA

3.10.3 MITIGATION MEASURES

The analysis of potential impacts related to hydrology and water quality indicated that the proposed project would not result in any adverse impacts. As a result, no mitigation measures are required.

3.11 LAND USE & PLANNING

3.11.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant impact on land use and planning if it results in any of the following:

- The physical division of an established community; or,
- 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.

3.11.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project physically divide an established community?* • *No Impact.*

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is currently underutilized and covered-over in grass, dirt, and weedy vegetation. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁷²

The southern portion of the project site and the seven-acre portion of the project site on the northern side (Phase 1) are currently zoned as M2 (*Light Manufacturing*). A small portion of the northern portion of the project site is zoned as CV (*Civic*). The remainder of the project site is not zoned (refer to Exhibit 3-5). The General Plan Existing Land Uses Map indicates that the majority of the project site has an existing land use designation of *Water Bodies, Easements and Public Works*. The northern portion of the project site (Phase 1) also has existing land use designations of *Civic and Institutional* and *Vacant Land* (refer to Exhibit 3-6).

The proposed project will not require a zone change or general plan amendment, as the proposed use is permitted within the project site. The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area. The park will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas

⁷² Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

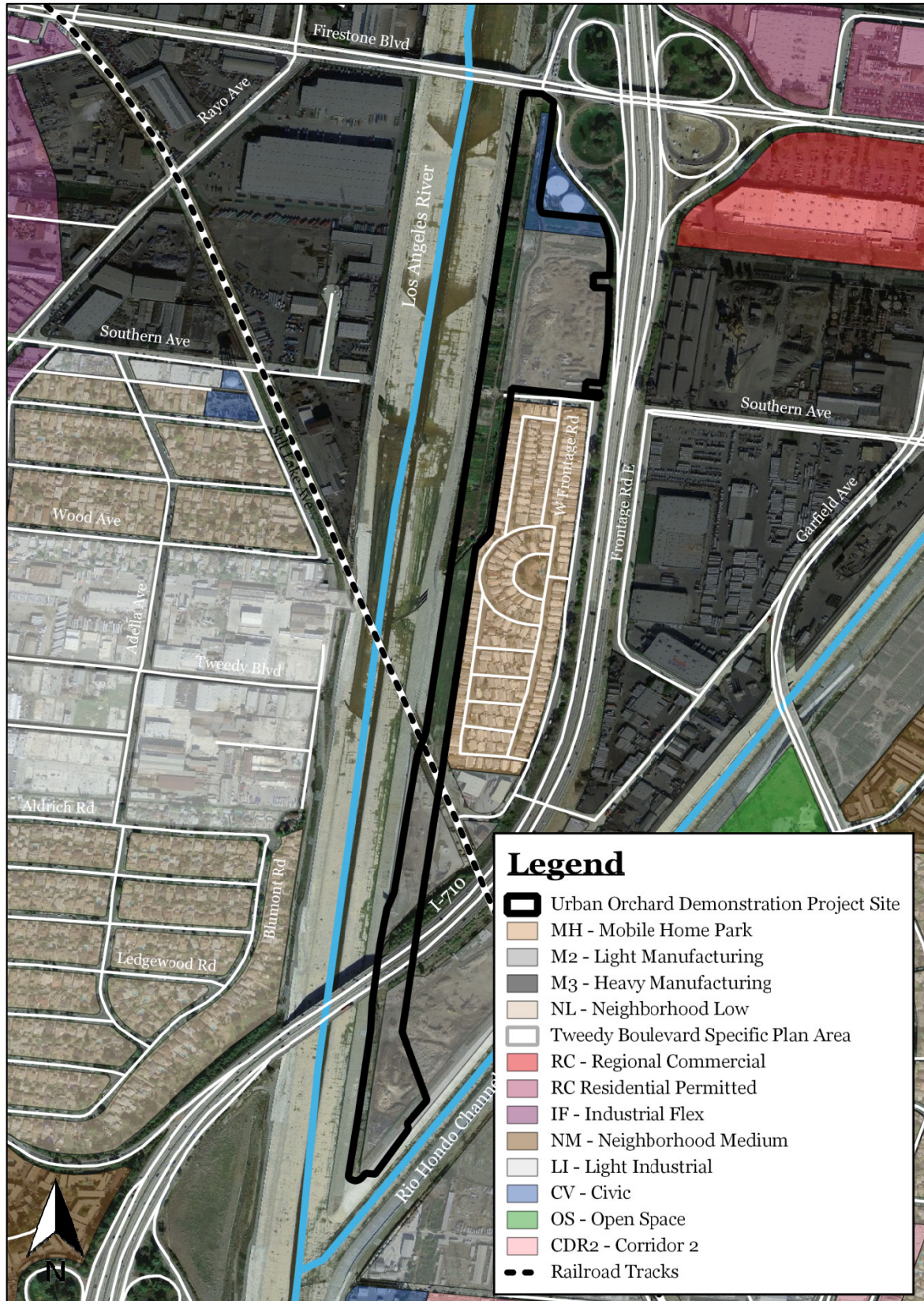


EXHIBIT 3-5 ZONING MAP

SOURCE: QUANTUM GIS AND CITY OF SOUTH GATE

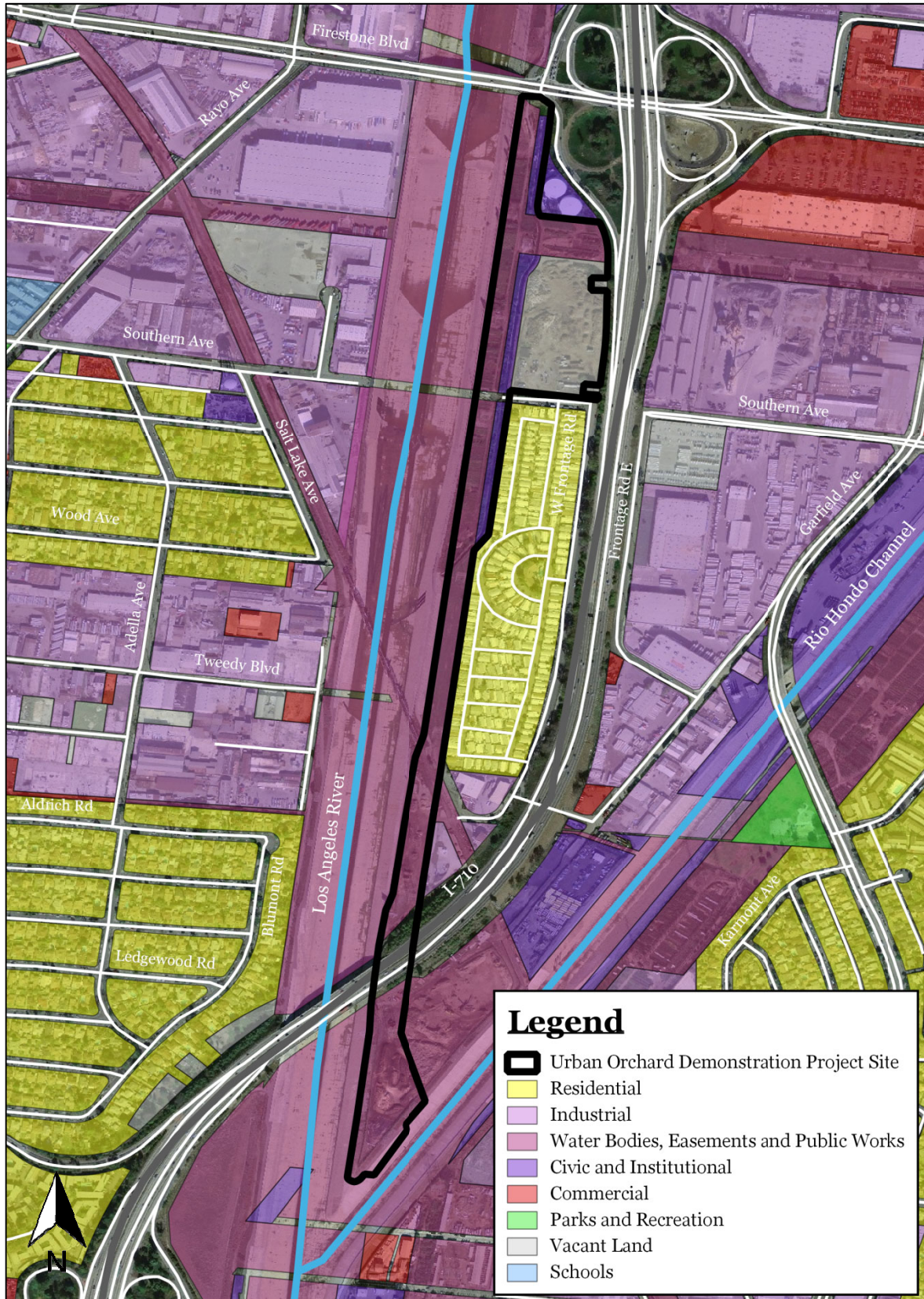


EXHIBIT 3-6
GENERAL PLAN EXISTING LAND USES MAP

SOURCE: QUANTUM GIS AND CITY OF SOUTH GATE

with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The proposed project will also feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The City's Municipal Code states that Public/Community Garden uses are permitted within the M2 (Light Manufacturing) zone.⁷³ Since a significant portion of the Phase 1 site will include orchards and gardens, the proposed use will be permitted within the site. In addition, an industrial use would not be ideal at the project site because it is located next to a residential use and the Los Angeles River. The project site is located within an urban area within the City of South Gate. The nearest residential uses include the mobile home park located adjacent to the project site to the east; residential uses located 600 feet west of the project site just west of the Los Angeles River; and, residential uses located approximately one-quarter mile east of the southern portion of the project site.⁷⁴ Although residential uses are located near the project site, the proposed project will be located along the Los Angeles River, which is already an existing buffer between residential uses. Furthermore, the proposed project will replace mostly vacant and underutilized land. Therefore, the proposed project therefore will not lead to any division of an existing established neighborhood and no impacts will occur.

B. Would the project 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? • No Impact.

The southern portion of the project site and the seven-acre portion of the project site on the northern side (Phase 1) are currently zoned as M2 (*Light Manufacturing*). A small portion of the northern portion of the project site is zoned as CV (*Civic*). The remainder of the project site is not zoned (refer to Exhibit 3-5). The General Plan Existing Land Uses Map indicates that the majority of the project site has an existing land use designation of *Water Bodies, Easements and Public Works*. The northern portion of the project site (Phase 1) also has existing land use designations of *Civic and Institutional* and *Vacant Land* (refer to Exhibit 3-6).

The proposed project will not require a zone change or general plan amendment, as the proposed use is permitted within the project site. The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area. The park will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage

⁷³ South Gate, City of. *Municipal Code*. Title 11 Zoning, Division II Zoning Regulations, Chapter 11.21 Land Use Types, Section 11.21.030 Land Use Permissions Tables.

⁷⁴ Google Earth. Website accessed January 15, 2019.

reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The proposed project will also feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The City's Municipal Code states that Public/Community Garden uses are permitted within the M2 (Light Manufacturing) zone.⁷⁵ Since a significant portion of the Phase 1 site will include orchards and gardens, the proposed use will be permitted within the site. In addition, an industrial use would not be ideal at the project site because it is located next to a residential use and the Los Angeles River. Therefore, the project will be in compliance with the City's zoning code and General Plan. The proposed project will not conflict with any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect and no impacts will occur.

3.11.3 MITIGATION MEASURES

The analysis determined that no significant impacts on land use and planning would result from the implementation of the proposed project. As a result, no mitigation measures are required.

3.12 MINERAL RESOURCES

3.12.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on mineral resources if it results in any of the following:

- The loss of availability of a known mineral resource that would be of value to the region and the residents of the State; or,
- 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.

3.12.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project 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?* • *No Impact.*

According to the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder, there are no existing or former oil wells and/or oil extraction activities located within the project site.⁷⁶ The nearest recorded wells to the project site are located approximately 0.85 miles to the west and northwest of the project site. Additionally, the project area is

⁷⁵ South Gate, City of. *Municipal Code*. Title 11 Zoning, Division II Zoning Regulations, Chapter 11.21 Land Use Types, Section 11.21.030 Land Use Permissions Tables.

⁷⁶ California Department of Conservation. *Division of Oil, Gas & Geothermal Resources Well Finder*. <http://maps.conservation.ca.gov/doggr/index.html#close>. Website accessed January 18, 2019.

not an area with active mineral extraction activities. Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements. As a result, no impacts on existing mineral resources will result from the proposed project's implementation.

B. Would the project 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? • No Impact.

As previously mentioned, no mineral, oil, or energy extraction and/or generation activities are located within the project site. As a result, the proposed project will not interfere with any resource extraction activity. Therefore, no impacts will result from the implementation of the proposed project.

3.12.3 MITIGATION MEASURES

The analysis indicated that no impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

3.13 NOISE

3.13.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant impact on the environment if it results in any of the following:

- The 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;
- The generation of excessive groundborne vibration or groundborne noise levels; or,
- The exposure of people residing or working in the project area to excessive noise levels 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.

3.13.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project result in 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? • Less than Significant Impact with Mitigation.*

Noise levels may be described using a number of methods designed to evaluate the “loudness” of a particular noise. The most commonly used unit for measuring the level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. The eardrum may rupture at 140 dB. In general, an increase of between 3.0 dB and 5.0 dB in the ambient noise level is considered to represent the threshold for human sensitivity. In other words, increases in ambient noise levels of 3.0 dB or less are not generally perceptible to persons with average hearing abilities.⁷⁷ Noise levels that are associated with common, everyday activities are illustrated in Exhibit 3-7. The ambient noise environment in the vicinity of the proposed project is dominated by noise emanating from vehicles traveling on the I-710 Freeway and noise typically associated with the adjacent uses, which are residential and industrial uses. Future sources of noise generated on-site will include noise typically associated with recreational uses. Noise emanating from the project site will be minimal and will not affect the residential mobile home uses located along the east side of the project site.

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City’s Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

⁷⁷ Bugliarello, et. al. *The Impact of Noise Pollution*, Chapter 127, 1975.

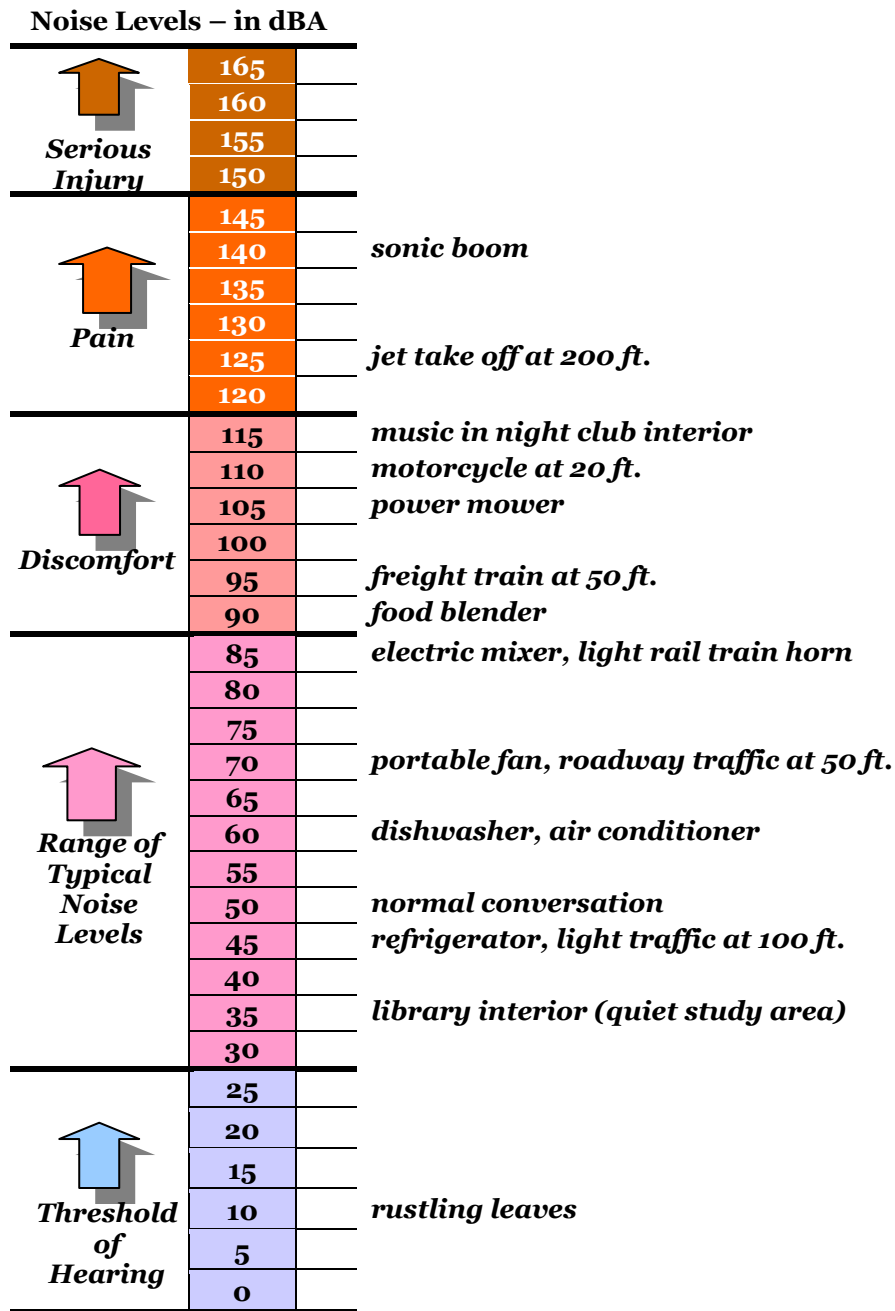


EXHIBIT 3-7 TYPICAL NOISE SOURCES AND LOUDNESS SCALE

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

During construction, the project may result in a substantial temporary increase in ambient noise levels in the absence of mitigation. Noise levels associated with various types of construction equipment are illustrated in Exhibit 3-8. The noise levels that are indicated in the exhibit illustrate the typical noise levels at a distance of 50 feet from the noise source. Composite construction noise is best characterized by Bolt, Beranek, and Newman.⁷⁸ In this study, the noisiest phases of construction for non-residential development is presented as 89 dBA as measured at a distance of 50 feet from the construction effort. As previously mentioned, the nearest residential use to the project site is the mobile home park located adjacent to the project site to the east. Residential uses are also located 600 feet west of the project site just west of the Los Angeles River and approximately one-quarter mile east of the southern portion of the project site. In order to ensure that the mobile home park use is shielded from construction noise, the following mitigation measures are required:

- The project contractors must notify residents in the area regarding construction times and local contact information. This notice must be placed along the east side of the project site and shall include the name and phone number of the local contact person residents may call to complain about noise. Upon receipt of a complaint, the contractor must respond immediately by reducing noise to meet Municipal Code requirements. In addition, all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Public Works Department.
- The project contractors shall use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

The implementation of the above-mentioned mitigation measures will reduce potential noise impacts to levels that are less than significant.

B. Would the project result in generation of excessive groundborne vibration or groundborne noise levels? • Less than Significant Impact with Mitigation.

The nearest land use that may potentially be impacted by groundborne vibration and noise (primarily from the use of heavy construction equipment) is the mobile home park is located adjacent to the project site to the east. Two single family residential neighborhoods are also located to the west, on the west side of the Los Angeles River. Once operational, the project's noise impacts will be similar to that typically associated with recreational uses and will not be significant.

As previously mentioned, the noisiest phases of construction are anticipated to be 89 dBA as measured at a distance of 50 feet from the construction activity. As stated within the City's Municipal Code, construction (including grading and equipment operations) within one-half mile of a residential use is prohibited from 8:00 PM to 7:00 AM and on Sundays and Federal holidays.⁷⁹ Compliance with City noise standards will decrease any potential adverse impacts to the adjacent mobile home park. Two mitigation measures were listed in the previous subsection (3.13.2.A) to ensure that the residential uses are shielded from construction noise.

⁷⁸ USEPA, Protective Noise Levels. 1971.

⁷⁹ South Gate, City of. *Municipal Code*. Title 9 Buildings, Chapter 9.02 Building Code, Section 9.02.030 Amendments to building code, Subsection J105.8 Time of Grading Operations.

Typical noise levels in dBA 50 ft. from source

			70	80	90	100
Equipment Powered by Internal Combustion Engines	Earth Moving Equipment	Compactors (Rollers)		70-80		
		Front Loaders		70-80	80-90	
		Backhoes		70-80	80-90	90-100
		Tractors			80-90	90-100
		Scrapers, Graders			80-90	
		Pavers			80-90	
		Trucks			80-90	90-100
	Materials Handling Equipment	Concrete Mixers		70-80	80-90	
		Concrete Pumps			80-90	
		Cranes (Movable)		70-80	80-90	
		Cranes (Derrick)		70-80	80-90	
	Stationary Equipment	Pumps	70-80			
		Generators		70-80		
Compressors				80-90		
Impact Equipment	Pneumatic Wrenches			80-90		
	Jack Hammers			80-90	90-100	
	Pile Drivers			90-100	100-110	
Other Equipment	Vibrators	70-80	70-80			
	Saws		70-80			

EXHIBIT 3-8
TYPICAL CONSTRUCTION NOISE LEVELS
 SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

Ground vibrations associated with construction activities using modern construction methods and equipment rarely reach the levels that result in damage to nearby buildings though vibration related to construction activities may be discernible in areas located near the construction site. A possible exception is in older buildings where special care must be taken to avoid damage. Table 3-5 summarizes the levels of vibration and the usual effect on people and buildings. The U.S. Department of Transportation (U.S. DOT) has guidelines for vibration levels from construction related to their activities, and recommends that the maximum peak-particle-velocity levels remain below 0.05 inches per second at the nearest structures. Vibration levels above 0.5 inches per second have the potential to cause architectural damage to normal dwellings. The U.S. DOT also states that vibration levels above 0.015 inches per second (in/sec) are sometimes perceptible to people, and the level at which vibration becomes an irritation to people is 0.64 inches per second.

**Table 3-5
 Common Effects of Construction Vibration**

Peak Particle Velocity (in/sec)	Effects on Humans	Effects on Buildings
<0.005	Imperceptible	No effect on buildings
0.005 to 0.015	Barely perceptible	No effect on buildings
0.02 to 0.05	Level at which continuous vibrations begin to annoy occupants of nearby buildings	No effect on buildings
0.1 to 0.5	Vibrations considered unacceptable for persons exposed to continuous or long-term vibration.	Minimal potential for damage to weak or sensitive structures
0.5 to 1.0	Vibrations considered bothersome by most people, however tolerable if short-term in length	Threshold at which there is a risk of architectural damage to buildings with plastered ceilings and walls. Some risk to ancient monuments and ruins.
1.0 to 2.0	Vibrations considered unpleasant by most people.	U.S. Bureau of Mines data indicates that blasting vibration in this range will not harm most buildings. Most construction vibration limits are in this range.
>3.0	Vibration is unpleasant	Potential for architectural damage and possible minor structural damage

Source: U.S. Department of Transportation

Typical levels from vibration generally do not have the potential for any structural damage if properly used. Some construction activities, such as pile driving and blasting, can produce vibration levels that may have the potential to damage some vibration sensitive structures if performed within 50 to 100 feet of the structure. Various types of construction equipment have been measured under a wide variety of construction activities with an average of source levels reported in terms of velocity levels as shown in Table 3-6. Although the table gives one level for each piece of equipment, it should be noted that there is a considerable variation in reported ground vibration levels from construction activities. The data in Table 3-6 provides vibration levels for several pieces of construction equipment. Based on Transit Noise and Vibration Impact Assessment (FTA, May 2006), a vibration level of 102 VdB (velocity in decibels 0.5 inches per second [iii/sec]) or higher (FTA, May 2006) is considered safe and would not result in any construction vibration damage. At a distance of 60 feet, the on-site pile driving would generate a vibration level of up to 0.25 in/sec. However, no pile driving equipment will be used during the project's construction. The potable water well will require excavation beyond 1,350 feet but will be concentrated in a small area near the northern portion of Phase 1, approximately 700 feet north of the residential mobile home use. Furthermore, augers are more often being used than pile drivers for

excavation. Augers produce less vibration and noise than pile drivers and are more fitting to use in the vicinity of a residential use. Therefore, the proposed project will not generate significant vibration impacts.

**Table 3-6
 Vibration Source Levels for Construction Equipment**

Construction Equipment		PPV @25 ft. (inches/sec.)	Noise Levels (VdB) @ 25 ft.
Pile Driver (impact)	Upper range	1.58	112
	Typical	0.644	104
Pile Drive (Sonic)	Upper range	0.734	105
	Typical	0.170	93
Clam Shovel Drop		0.202	94
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Small Bulldozer		0.035	79

Source: Noise and Vibration During Construction

As indicated previously, the project site’s eastern property line abuts a residential use. The project will result in a temporary increase in ambient noise and vibration levels during the project’s construction phase. The vibrations will range from 79 to 94 VdB at 25 feet from the activity location. As indicated previously, the noise/vibration will decrease with distance and at no time will the noise levels be over 110 VdB that which could cause minor damage. Since there are sensitive receptors located adjacent to the project site to the east, the following mitigation is required:

- The project contractor will be responsible for making any repairs or replacements to facilities or structures damaged due to the use of heavy construction equipment.

Adherence to the above-mentioned mitigation will reduce potential impacts to levels that are less than significant.

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, would the project expose people residing or working in the project area to excessive noise levels?

- *No Impact.*

The project site is not located within an airport land use plan and is not located within two miles of a public airport or public use airport.⁸⁰ The nearest airport is the Compton/Woodley Airport, which is located 4.65 miles southwest of the project site. As a result, the proposed project will not expose people residing or working in the project area to excessive noise levels.

⁸⁰ Toll-Free Airline. *Los Angeles County Public and Private Airports, California.*
<http://www.tollfreeairline.com/california/losangeles.htm>

3.13.3 MITIGATION MEASURES

The analysis of potential impacts related to noise indicated that the mobile home park use located adjacent to the project site to the east, the residential uses located 600 feet west of the project site just west of the Los Angeles River and the residential uses located approximately one-quarter mile east of the southern portion of the project site could potentially be impacted by construction noise and vibration. To ensure that the residential uses are shielded from construction noise and vibration, the following mitigation measures are required:

Mitigation Measure No. 7 (Noise). The project contractors must notify residents in the area regarding construction times and local contact information. This notice must be placed along the east side of the project site and shall include the name and phone number of the local contact person residents may call to complain about noise. Upon receipt of a complaint, the contractor must respond immediately by reducing noise to meet Municipal Code requirements. In addition, all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Public Works Department.

Mitigation Measure No. 8 (Noise). The project contractors shall use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

Mitigation Measure No. 9 (Noise). The project contractor will be responsible for making any repairs or replacements to facilities or structures damaged due to the use of heavy construction equipment.

3.14 POPULATION & HOUSING

3.14.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant impact on housing and population if it results in any of the following:

- A 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); or,
- The displacement of substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

3.14.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project 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)? • No Impact.*

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end. Growth-inducing impacts are generally associated with the provision of urban services to an undeveloped or rural area. Growth-inducing impacts include the following:

- New development in an area presently undeveloped and economic factors which may influence development;
- Extension of roadways and other transportation facilities;
- Extension of infrastructure and other improvements;
- Major off-site public projects (treatment plants, etc.);
- The removal of housing requiring replacement housing elsewhere;
- Additional population growth leading to increased demand for goods and services; and,
- Short-term growth-inducing impacts related to the project's construction.

According to the Growth Forecast Appendix prepared by SCAG for the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the City of South Gate had a population of 94,700 in 2012 and is projected to have a population of 111,800 by the year 2040.⁸¹ As of

⁸¹ Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast.* April 2016.

July 1, 2017, the population in the City of South Gate was estimated to be 95,430.⁸² The proposed project will involve the construction and operation of a recreational park area and will not contribute to population growth within the City. According to the RTP/SCS Demographics and Growth Forecast

Appendix, the City of South Gate is projected to add a total of 3,600 new jobs through the year 2040.⁸³ The proposed project will result in the creation of 10-12 jobs. The number of potential new jobs will not exceed the City's anticipated growth projections and no new residents will be introduced. As a result, no impacts will occur.

B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? • No Impact.

The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is currently underutilized and covered-over in grass, dirt, and weedy vegetation. There are no housing units located within the project site boundaries. The portion of the project site located between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁸⁴ No housing units will be displaced as a result of the proposed project's implementation and no impacts will occur.

3.14.3 MITIGATION MEASURES

The analysis of population and housing impacts indicated that no significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.15 PUBLIC SERVICES

3.15.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on public services if it results in any of the following:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *fire protection*;

⁸² United States Census Bureau. *Quickfacts, South Gate City, California.*
<https://www.census.gov/quickfacts/fact/table/southgatecitycalifornia/PST045218>.

⁸³ Southern California Association of Governments. *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040. Demographics & Growth Forecast.* April 2016.

⁸⁴ Blodgett Baylosis Environmental Planning. *Site Survey.* Survey was conducted on December 19, 2018.

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *police protection*;
- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *schools*;
- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *parks*; or,
- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for *other public facilities*.

3.15.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection? • Less than Significant Impact.*

The City of South Gate is served by the Los Angeles County Fire Department. Two fire stations are located within the City. Los Angeles County Fire Department Station #54 is located at 4867 Southern Avenue, approximately 0.64 miles west of the project site; and, Los Angeles County Fire Department Station #57 is located at 5720 Gardendale Street, approximately 0.83 miles southeast of the project site. Fire Station 54 is staffed at all times by one captain, one engineer, one firefighter, and three paramedics. Fire Station 57 is staffed by one captain, one engineer and two firefighters. A battalion chief oversees both fire stations. In total, there are 35 fire department personnel spread out over three shifts. The average response time is four minutes and 58 seconds for emergency calls, and seven minutes and six seconds for non-emergency calls.⁸⁵

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The

⁸⁵ South Gate, City of. *South Gate General Plan 2035*. December 2009.

project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The Fire Department currently reviews all new development plans, and future development will be required to conform to all fire protection and prevention requirements, including emergency access. The proposed project would only place an incremental demand on fire services since the project will involve the operation of a recreational park area. Compliance with the above-mentioned requirement, as well as the pertinent codes and ordinances, would reduce the impacts to levels that are less than significant.

B. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection? • Less than Significant Impact.

The South Gate Police Department is responsible for management of all law enforcement services within the City. The Department operates out of its headquarters at 8620 California Avenue, as well as a substation at the El Paseo Shopping Center. The South Gate Police Department has 97 sworn officers, including one chief, three captains, five lieutenants, 11 sergeants and 77 police officers.⁸⁶ The proposed project would only place an incremental demand on police protection services since the project is not anticipated to be an attractor for crime due to the lack of unsecure vacant space. The proposed project will be open from dusk to dawn and will be secured with a wrought-iron gate at the entrance after sundown. A chain-link fence will be placed around the perimeter of the park as part of the project. In addition, the parking areas will be illuminated past park hours for security purposes. To ensure the proposed project elements adhere to the City's security requirements, the South Gate Police Department will review the site plan for the proposed project to ensure that the development adheres to the Department requirements, including, but not limited to, photometric plan review.

⁸⁶ South Gate, City of. *South Gate General Plan 2035*. December 2009.

Adherence to the above-mentioned requirement will reduce potential impacts to levels that are less than significant.

C. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools? • No Impact.

Due to the nature of the proposed project, no school enrollment impacts will occur. The proposed project will not increase demand for school services. As a result, no impacts will occur.

D. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for parks? • Less than Significant Impact.

The proposed project involves the construction and operation of a park area that will offer many recreational activities including pedestrian walkways, bicycle paths, an educational garden and outdoor fitness equipment among various other elements. Since the proposed project will involve the introduction of a new recreational space, the proposed project will not adversely impact any existing park or other recreational facility.

Regional access to the proposed project will be provided by the existing Los Angeles River Trail, which is located along the west side of the Los Angeles River; and the Rio Hondo River Trail, which is located along the east side of the Rio Hondo Channel. Three future potential bridges will be constructed to connect the proposed project to the Los Angeles River Trail and the Rio Hondo River Trail (it is important to note that these bridges are not part of this environmental analysis). One bridge would be located near the southern boundary of the seven-acre parcel (Phase 1) and would connect to the Los Angeles River Trail; the second bridge would be located near the southern end of the project site and would connect to the Los Angeles River Trail; the third bridge would also be located near the southern end of the project site and would connect to the Rio Hondo River Trail.

The future potential bridges from the proposed project to the Los Angeles River Trail and the Rio Hondo River Trail will facilitate access to other parks in the region, though the impact will not be significant and will not be enough to cause substantial physical deterioration in other parks or recreational facilities. In addition, the mitigation measures provided within this environmental analysis will ensure that the proposed project does not have an adverse physical effect on the environment. As a result, less than significant impacts will occur.

E. Would the project 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 would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities? • No Impact.

No new public facilities will be needed since the proposed project will be a recreational park development that will not result in an increase in population and therefore will not create a need for increased public services. As a result, no impacts will occur.

3.15.3 MITIGATION MEASURES

The analysis determined that the proposed project would not result in any significant impact on public services. As a result, no mitigation is required.

3.16 RECREATION

3.16.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on the environment if it results in any of the following:

- An increase in 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; or,
- The inclusion of recreational facilities or the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.16.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

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? • Less than Significant Impact.

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The proposed project involves the construction and operation of a recreational park area that will offer many recreational activities including pedestrian walkways, bicycle paths, an educational garden, and outdoor fitness equipment among various other elements. Since the proposed project will involve the introduction of a new recreational space, the proposed project will not adversely impact any existing park or other recreational facility.

Regional access to the proposed project will be provided by the existing Los Angeles River Trail, which is located along the west side of the Los Angeles River; and the Rio Hondo River Trail, which is located along the east side of the Rio Hondo Channel. Three future potential bridges will be constructed to connect the proposed project to the Los Angeles River Trail and the Rio Hondo River Trail (it is important to note that these bridges are not part of this environmental analysis). One bridge would be located near the southern boundary of the seven-acre parcel (Phase 1) and would connect to the Los Angeles River Trail; the second bridge would be located near the southern end of the project site and would connect to the Los Angeles River Trail; the third bridge would also be located near the southern end of the project site and would connect to the Rio Hondo River Trail.

The future potential bridges from the proposed project to the Los Angeles River Trail and the Rio Hondo River Trail will facilitate access to other parks in the region, though the impact will not be significant and will not be enough to cause substantial physical deterioration in other parks or recreational facilities. In addition, the mitigation measures provided within this environmental analysis will ensure that the proposed project does not have an adverse physical effect on the environment. As a result, less than significant impacts will occur.

B. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? • Less than Significant Impact.

The proposed project will involve the construction and operation of a recreational park area that will offer many amenities including pedestrian walkways, bicycle paths, an educational garden and outdoor fitness equipment among various other elements. The mitigation measures provided within this environmental analysis will ensure that the project does not have an adverse physical effect on the environment. As a result, less than significant impacts will occur.

3.16.3 MITIGATION MEASURES

The analysis determined that the proposed project would not result in any significant impact on recreational facilities and services. As a result, no mitigation is required.

3.17 TRANSPORTATION

3.17.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may have a significant adverse impact on traffic and circulation if it results in any of the following:

- A conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- A conflict or inconsistency with CEQA Guidelines Section 15064.3 subdivision (b);
- A substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or,
- Inadequate emergency access.

3.17.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? • Less than Significant Impact.

The proposed project will include pedestrian walkways and bicycle trails, which will provide a safe alternative way of traveling through the City of South Gate. The walkways and trails will be located along the east side of the Los Angeles River. Regional access to the proposed project will be provided by the existing Los Angeles River Trail, which is located along the west side of the Los Angeles River; and the Rio Hondo River Trail, which is located along the east side of the Rio Hondo Channel. Along their courses, these two existing trails provide access to several community parks, nearby schools, and other recreational sites. Three future potential bridges will be constructed to connect the proposed project to the Los Angeles River Trail and the Rio Hondo River Trail (it is important to note that these bridges are not part of this environmental analysis). One bridge would be located near the southern boundary of the seven-acre parcel (Phase 1) and would connect to the Los Angeles River Trail; the second bridge would be located near the southern end of the project site and would connect to the Los Angeles River Trail; the third bridge would also be located near the southern end of the project site and would connect to the Rio Hondo River Trail. Therefore, a portion of the Los Angeles River Trail and the Rio Hondo River Trail patrons will potentially have the ability to access the Urban Orchard Demonstration Project recreational park area.

Many of the visitors to the proposed project will be local residents, commuters on bicycles and recreational bicyclists and pedestrians. The project would have a beneficial impact on the City's

circulation system by providing an additional method of transportation. The project, therefore, has the potential to reduce the existing traffic within the City and the surrounding areas. Due to the location and the fact that the project would be regionally connected to the Los Angeles River Trail and the Rio Hondo River Trail, it is unlikely that many of the visitors to the project will arrive by vehicles. However, fifteen parking spaces will be provided on a surface parking area at the entrance of the site.

In order to accurately assess future traffic conditions with the proposed project, trip generation estimates were developed for the project. Trip generation rates for the project are based on the nationally recognized recommendations contained in “Trip Generation” Manual, 10th edition, published by the Institute of Transportation Engineers (ITE). Table 3-7 shows a summary of trip generation estimates for the project. The estimated average daily trip generation rates assume that 57 vehicle trips will occur at the project site every day and that six vehicle trips will occur during the PM peak hour.

**Table 3-7
 Trip Generation Estimates**

ITE Land Use/Project Scenario	ITE Code & Unit	Unit	Daily	PM Peak Hour Total
City Park (Trip Rates)	411	Acres	1.90	0.19
Total	30	Acres	57	6

Source: ITE Trip Generation Manual, 10th Edition

Therefore, the project is not expected to significantly impact traffic conditions on any of the surrounding roadways. As a result, impacts are expected to be less than significant.

B. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)? • Less than Significant Impact.

According to CEQA Guidelines §15064.3 subdivision (b)(1), vehicle miles traveled (VMT) 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 VMT in the project area compared to existing conditions should be considered to have a less than significant transportation impact.

The proposed project involves the construction and operation of a recreational park area. It is important to note that the project is an “infill” development, which is seen as an important strategy in combating the release of GHG emissions. Infill development provides a regional benefit in terms of a reduction in VMT since the project is consistent with the regional and State sustainable growth objectives identified in the State’s Strategic Growth Council (SGC).⁸⁷ Infill development reduces VMT by recycling existing undeveloped or underutilized properties located in established urban areas. When development is located in a more rural setting, such as further east in the desert areas, employees, patrons, visitors, and residents may have to travel farther since rural development is often

⁸⁷ California Strategic Growth Council. <http://www.sgc.ca.gov/Initiatives/infill-development.html>.

located a significant distance from employment, entertainment, and population centers. Consequently, this distance is reduced when development is located in urban areas since employment, entertainment, and population centers tend to be set in more established communities. Furthermore, the proposed project would have a beneficial impact on the City's circulation system by providing an additional method of transportation. The project, therefore, has the potential to reduce the existing traffic within the City and the surrounding areas.

CEQA Guidelines §15064.3 subdivision (b)(2) focuses on impacts that result from certain transportation projects. Subdivision (b)(2) clarifies that projects that reduce VMT, such as pedestrian, bicycle and transit projects, should be presumed to have a less than significant impact. The proposed project involves the construction and operation of a recreational park area that will include pedestrian walkways and bicycle trails. Therefore, according to subdivision (b)(2), less than significant impacts will occur. Furthermore, the project is an infill development, which is seen as an important strategy in combating the release of GHG emissions. As a result, the potential impacts are considered to be less than significant.

C. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? • No Impact.

Vehicular access to the project site will be provided by one full-access driveway which will be located near the southeast corner of the seven-acre site (Phase 1). Approximately 57 vehicle trips will occur at the project site every day and six vehicle trips will occur during the AM and PM peak hour. This low volume of traffic is not expected to cause any significant street delays or long queues. The proposed project will be located in an area that is not readily accessible from a major arterial road. Therefore, the street that leads to the project entrance (West Frontage Road) will not handle a significantly larger amount of traffic.

Fifteen parking spaces will be provided on a surface parking area. Due to the fact that the project would be regionally connected to the Los Angeles River Trail and the Rio Hondo River Trail, it is unlikely that many of the visitors to the project will arrive by vehicles. The existing public streets would remain unchanged and no modifications resulting in an increased hazard will be made to the existing street system. As a result, no impacts will result.

D. Would the project result in inadequate emergency access? • No Impact.

The proposed project would not impede emergency access to any neighboring properties during construction. At no time will the surrounding roadways be closed to traffic during the project's construction. The Los Angeles County Fire Department will review the on-site circulation to ensure that sufficient emergency access and clearance is provided. As a result, no impacts related to emergency access will occur.

3.17.3 MITIGATION MEASURES

The analysis determined that no significant traffic and circulation impacts would result from the proposed project's implementation. As a result, no mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on tribal cultural resources if it results in any of the following:

- 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 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); or,
- 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 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.

3.18.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *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 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)?* • *Less than Significant Impact with Mitigation.*

A Tribal Resource is defined in Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “non-unique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

The proposed project involves the installation of a 30-acre passive recreational park area. The majority of the project area is currently underutilized and covered-over in grass, dirt, and weedy vegetation. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁸⁸

The project site is located within an urbanized area of the City that has been disturbed due to past development and there is a limited likelihood that artifacts will be encountered. Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements. In addition, the project area is not located within an area that is typically associated with habitation sites, foraging areas, ceremonial sites, or burials.

The Trust for Public Land conducted Native American consultation on behalf of the City of South Gate under Section 106 of the National Historic Preservation Act. Responses were received from four of the five tribal members contacted, summarized below:

Andy Salas, Chairperson of Gabrieleno Band of Mission Indians - Kizh Nation responded via email on November 27, 2017 requesting consultation, which took place on January 11, 2018. Because the project is located within a highly culturally sensitive area and in order to protect resources, Mr. Salas is requesting that a Native American Monitor be present on site during all ground disturbances.

Anthony Morales, Chairperson, Gabrielino/Tongva San Gabriel Band of Mission Indians, stated that he has no problem with open space/recreational use of the park by the public; however, the area along the river is sensitive for the presence of cultural resources, as encampments or villages are known to have existed along rivers. Therefore, if an archaeological survey is being conducted for the project, Mr. Morales would like one of his representatives to be present during the field work. On December 21, 2017, The Trust for Public Land again spoke to Mr. Morales to ensure him that one of his representatives would be invited to participate in the survey. Adrian Morales

⁸⁸ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

participated in the archaeological survey of the project site along with the Native American representative on January 18, 2018.

Robert F. Dorame, Chairperson, Gabrielino Tongva Indians of California Tribal Council spoke with The Trust for Public Land via telephone on several occasions. Mr. Dorame strongly recommended monitoring of grading because of his knowledge of a village site being located nearby. Mr. Dorame named two villages—Tibahena and Ahau—the tribe believes are located within one mile of the project. He emphasized that human remains have also been recovered within a mile from where the river flowed. For these reasons he also requested that a monitor be retained to conduct Native American monitoring during all ground disturbance.

Charles Alvarez, Gabrielino-Tongva Tribe notified The Trust for Public Land that he “okayed the project”.

Although the proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery, the project site is situated in an area of high archaeological significance. As a result, the following mitigation is required:

- The project contractor will request the monitoring services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

Title 14; Chapter 3; Article 5; Section 15064.5 of CEQA will apply in terms of the identification of significant archaeological resources and their salvage. Adherence to the above-mentioned mitigation will reduce potential impacts to levels that are less than significant.

B. 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 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 Resource Code Section 5024.1, the Lead Agency shall consider the significance of the resource to a California Native American tribe. • Less than Significant Impact.

The project site is located within an urbanized area of the City that has been disturbed due to past development and there is a limited likelihood that artifacts will be encountered. Project construction will involve excavation for the constructed wetland (three to four feet in depth), for the foundation and footings for the one-story community/maintenance building and one-story water building (three to

four feet), and for the hydrology substructures (24 feet). The water well will require excavation beyond 1,350 feet but will be concentrated in a small area. Ground disturbance will also involve grading and earth-clearing activities for the installation of the grass and landscaping and other on-site improvements. In addition, the project area is not located within an area that is typically associated with habitation sites, foraging areas, ceremonial sites, or burials. Nevertheless, mitigation was provided in the previous subsection. With the implementation of this mitigation measure, tribal cultural impacts will be reduced to levels that are considered to be less than significant.

3.18.3 MITIGATION MEASURES

Although parts of the project site have been subject to disturbance to accommodate the existing structures, the project site is situated in an area of high archaeological significance. As a result, the following mitigation is required:

Mitigation Measure No. 10 (Tribal Cultural Resources). The project contractor will request the monitoring services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

3.19 UTILITIES & SERVICE SYSTEMS

3.19.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact on utilities if it results in any of the following:

- The requirement or relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- 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;
- The generation of 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;
- Incompliance with Federal, State, and local management and reduction statutes and regulations related to solid waste.

3.19.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? • Less than Significant Impact.*

The proposed project will involve the construction and subsequent operation of a 30-acre passive recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

Due to the nature of the proposed project, natural gas and telecommunication facilities will not be required to be relocated or constructed. Those services will only be needed within the community/maintenance building. In addition, as noted in the next subsection (3.19.2.B), the proposed project is projected to consume approximately 42,358 gallons of water on a daily basis. The existing water supply facilities can accommodate this additional demand.

The City of South Gate is located within the service area of the Sanitation District 2 of Los Angeles County. The nearest wastewater treatment plant to South Gate is the Los Coyotes Water Reclamation Plant (WRP) located in Cerritos. The Los Coyotes WRP is located at 16515 Piuma Avenue in the City of Cerritos and occupies 34 acres at the northwest junction of the San Gabriel River (I-605) and the Artesia (SR-91) Freeways. The plant was placed in operation on May 25, 1970, and initially had a capacity of 12.5 million gallons per day (mgd) and consisted of primary treatment and secondary treatment with activated sludge. The Los Coyotes WRP provides primary, secondary and tertiary treatment for 37.5 mgd. The plant serves a population of approximately 370,000 people. Over five mgd of the reclaimed water is reused at over 270 reuse sites. Reuse includes landscape irrigation of schools, golf courses, parks, nurseries, and greenbelts; and industrial use at local companies for carpet

dying and concrete mixing. The remainder of the effluent is discharged to the San Gabriel River. Treated wastewater is disinfected with chlorine and conveyed to the Pacific Ocean.⁸⁹ The Los Coyotes WRP has a design capacity of 37.5 mgd and currently processes an average flow of 20.36 mgd. The on-site wastewater generation will primarily be a result of the restroom usage. As previously indicated, the proposed project will generate 57 vehicle trips per day (28.5 vehicles, two in and out trips per vehicles). Therefore, for purposes of this analysis, we can assume four persons per vehicle. As indicated in Table 3-8, the future development is projected to generate 570 gallons of effluent on a daily basis which is well under the capacity of the aforementioned WRPs.

**Table 3-8
 Wastewater (Effluent) Generation (gals/day)**

Use	Unit	Factor	Generation
Park restroom	114 persons	5 gals/person/day	570 gals/day
Total Generation			570 gals/day

Source: Blodgett Baylois Environmental Planning.

In addition, the proposed project will include hydrological features which will facilitate stormwater treatment and reuse. Hydrological features will include: a constructed wetland, consisting of approximately one acre, and used to treat water from the Bandini Channel and to store irrigation water for the orchard; a water quality pre-treatment hydrodynamic separator with an operational flow capacity of up to five cubic feet per second; a stormwater harvesting system includes additional filtration and a pump to provide irrigation for the orchard and buffer trees; and, permeable pavement to capture and clean dry-weather flow and stormwater. Since the project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the impacts are expected to be less than significant.

B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? • Less than Significant Impact.

The City of South Gate operates a municipal water utility (Utility) located in an adjudicated water basin. The City uses groundwater from the City wells as its primary source. Water generated from wells is chlorinated and distributed to City customers or stored in reservoirs. The total capacity of both active and stand-by wells is 32.97 million gallons per day (mgd), or 101.19 acre-feet per day. This represents a surplus over the City's average daily demand of 9.32 mgd, and the City's maximum daily demand of 16.78 mgd. In addition to its own sources, the City also has agreements to purchase water from other agencies including the Metropolitan Water District of Southern California (MWD), the City

⁸⁹ Los Angeles County Sanitation Districts.
http://www.lacsd.org/wastewater/wwfacilities/joint_outfall_system_wrp/los_coyotes.asp.

of Downey and the Golden State Water Company. These secondary sources are generally for emergencies only. The Utility has annual pumping rights of 11,183 acre-feet of water.⁹⁰

Using an annual irrigation formula and taking into account the different types of irrigation that will be needed on-site (moderate irrigation for the orchard areas and light irrigation for the rest of the project site), approximately 41,788 gallons of water will be used for irrigation per day.⁹¹

Orchard Area

Annual irrigation factor = 20.14 (moderate water requirement)

Area = 304,920 square feet (7 acres)

Irrigation System Efficiency = 85% (high efficiency)

$$20.14 \left(\frac{\text{gallons}}{\text{square foot-year}} \right) \times 304,920 \text{ square feet} \div 0.85 \\ = 7,224,810 \text{ gallons/year or } 19,794 \text{ gallons/day}$$

Rest of Project Site

Annual irrigation factor = 6.81 (low water requirement)

Area = 1,002,000 square feet (23 acres)

Irrigation System Efficiency = 85% (high efficiency)

$$6.81 \left(\frac{\text{gallons}}{\text{square foot-year}} \right) \times 1,002,000 \text{ square feet} \div 0.85 \\ = 8,027,788 \text{ gallons/year or } 21,994 \text{ gallons/day}$$

Total Daily Water Consumption = 19,794 + 21,994 = 41,788 gallons/day

Adding the amount of water that will be used for restrooms (570 gallons per day), the daily projected water consumption will be approximately 42,358 gallons per day. The existing water supply facilities can accommodate this additional demand. In addition, a potable water well and water building will be located on-site in the future. The new water well and water building will be owned and operated by the City's Water Division. Furthermore, as noted in the previous subsection, the project will include hydrological features which will facilitate stormwater capture and reuse. Therefore, the project will have sufficient water supplies available to serve the project and less than significant impacts are anticipated to occur.

C. Would the project 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? • Less than Significant Impact.

As previously mentioned, the proposed project will consume approximately 42,358 gallons of water per day. The proposed project is anticipated to produce 570 gallons of effluent (wastewater) daily. As

⁹⁰ South Gate, City of. *South Gate General Plan 2035*. December 2009.

⁹¹ United States Department of Energy. *Guidelines for Estimating Unmetered Landscaping Water Use*. July 2010.

indicated earlier, there is sufficient capacity at the Los Coyotes WRP. As a result, less than significant impacts will occur.

D. Would the project 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? • Less than Significant Impact.

A majority of solid waste is disposed at either Class III landfills (municipal solid waste facilities), which are facilities for non-hazardous household waste, or unclassified (inert) landfills that accept materials such as soil, concrete, asphalt, and other construction and demolition debris. Waste Management operates a transfer station in South Gate and uses specific landfills for residential and commercial/industrial wastes: Commerce Refuse-To-Energy Facility, Bradley Landfill, Downtown Diversions, Inc., El Sobrante Landfill, Nu-Way Live Oak Reclamation, Inc., Southeast Recovery Resource Facility City of Long Beach-Energy Recovery Bureau and Synagro Regional Composting Facility.⁹² The City of South Gate is a member of the Los Angeles Integrated Waste Management Authority a regional agency, also known as LARA, which is a consortium of 16 cities in Los Angeles County. In 2004, the California Integrated Waste Management Board (CIWMB) approved the formation of LARA as a regional agency whose mission is to assist members in meeting and exceeding the 50 percent waste diversion mandates of State Assembly Bill 939. The City has approved a number of private sector businesses that recycle materials including Interior Removal Specialists, Pacific Coast Metals, Hanson Aggregates, Inc. and the Sanitation Districts South Gate Transfer Station. The City has several programs to divert solid waste from landfills including composting, facility recovery, policy incentives, household hazardous waste management, and public education about recycling and waste reduction. The City diverted 47 percent of its solid waste in 2002.⁹³ As indicated in Table 3-9, the future daily solid waste generation is projected to be 3,921 pounds per day. The proposed project will contribute a limited amount to the waste stream.

**Table 3-9
 Solid Waste Generation (lbs/day)**

Use	Unit	Factor	Generation
Open Space	1,307,000 square feet	3 lbs/day/1,000 sq. ft.	3,921 lbs/day
Total Generation			3,921 lbs/day

Source: City of Los Angeles CEQA Thresholds Guide, 2006.

The proposed project, like all other development in South Gate, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. In addition, the project will include trash cans and recycling bins throughout the project site. As a result, less than significant impacts will occur.

⁹² South Gate, City of. *South Gate General Plan 2035*. December 2009.

⁹³ Ibid.

E. Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste? • No Impact.

The proposed project, like all other development in South Gate, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. In addition, the project will include trash cans and recycling bins throughout the project site. As a result, no impacts related to State and local statutes governing solid waste are anticipated.

3.19.3 MITIGATION MEASURES

The analysis of utilities and service systems indicated that no significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.20 WILDFIRES

3.20.1 THRESHOLDS OF SIGNIFICANCE

According to the City of South Gate, acting as Lead Agency, a project may be deemed to have a significant adverse impact if it results in any of the following located in or near State responsibility areas or lands classified as very high fire hazard severity zones:

- If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, a substantial impairment of an adopted emergency response plan or emergency evacuation plan;
- If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, the exacerbation of wildfire risks due to slope, prevailing winds, and other factors, and thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, the requirement of 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 would the project; or,
- If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, the exposure of 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.

3.20.2 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? • No Impact.*

The proposed project involves the construction and operation of a recreational park area within an urban area of the City of South Gate. The proposed project would not involve the closure or alteration of any existing evacuation routes. As a result, no impacts will occur.

B. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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? • No Impact.*

The proposed project involves the installation of a 30-acre passive recreational park area. The proposed project site is located among industrial and residential uses and has previously been heavily modified and graded to accommodate previous uses including a solid waste landfill and a plant nursery. The majority of the project area is currently underutilized and covered-over in grass, dirt, and weedy vegetation. Five trees are located on-site and include palm trees and deciduous trees. All five trees are of species commonly used in urban landscaping and are not protected by any regional or local policy or ordinance. The segment in between the Thunderbird Villa Mobile Home Park and the I-710 Freeway is covered-over in asphalt pavement. Also located on-site are four static billboards, a cellular telephone tower, eight electrical transmission towers and the Bandini Channel, which extends along the northern portion of the project site, along the east side of the Los Angeles River. In addition, a Union Pacific railroad track and part of the Old South Gate Train Bridge traverse a small portion of the project area.⁹⁴

There is no risk from wildfire within the project site or the surrounding area given the project site's distance from any area that may be subject to a wildfire event. In addition, the proposed project will replace a site that is currently occupied with urban uses and will therefore not change the nature of the project area. As a result, no impacts will occur.

C. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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? • No Impact.*

There is no risk from wildfire within the project site or the surrounding area given the project site's distance from any area that may be subject to a wildfire event. As a result, no impacts will occur.

⁹⁴ Blodgett Baylosis Environmental Planning. *Site Survey*. Survey was conducted on December 19, 2018.

- D. *If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project 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? • No Impact.*

There is no risk from wildfire within the project site or the surrounding area given the project site's distance from any area that may be subject to a wildfire event. In addition, the surrounding area is level and completely developed. As a result, no impacts will occur.

3.20.3 MITIGATION MEASURES

The analysis of wildfire impacts indicated that no significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially 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, substantially 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. As indicated in Section 3.1 through 3.20, the proposed project will not result in any significant unmitigable environmental impacts.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable. The proposed project will not lead to a cumulatively significant impact on any of the issues analyzed herein.
- The proposed project *will not* have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. As indicated in Section 3.1 through 3.20, the proposed project will not result in any significant unmitigable environmental impacts.



SECTION 4 CONCLUSIONS

4.1 FINDINGS

The Initial Study determined that the proposed project is not expected to have significant adverse environmental impacts. The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially 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, substantially reduce the number or restrict the range of an endangered, rare or threatened species or eliminate important examples of the major periods of California history or prehistory.
- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.
- A Mitigation Reporting and Monitoring Program *will be* required.

4.2 MITIGATION MONITORING

In addition, pursuant to Section 21081(a) of the Public Resources Code, findings must be adopted by the decision-maker coincidental to the approval of a Mitigated Negative Declaration, which relates to the Mitigation Monitoring and Reporting Program. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180 and in compliance with the requirements of the Public Resources Code. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the City of South Gate can make the following additional findings:

- A mitigation reporting or monitoring program will be required; and,
- An accountable enforcement agency or monitoring agency shall be identified for the mitigation measures adopted as part of the decision-maker's final determination.

A number of mitigation measures have been recommended as a means to reduce or eliminate potential adverse environmental impacts to insignificant levels. AB-3180 requires that a monitoring and reporting program be adopted for the recommended mitigation measures.

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SECTION 5 REFERENCES

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5.2 REFERENCES

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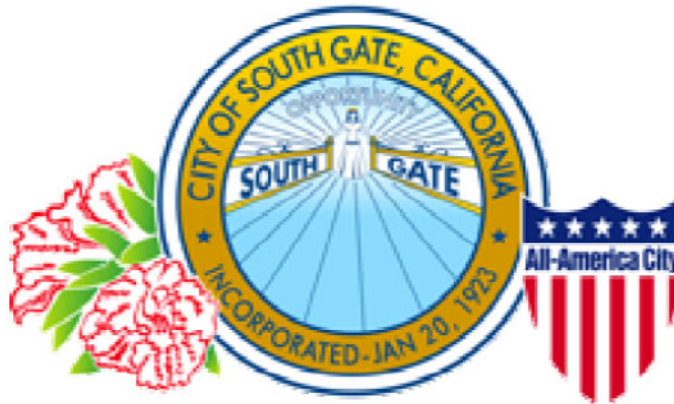
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CITY OF SOUTH GATE URBAN ORCHARD DEMONSTRATION PROJECT



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JUNE 26, 2019

SGAT 006

MITIGATION MONITORING AND REPORTING PROGRAM
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1. OVERVIEW OF THE PROJECT

The proposed project will involve the construction and subsequent operation of a 30-acre recreational park area that will extend along the east side of the Los Angeles River between Firestone Boulevard (on the north), the confluence where the Los Angeles River connects with the Rio Hondo Channel (on the south), the Los Angeles River (on the west) and Interstate 710 (on the east). The project area includes 23 acres which extend for approximately 1.1 miles along the east side of the Los Angeles River; and the Bandini Channel, which extends along the northern portion of the project site and along the east side of the Los Angeles River. The project area will be anchored by a 7-acre City-owned parcel, located to the north of the Thunderbird Villa Mobile Home Park.

The project will be constructed in phases. Phase 1, the 7-acre City-owned property, will feature a constructed wetland and a wide range of recreational amenities including a community/maintenance building, restrooms, an educational garden, an orchard that will contain fruit trees, a plaza area that will include picnic areas with canopies, native habitat planting, interpretive elements, a parking lot and potential to support native species. Other features will include a channel diversion structure and pumping system to take water from the Bandini Channel to the constructed treatment wetland and a subsurface storage reservoir; a water quality pre-treatment hydrodynamic separator; and, a stormwater harvesting system including additional filtration and a pump to provide irrigation for the orchard and buffer trees. A potable water well and water building will be located within the project area. The new water well and water building will be owned and operated by the City's Water Division. The phases within the 23 acres will feature landscaping and trails along the entire length of the park area. A confluence outlook will be provided at the southern end.

The on-site Union Pacific railroad track will be widened and a train station will be built on-site in the future to accommodate the proposed West Santa Ana Branch Line. The West Santa Ana Branch Line is a project by The Los Angeles County Metropolitan Transportation Authority (Metro) that involves the construction and operation of a light rail transit line that would connect downtown Los Angeles to southeast LA County. It is important to note that the widening of the railroad track and the construction of the train station for the West Santa Ana Branch Line are not a part of this environmental analysis.

2. FINDINGS OF THE ENVIRONMENTAL ASSESSMENT

The attached Initial Study prepared for the proposed project indicated that the proposed project will not result in significant environmental impacts upon implementation of the required mitigation measures. The following Mandatory Findings of Significance can be made as set forth in Section 15065 of the CEQA Guidelines, as amended, based on the results of this environmental assessment:

- The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially 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, substantially reduce the number or restrict the range of an endangered, rare or

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threatened species or eliminate important examples of the major periods of California history or prehistory.

- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantially adverse effects on human beings, either directly or indirectly.

3. FINDINGS RELATED TO MITIGATION MONITORING

Section 21081(a) of the Public Resources Code states that findings must be adopted by the decision-makers coincidental to the approval of a Mitigated Negative Declaration. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the following additional findings may be made:

- A mitigation monitoring and reporting program will be required;
- Site plans and/or building plans, submitted for approval by the responsible monitoring agency, shall include the required standard conditions; and,
- An accountable enforcement agency or monitoring agency shall be identified for the mitigations adopted as part of the decision-maker's final determination.

4. MITIGATION MEASURES

In order to ensure that all construction staging occurs on-site and that the proposed project does not cause off-site particulate emissions, the following mitigation is required:

Mitigation Measure No. 1 (Air Quality). The project contractors must submit a construction and staging plan to the City for approval before commencing any construction activity. The construction and staging plan must establish an on-site construction equipment staging area and construction worker parking lot, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments.

Mitigation Measure No. 2 (Air Quality). Contractors must use off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during project construction. Such equipment will be outlined with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions.

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In order to reduce any potential impact to avian species, the following mitigation measure is required:

Mitigation Measure No. 3 (Biological Resources). If clearing and/or construction activities will occur during the raptor or migratory bird nesting season (February 15–August 15), the project contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before construction activities. The qualified biologist shall survey the construction zone and a 500-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist.

The analysis determined that the following mitigation would be required:

Mitigation Measure No. 4 (Energy). The project contractor must install ENERGY STAR rated light emitting diodes (LEDs) for outdoor and parking lot lighting.

In the event that intact paleontological resources are located within the project site, ground-disturbing activities such as grading and excavation have the potential for destroying a unique paleontological resource or site. Therefore, the following mitigation is required:

Mitigation Measure No. 5 (Geology & Soils). Prior to commencement of any grading activity on site, the contractor shall retain a qualified paleontologist, subject to the review and approval of the City's Engineer, or designee. The qualified paleontologist shall be on-site during grading and other significant ground disturbance activities that impact Pleistocene alluvial deposits, which could occur at depths below six feet. The monitoring shall apply to the areas of the site where excavation shall extend at depths of six feet or more.

Due to the on-site soil contamination, the following mitigation measure is required:

Mitigation Measure No. 6 (Hazards & Hazardous Materials). The Applicant (City of South Gate) will be required to prepare a soil management plan (SMP), as recommended by Tetra Tech, Inc. The project contractors will then be required to adhere to the recommendations listed within the SMP. The project contractors must also adhere to the recommendations listed within the *Infiltration Study for Proposed Water Quality Improvements, Urban Orchard Project* prepared by Albus-Keefe & Associates, Inc.

The analysis of potential impacts related to noise indicated that the mobile home park use located adjacent to the project site to the east, the residential uses located 600 feet west of the project site just west of the Los Angeles River and the residential uses located approximately one-quarter mile east of the southern portion of the project site could potentially be impacted by construction noise and vibration. To

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ensure that the residential uses are shielded from construction noise and vibration, the following mitigation measures are required:

Mitigation Measure No. 7 (Noise). The project contractors must notify residents in the area regarding construction times and local contact information. This notice must be placed along the east side of the project site and shall include the name and phone number of the local contact person residents may call to complain about noise. Upon receipt of a complaint, the contractor must respond immediately by reducing noise to meet Municipal Code requirements. In addition, all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Public Works Department.

Mitigation Measure No. 8 (Noise). The project contractors shall use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.

Mitigation Measure No. 9 (Noise). The project contractor will be responsible for making any repairs or replacements to facilities or structures damaged due to the use of heavy construction equipment.

Although parts of the project site have been subject to disturbance to accommodate the existing structures, the project site is situated in an area of high archaeological significance. As a result, the following mitigation is required:

Mitigation Measure No. 10 (Tribal Cultural Resources). The project contractor will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.

5. MITIGATION MONITORING

The monitoring and reporting on the implementation of these measures, including the period for implementation, monitoring agency, and the monitoring action, are identified in Table 1.

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TABLE 1 MITIGATION-MONITORING PROGRAM			
Measure	Enforcement Agency	Monitoring Phase	Verification
<p>Mitigation Measure No. 1 (Air Quality). The project contractors must submit a construction and staging plan to the City for approval before commencing any construction activity. The construction and staging plan must establish an on-site construction equipment staging area and construction worker parking lot, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments.</p>	<p>Public Works Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction and staging plan is approved.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>Mitigation Measure No. 2 (Air Quality). Contractors must use off-road diesel-powered construction equipment that meets or exceeds the CARB and USEPA Tier 4 off-road emissions standards for equipment rated at 50 horsepower or greater during project construction. Such equipment will be outlined with Best Available Control Technology (BACT) devices including a CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least 85 percent reduction in particulate matter emissions.</p>	<p>Public Works Director</p> <ul style="list-style-type: none"> • <p><i>(The City is responsible for implementation)</i></p>	<p><i>During construction.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>Mitigation Measure No. 3 (Biological Resources). If clearing and/or construction activities will occur during the raptor or migratory bird nesting season (February 15–August 15), the project contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before construction activities. The qualified biologist shall survey the construction zone and a 500-foot buffer surrounding the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist.</p>	<p>Public Works Director</p> <ul style="list-style-type: none"> • <p><i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when the project site is cleared by the appointed biologist and construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>Mitigation Measure No. 4 (Energy). The project contractor must install ENERGY STAR rated light emitting diodes (LEDs) for outdoor and parking lot lighting.</p>	<p>Public Works Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(The City is responsible for implementation)</i></p>	<p><i>During construction.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>

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<p>Mitigation Measure No. 5 (Geology & Soils). Prior to commencement of any grading activity on site, the contractor shall retain a qualified paleontologist, subject to the review and approval of the City's Engineer, or designee. The qualified paleontologist shall be on-site during grading and other significant ground disturbance activities that impact Pleistocene alluvial deposits, which could occur at depths below six feet. The monitoring shall apply to the areas of the site where excavation shall extend at depths of six feet or more.</p>	<p>Public Works Director, City Engineer and the Chief Building Official • <i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i> • Mitigation ends when ground disturbance is completed or otherwise noted by the appointed paleontologist.</p>	<p>Date: Name & Title:</p>
<p>Mitigation Measure No. 6 (Hazards & Hazardous Materials). The Applicant (City of South Gate) will be required to prepare a soil management plan (SMP), as recommended by Tetra Tech, Inc. The project contractors will then be required to adhere to the recommendations listed within the SMP. The project contractors must also adhere to the recommendations listed within the <i>Infiltration Study for Proposed Water Quality Improvements, Urban Orchard Project</i> prepared by Albus-Keefe & Associates, Inc.</p>	<p>Public Works Director, City Engineer • <i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i> • Mitigation ends when soil remediation is complete and well is installed.</p>	<p>Date: Name & Title:</p>
<p>Mitigation Measure No. 7 (Noise). The project contractors must notify residents in the area regarding construction times and local contact information. This notice must be placed along the east side of the project site and shall include the name and phone number of the local contact person residents may call to complain about noise. Upon receipt of a complaint, the contractor must respond immediately by reducing noise to meet Municipal Code requirements. In addition, all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Public Works Department.</p>	<p>Public Works Director and Code Enforcement • <i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i> • Mitigation ends when construction is completed.</p>	<p>Date: Name & Title:</p>
<p>Mitigation Measure No. 8 (Noise). The project contractors shall use construction equipment that includes working mufflers and other sound suppression equipment as a means to reduce machinery noise.</p>	<p>Public Works Director • <i>(The City is responsible for implementation)</i></p>	<p><i>During construction.</i> • Mitigation ends when construction is completed.</p>	<p>Date: Name & Title:</p>
<p>Mitigation Measure No. 9 (Noise). The project contractor will be responsible for making any repairs or replacements to facilities or structures damaged due to the use of heavy construction equipment.</p>	<p>Public Works Director and the Chief Building Official • <i>(The City is responsible for implementation)</i></p>	<p><i>During construction.</i> • Mitigation ends when the required repairs or replacements are completed.</p>	<p>Date: Name & Title:</p>

INITIAL STUDY & MITIGATED NEGATIVE DECLARATION
 URBAN ORCHARD DEMONSTRATION PROJECT • CITY OF SOUTH GATE

MITIGATION MONITORING AND REPORTING PROGRAM
 INITIAL STUDY & MITIGATED NEGATIVE DECLARATION
 URBAN ORCHARD DEMONSTRATION PROJECT • CITY OF SOUTH GATE

<p>Mitigation Measure No. 10 (Tribal Cultural Resources). The project contractor will be required to obtain the services of a qualified Native American Monitor(s) during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and will be present on-site during the construction phases that involve any ground-disturbing activities.</p>	<p style="text-align: center;">Public Works Director • <i>(The City is responsible for implementation)</i></p>	<p><i>Prior to the start of any construction-related activities.</i></p> <p style="text-align: center;">•</p> <p>Mitigation ends when ground disturbance is completed or otherwise noted by the appointed Native American Monitor(s).</p>	<p>Date:</p> <p>Name & Title:</p>
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Urban Orchard - South Coast AQMD Air District, Summer
Urban Orchard
 South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	7.00	Acre	7.00	304,920.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase - per ISMND
- Construction Off-road Equipment Mitigation -
- Area Mitigation -
- Water Mitigation -
- Mobile Land Use Mitigation -
- Waste Mitigation -

INITIAL STUDY & MITIGATED NEGATIVE DECLARATION
 URBAN ORCHARD DEMONSTRATION PROJECT • CITY OF SOUTH GATE

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Urban Orchard - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	174.00
tblConstructionPhase	NumDays	20.00	45.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	8/21/2020	12/31/2020
tblConstructionPhase	PhaseEndDate	6/25/2020	8/31/2020
tblConstructionPhase	PhaseEndDate	6/28/2019	8/31/2019
tblConstructionPhase	PhaseEndDate	8/9/2019	12/31/2019
tblConstructionPhase	PhaseEndDate	7/24/2020	10/31/2020
tblConstructionPhase	PhaseEndDate	7/12/2019	10/31/2019
tblConstructionPhase	PhaseStartDate	7/25/2020	11/12/2020
tblConstructionPhase	PhaseStartDate	8/10/2019	1/1/2020
tblConstructionPhase	PhaseStartDate	6/1/2019	7/1/2019
tblConstructionPhase	PhaseStartDate	7/13/2019	11/1/2019
tblConstructionPhase	PhaseStartDate	6/27/2020	9/1/2020
tblConstructionPhase	PhaseStartDate	6/29/2019	9/1/2019
tblGrading	AcresOfGrading	21.50	10.00

2.0 Emissions Summary

Urban Orchard - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)
Unmitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2019	4.4232	45.6341	22.8718	0.0406	18.2675	2.3819	20.6594	9.9840	2.2006	12.1846	0.0000	3,994.0477	3,994.0477	1.1983	0.0000	4,020.7320
2020	2.8632	24.8221	23.3307	0.0545	1.7508	1.1539	2.9046	0.4716	1.0852	1.5568	0.0000	5,390.1597	5,390.1597	0.7511	0.0000	5,408.9379
Maximum	4.4232	45.6341	23.3307	0.0545	18.2675	2.3819	20.6594	9.9840	2.2006	12.1846	0.0000	5,390.1597	5,390.1597	1.1983	0.0000	5,408.9379

Mitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2019	4.4232	45.6341	22.8718	0.0406	7.2470	2.3819	9.6390	3.9263	2.2006	6.1269	0.0000	3,994.0477	3,994.0477	1.1983	0.0000	4,020.7319
2020	2.8632	24.8221	23.3307	0.0545	1.7508	1.1539	2.9046	0.4716	1.0852	1.5568	0.0000	5,390.1597	5,390.1597	0.7511	0.0000	5,408.9379
Maximum	4.4232	45.6341	23.3307	0.0545	7.2470	2.3819	9.6390	3.9263	2.2006	6.1269	0.0000	5,390.1597	5,390.1597	1.1983	0.0000	5,408.9379
Percent Reduction	0.00	0.00	0.00	0.00	55.05	0.00	46.77	57.94	0.00	44.08	0.00	0.00	0.00	0.00	0.00	0.00

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Urban Orchard - South Coast AQMD Air District, Summer

2.2 Overall Operational
Unmitigated Operational

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.0158	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Mobile	0.2778	1.3677	3.4662	0.0123	0.9744	9.6500e-003	0.9840	0.2607	9.0100e-003	0.2697		1.2549925	1.2549925	0.0611		1.2565195
Total	0.2936	1.3677	3.4670	0.0123	0.9744	9.6500e-003	0.9840	0.2607	9.0100e-003	0.2697		1.2549940	1.2549940	0.0611	0.0000	1.2565212

Mitigated Operational

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Area	0.0158	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Energy	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Mobile	0.2757	1.3532	3.4086	0.0121	0.9548	9.4700e-003	0.9644	0.2555	8.8500e-003	0.2643		1.2316307	1.2316307	0.0601		1.2331336
Total	0.2915	1.3532	3.4094	0.0121	0.9548	9.4700e-003	0.9644	0.2555	8.8500e-003	0.2643		1.2316322	1.2316322	0.0601	0.0000	1.2331352

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Urban Orchard - South Coast AQMD Air District, Summer

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
0.73	1.06	1.66	1.86	2.00	1.87	2.00	2.00	1.78	1.99	0.00	1.86	1.86	1.57	0.00	1.86

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2019	9/31/2019	5	45	
2	Site Preparation	Site Preparation	9/1/2019	10/31/2019	5	44	
3	Grading	Grading	11/1/2019	12/31/2019	5	48	
4	Building Construction	Building Construction	1/1/2020	9/31/2020	5	174	
5	Paving	Paving	9/1/2020	10/31/2020	5	44	
6	Architectural Coating	Architectural Coating	11/1/2020	12/31/2020	5	44	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Urban Orchard - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Urban Orchard - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	128.00	50.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	26.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

Category	ib/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBto- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	3.5134	35.7830	22.0600	0.0388	1.7949	1.7949	1.7949	1.6697	1.6697	1.6697	3,816.899	4	3,816.899	1.0618	4	3,843.445
Total	3.5134	35.7830	22.0600	0.0388	1.7949	1.7949	1.7949	1.6697	1.6697	1.6697	3,816.899	4	3,816.899	1.0618	4	3,843.445

3.2 Demolition - 2019
Unmitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.2869		177.2869	
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.2869		177.2869	

Mitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816,899	3,816,899	1.0618		3,843,445	1
Total	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816,899	3,816,899	1.0618		3,843,445	1

3.2 Demolition - 2019

Mitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457			177.1484	177.1484	5.5400e-003	177.2869
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457			177.1484	177.1484	5.5400e-003	177.2869

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991			3,766.4529	1.1917		3,796.2449
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4666	9.9307	2.1991	12.1298			3,766.4529	1.1917		3,796.2449

3.3 Site Preparation - 2019
Unmitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003			212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548		212.5780	212.5780	6.6500e-003			212.7442

Mitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000				0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3.7664529	3.7664529	1.1917			3.7962445
Total	4.3350	45.5727	22.0630	0.0380	7.0458	2.3904	9.4362	3.8730	2.1991	6.0721	0.0000	3.7664529	3.7664529	1.1917			3.7962445

3.3 Site Preparation - 2019
Mitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bic-CO2	NBic-CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000			0.0000
Worker	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548			212.5780	212.5780	6.6500e-003		212.7442
Total	0.0882	0.0613	0.8088	2.1400e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4400e-003	0.0548			212.5780	212.5780	6.6500e-003		212.7442

3.4 Grading - 2019
Unmitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bic-CO2	NBic-CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					6.2687	0.0000	6.2687	3.3369	0.0000	3.3369			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2034	0.0237		1.3974	1.3974		1.2856	1.2856			2,936.8068	2,936.8068	0.9292	2,960.0361
Total	2.5805	28.3480	16.2034	0.0237	6.2687	1.3974	7.6661	3.3369	1.2856	4.6224			2,936.8068	2,936.8068	0.9292	2,960.0361

3.4 Grading - 2019
Unmitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.2869		177.2869	
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1690	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.2869		177.2869	

Mitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					2.4448	0.0000	2.4448	1.3014	0.0000	1.3014			0.0000			0.0000	
Off-Road	2.5805	28.3480	16.2934	0.0237		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361	
Total	2.5805	28.3480	16.2934	0.0237	2.4448	1.3974	3.8422	1.3014	1.2856	2.5869	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361	

Urban Orchard - South Coast AQMD Air District, Summer

3.4 Grading - 2019

Mitigated Construction Off-Site

Category	lb/day											CO2e					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2		NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1890	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.1484	177.2869	177.2869	177.2869
Total	0.0735	0.0511	0.6740	1.7800e-003	0.1677	1.3000e-003	0.1890	0.0445	1.2000e-003	0.0457	177.1484	177.1484	5.5400e-003	177.1484	177.2869	177.2869	177.2869

3.5 Building Construction - 2020

Unmitigated Construction On-Site

Category	lb/day											CO2e					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2		NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	2.1198	19.1860	16.9485	0.0269	1.1171	1.1171	1.1171	1.0503	1.0503	1.0503	2,553.063	2,553.063	0.6229	0.6229	2,568.634	2,568.634	5
Total	2.1198	19.1860	16.9485	0.0269	1.1171	1.1171	1.1171	1.0503	1.0503	1.0503	2,553.063	2,553.063	0.6229	0.6229	2,568.634	2,568.634	5

3.5 Building Construction - 2020
Unmitigated Construction Off-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	Non-Bio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.1642	5.2468	1.2494	0.0129	0.3200	0.0260	0.3460	0.0921	0.0249	0.1170		1,372,242 ₃	1,372,242 ₃	0.0862			1,374,396 ₂
Worker	0.5791	0.3863	5.2329	0.0147	1.4307	0.0109	1.4416	0.3764	0.0100	0.3864		1,464,854 ₃	1,464,854 ₃	0.0421			1,466,907 ₂
Total	0.7433	5.6361	6.4822	0.0276	1.7508	0.0368	1.7876	0.4716	0.0349	0.5064		2,837,096₆	2,837,096₆	0.1283			2,840,303₄

Mitigated Construction On-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	Non-Bio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	2.1198	19.1860	16.8465	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553,063 ₁	2,553,063 ₁	0.6229			2,568,634 ₉
Total	2.1198	19.1860	16.8465	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553,063₁	2,553,063₁	0.6229			2,568,634₉

3.5 Building Construction - 2020
Mitigated Construction Off-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	NZO	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.1642	5.2468	1.2494	0.0129	0.3200	0.0260	0.3460	0.0921	0.0249	0.1170	1,372.242 ³	1,372.242 ³	1,372.242 ³	0.0862			1,374.396 ²
Worker	0.5791	0.3893	5.2329	0.0147	1.4307	0.0109	1.4416	0.3794	0.0100	0.3894	1,464.854 ³	1,464.854 ³	1,464.854 ³	0.0421			1,465.907 ²
Total	0.7433	5.6361	6.4822	0.0276	1.7508	0.0368	1.7876	0.4716	0.0349	0.5064	2,837.096⁶	2,837.096⁶	2,837.096⁶	0.1283			2,840.303⁴

3.6 Paving - 2020
Unmitigated Construction On-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	NZO	CO2e	
Off-Road	1.3666	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	2,207.733 ⁴	2,207.733 ⁴	2,207.733 ⁴	0.7140			2,225.584 ¹
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.3666	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	2,207.733⁴	2,207.733⁴	2,207.733⁴	0.7140			2,225.584¹

3.6 Paving - 2020

Unmitigated Construction Off-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0579	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456	171.6626	171.6626	4.9400e-003	171.7860	171.7860	171.7860	171.7860
Total	0.0679	0.0456	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456	171.6626	171.6626	4.9400e-003	171.7860	171.7860	171.7860	171.7860

Mitigated Construction On-Site

Category	lb/day										lb/day						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	1.3556	14.0656	14.6521	0.0223	0.0000	0.7528	0.7528	0.6926	0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140	2,225.5641	2,225.5641	2,225.5641
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.3556	14.0656	14.6521	0.0223	0.0000	0.7528	0.7528	0.6926	0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140	2,225.5641	2,225.5641	2,225.5641

3.6 Paving - 2020
Mitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0679	0.0466	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456	171.6626	171.6626	4.9400e-003	171.7860		171.7860	
Total	0.0679	0.0466	0.6132	1.7200e-003	0.1677	1.2700e-003	0.1689	0.0445	1.1700e-003	0.0456	171.6626	171.6626	4.9400e-003	171.7860		171.7860	

3.7 Architectural Coating - 2020
Unmitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.2422	1.6638	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109			281.4481	0.0218		281.9928	
Total	0.2422	1.6638	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109			281.4481	0.0218		281.9928	

3.7 Architectural Coating - 2020
Unmitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBi- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1176	0.0791	1.0629	2.9600e-003	0.2906	2.2000e-003	0.2928	0.0771	2.0300e-003	0.0791	297.5485	297.5485	8.5600e-003	297.7624			297.7624
Total	0.1176	0.0791	1.0629	2.9600e-003	0.2906	2.2000e-003	0.2928	0.0771	2.0300e-003	0.0791	297.5485	297.5485	8.5600e-003	297.7624			297.7624

Mitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bi- CO2	NBi- CO2	Total CO2	CH4	N2O	CO2e	
Archit. Coating	0.0000				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003	0.1109	0.1109	0.1109	0.1109	0.1109	0.1109	0.0000	281.4481	281.4481	0.0218			281.9828
Total	0.2422	1.6838	1.8314	2.9700e-003	0.1109	0.1109	0.1109	0.1109	0.1109	0.1109	0.0000	281.4481	281.4481	0.0218			281.9828

3.7 Architectural Coating - 2020
Mitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	Non-Bio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1176	0.0781	1.0629	2.9600e-003	0.2906	2.2000e-003	0.2928	0.0771	2.0300e-003	0.0791	287.5485	287.5485	8.5500e-003	297.7624			
Total	0.1176	0.0781	1.0629	2.9600e-003	0.2906	2.2000e-003	0.2928	0.0771	2.0300e-003	0.0791	287.5485	287.5485	8.5500e-003	297.7624			

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

Urban Orchard - South Coast AQMD Air District, Summer

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	0.2757	1.352	3.4086	0.0121	0.9549	9.4700e-003	0.9544	0.2555	8.9500e-003	0.2643		1,231,630	1,231,630	0.0601		1,233,133
Unmitigated	0.2778	1.3577	3.4662	0.0123	0.9744	9.6500e-003	0.9840	0.2607	9.0100e-003	0.2697		1,254,982	1,254,982	0.0611		1,256,519

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
City Park	13.23	159.25	117.18	140,827	138,010
Total	13.23	159.25	117.18	140,827	138,010

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.548955	0.043235	0.200706	0.120309	0.016131	0.005851	0.021034	0.033479	0.002070	0.01877	0.004817	0.000707	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas
 Unmitigated

Land Use	NaturalGas Use KBTU/yr	lb/day															
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
City Park	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas
Mitigated

Land Use	NaturalGas Use kBTU/yr	lb/day																
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
City Park	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior

Urban Orchard - South Coast AQMD Air District, Summer

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Mitigated	0.0158	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Unmitigated	0.0158	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

6.2 Area by SubCategory
Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.0158	1.0000e-005	7.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

6.2 Area by SubCategory

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0157					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003
Total	0.0158	1.0000e-005	7.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5300e-003	1.5300e-003	0.0000		1.6300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Toilet

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation